Evaluating Group Model Building in Mental Health and Vocational Rehabilitation Service Delivery

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In recent years, facilitated system dynamics group model building has been used to facilitate and support decision making in management teams working to solve complex problems in both private and public sector settings. This approach is considered to be an important tool for improving the system thinking and decision making capabilities of participating managers. The goal of these interventions is to strengthen a teams' ability to work toward developing an agreed upon course of action that will ultimately lead to resolving the problem at hand. Although there are strong indications that these approaches provide great benefits, little research has empirically explored the degree to which group system dynamic model building successfully facilitates this outcome. In New York State, a system dynamics group model building strategy is being systematically examined as an approach to promote public sector system change in mental health and vocational rehabilitation service delivery systems.

To test the impact of group model building researchers at the State University of New York at Albany and the New York State Office of Mental Health (NYSOMH) have collaboratively designed an experiment which builds on an innovative ongoing policy initiative aimed at improving access to vocational rehabilitation services for individuals with serious mental illness. The project, supported by the National Institute of Mental Health funded Center for the Study of Issues in Public Mental Health Services, measures and compares system change outcomes for local areas in which key actors in the mental health and vocational rehabilitation are actively engaged in examining the issue of services integration between these systems and receive differential interventions to assist their efforts.

Public Policy Problem

Delivery of publicly funded vocational rehabilitation services to persons with severe mental illness has been problematic. The problem is compounded by the structural fragmentation of service delivery promoted at the state level. Currently, the

New York State Office of Mental Health (NYSOMH) has primary responsibility for service provision to people with serious mental illness, while the Office of Vocational and Educational Services for Individuals with Disabilities (VESID), an administrative entity located in the state's Department of Education, is charged with overseeing delivery and coordination of vocational rehabilitation services. This arrangement has resulted in difficulties in access and coordination of vocational rehabilitation services for individuals with severe mental illness.

Through a recently signed, formal memorandum of understanding, the chief administrative officers of the NYSOMH and VESID committed their agencies to addressing this difficult situation. To further encourage this general statement of policy, a demonstration, Services Integration Project (SIP) was implemented in seven counties in NYS. In these areas, teams comprised of representatives of both service systems were empowered to actively explore the integration of services between the mental health and vocational rehabilitation systems in their local areas. The study to test the efficacy of Group Model Building was developed in the context of this policy setting. THE NYSOMH and VESID both agreed to use the opportunity presented by this new policy initiative as a means to test group model building as an innovative approach to promoting system change.

Research Design for Examining Outcomes of Group Model Building

The study examining the impact of group model building focuses on individuals from eight counties in New York State who are key actors in the local mental health and vocational rehabilitation systems. In four counties these individuals will participate in a Group Model Building decision support conference specifically designed to facilitate mental health/vocational rehabilitation services integration. Instrumentation designed to measure system change and group functioning outcomes are administered to these individuals both prior to and following the model building exercise. Equivalent data collection instrumentation are also administered to individuals in four counties where the group model building is not implemented. These data will be analyzed to assess the degree to which progress toward achieving an integrated service delivery system has been made in each local area. System change outcomes measured are the degree to

which important characteristics of an integrated system and processes which move a system toward integration are present in a local area. A Organizational Network Analysis is also administered to assess shifts in relationships among key provider organizations in the area. Instrumentation designed to measure group member impressions of group functioning is also administered. These data will be analyzed to assess the impact of a group model building on the group of individuals who participate. Change in group cohesion, goal clarity, group fragmentation, and the openness of group process will be assessed in each comparative study condition. In addition, analytic techniques to explore shifts in variability of perceptions of study participants on the goals of services integration and the means to achieving integration are also being examined to assess the impact of group model building using system dynamics on moving participants toward a greater shared vision and shared understanding of the services integration issue and on what steps need to be taken to achieve the desired outcome.

The Group Model Building Intervention for Mental Health/Vocational Rehabilitation Services Integration

The Group Model Building Intervention that is tested by this research was developed in a pilot phase of the project. The intervention consists of four meetings which occur over approximately six months. The initial meeting serves to orient the participants to the process in which they will participate. The system dynamic method is explained along with precise expectations from participants. The second meeting is a two-day group model building conference where the group is interactively engaged in the process of developing a client flow system dynamics model which reflects the groups consensus view of how individuals flow through the local service system. Modelers attending the conference use data elicited by the facilitator to construct a system dynamics simulation model. The model is used to explore the impact of various policy scenarios on the behavior of the system. The system dynamic modelers share insights from the group constructed model with the group. The session ends with an action plan and responsibility list for moving toward a more integrated system.

The third and fourth meetings of the intervention are one day sessions in which the facilitators continue to explore insights into system behavior based on simulations of

the system dynamics model constructed by the group. Group members report on progress in action areas identified in previous meetings and leave each session with a revised action plan for moving toward a more integrated service system.

Preliminary Outcomes

A pilot test of the group model building intervention and the instrumentation to measure system change and group functioning showed that some change could be detected. In the area of system change, the network analytic data suggest that movement toward establishing important pre-conditions for system change had occurred in the short time between the pre- and post- group model building data collection. Overall, respondents reported a significant increase in the presence of situational factors necessary for change. Inspection of specific situational factors revealed that participants perceived the greatest increase in consensus about the vocational needs of persons with mental illness. With respect to structural conditions within the network, no significant changes were found from pre- to post- assessment. Although there was no significant increase reported in the effectiveness and utility of the interorganizational relationships, a significant increase in the level of satisfaction with these relationships was present. Attitudinal data from participants at the pilot site also show changes that coincide with observed changes in behavior of the group and new activities directed at changing processes involved with delivering vocational rehabilitation services to individuals with serious mental illness. Analysis of pilot data on movement toward a shared understanding of the problem showed change in the direction of greater agreement on dimensions of services integration for mental health and vocational rehabilitation.