Mental Health (MH) provider organizations often encounter financial resource and staff recruitment problems when implementing an evidence-based practice (EBP); however, they typically lack information on ways to solve these problems. Findings from the Innovation Diffusion and Adoption Research Project (IDARP) can offer some suggestions about these issues. At three contact points between 2001 and 2005, IDARP participants were asked to use a 10-point, Likert-type scale to rate the extent to which financial resource limitations and staff recruitment problems hindered efforts to implement EBPs, where “1” is “to no extent” and “10” is “to a great extent”. This analysis describes their responses to these two questions along with more detailed information they shared during face-to-face interviews about how these issues impeded implementation and about the strategies used to minimize their negative impacts.

**Background**

IDARP is a longitudinal study that spans three contact points and is comprised of 91 projects. This bulletin presents data from a subset of 41 projects that responded to questions about financial resource and staff recruitment problems. All 41 projects included in this analysis were still implementing one of the following four EBPs at the third contact point: 1) Cluster-Based Planning (CBP), a research-based consumer classification scheme; 2) Integrated Dual Diagnosis Treatment (IDDT), an EBP tailored for individuals with mental illness and substance abuse problems; 3) Multi-Systemic Therapy (MST), an EBP involving intensive home-based treatment for youth, and 4) Ohio Medication Algorithm Project (OMAP), medication algorithms related to schizophrenia and depression. Table 1 depicts the number of informants and projects by EBP.

<table>
<thead>
<tr>
<th>EBP</th>
<th>Informants</th>
<th>Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBP</td>
<td>34</td>
<td>10</td>
</tr>
<tr>
<td>IDDT*</td>
<td>66</td>
<td>21</td>
</tr>
<tr>
<td>MST</td>
<td>44</td>
<td>7</td>
</tr>
<tr>
<td>OMAP</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>153</td>
<td>41</td>
</tr>
</tbody>
</table>

*No Wrong Door projects are not included in analysis

A resource allocation model (1), as described in economic theory, will be used to explain how financial resource and staff recruitment/availability issues affect the implementation process. According to this theory, MH providers incur costs when delivering services to consumers. Resources (e.g., grants) from internal and external sources and billings to third-party payors (e.g., Medicaid) typically offset these costs. Ideally, the organization will develop a resource allocation plan to determine how much service can be delivered within a limited budget for a specified time period. In developing this plan, the budget analyst first calculates staff productivity levels, which are the number of staff hours that potentially could be billed to third-party payors.

Then, the analyst computes how much staff expertise and other items can be purchased so that the productivity levels can be attained. If the targeted productivity levels are met, the organization can replenish the funds used to cover expenses, and continue to offer the service. The interaction among productivity levels (PL), financial resources (FR), and staff resources (SR) is depicted in the following diagram:

**Lack of Resources**

At each contact point, participants were asked: “To what extent has the lack of resources hindered the implementation process?” Graph 1 shows that average scores for informants varied both by contact point and by EBP. At each contact point, CBP informants rated this problem as hindering implementation efforts to a moderate extent for at least one contact point. With the exception of the CBP projects, respondent explanations suggest that this problem tended to occur when the project ran out of grant funds and had to rely on third-party payors, such as Medicaid, as the sole source of...
funding. According to the informants’ comments regarding IDDT, MST, and OMAP projects, grants absorbed costs that third-party payors did not cover. Grant funding was often unstable since grantors did not make timely funding commitments and/or reduced grants during the implementation process. This instability caused projects to rely on billings to third-party payors to cover expenses at an earlier point in the implementation process than project teams had anticipated. Further, due to vacancies and/or inexperience among implementation team members, it was difficult to attain the productivity levels needed to bill third-party payors in order to generate the revenue needed to pay for service-delivery costs. To complicate matters further, third-party payors often had cumbersome billing processes that caused billing errors. The extent of the problem, as suggested by the average ratings, began to decrease as providers gained experienced in billing processes and/or when third-party payors, such as Medicaid, revised rules to cover more of the costs associated with implementing the EBP.

Informants commenting on CBP projects noted that resource problems were usually due to staff turn-over. CBP projects often relied on experienced staff to train new staff. When experienced staff left the agency, MH providers had to incur unanticipated training costs.

Staff Recruitment
At each contact point, informants were asked: “To what extent have personnel recruitment problems hindered the implementation of the EBP, such as finding people who are willing or qualified to implement the practice?” Average scores for this question also varied over time for each EBP. Ratings typically coincide with vacancy rates; they are at the highest point when providers need to hire staff and decrease as vacancies are filled (Graph 2). Based on participants’ comments, staff recruitment problems typically stemmed from two, overlapping issues. First, agencies, especially those located in rural areas, were unable to offer competitive salaries to attract experienced, credentialed applicants because of a lack of start-up funds. Second, a qualified pool of experienced workers was often unavailable within the agency and/or in the local community. In-house staff were reluctant to transfer to the implementation team because they viewed the positions as not being secure, and outside applicants were unable to relocate to the community because of family commitments. Recruitment difficulties often led to the implementation team having vacant positions and/or hiring unqualified people. The vacancies and/or unqualified staff, in turn, adversely affected productivity levels since the team could not bill enough service hours to offset the implementation costs. As one informant stated, “[v]acancies are killing us. We are spending so much time trying to hire and get productivity levels up.”

Conclusions
As this analysis indicates, an inadequate amount of start-up funds and the inability to hire (and/or retain) qualified personnel to implement the EBP adversely affected the implementation team’s productivity levels. When the MH provider either had vacant positions or unqualified staff, the agency was unable to meet productivity levels and had to reduce future service delivery expectations. One informant summarized the funding/staffing/productivity issue as follows: “We have to be pragmatic about billing for revenue and make sure a certain amount comes in to fund the service.”

Drawing upon IDARP participants’ comments, the following suggestions may help to lessen the impact of these three issues on the implementation process:

- Evaluate external funding sources to ensure that the funding is stable, timely, and flexible;
- Collect information early in the process about third-party billing procedures;
- Prepare a gap analysis during the planning phase to determine what resources are needed to implement the EBP and what resources are readily available within the agency and within the community;
- Offer incentives to cross-train staff so that EBP knowledge is firmly entrenched within the organization;
- Develop recruiting packets to explain the agency’s mission and to describe the position accurately;
- Contact CCOE staff for information, planning advice, and other technical assistance.

References:

For more information:
IDARP Bulletins are issued periodically to report specific research findings that may be of interest to policy makers, practitioners, consumers, etc. For more information about this Bulletin, please contact Helen Anne Sweeney, IDARP Project Manager (SweeneyH@mh.state.oh.us) or Rick Massatti (MassattiR@mh.state.oh.us).