

Featured Article

Critical Ingredients for Improving Mental Health Services: Use of Outcome Data, Stakeholder Involvement, and Evidence-Based Practices

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L. A. Hamerlynck's (1980) article on behavioral contingencies operating in the typical administration of the public mental health system accurately describes many of the processes that still exist 25 years later. Hamerlynck proposes changes that would make the system less vulnerable to negative and coercive behavioral exchanges between state administrators and providers, which almost always result in the client losing out. We have operationalized several of the suggested changes offered by Hamerlynck for Michigan's public mental health system for children. We agree that this has led to a system that holds better hope for offering more appropriate, effective, and family-friendly services.

In the ideal mental health system, Hamerlynck (1980) advocates for: (a) Ogden Lindsley's notion of data-based services in which data collection focuses on client outcomes rather than provider service activity, in part so that performance indicators do not entirely omit the client (Binder, 2005); (b) responding to client needs rather than labeling clients as deficient when their needs do not fit the services the provider chooses to offer; (c) generation of support for programs or changes from a wide group of stakeholders to assure the broadest possible support; (d) identification of innovative programs that have strong advocates and an empirical basis; and (e) installation of a mechanism for assuring model integrity (e.g., treatment fidelity) when innovative programs are implemented. Hamerlynck's suggestions foretell the current emphasis on the need to monitor client outcomes and treatment fidelity as empirically supported interventions are introduced into community practice (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005; Kazdin & Kendall, 1998; Weisz, Donenberg, Han, & Weiss, 1995; Weisz & Jensen, 1999)

Over the last 9 years, Michigan's public mental health system for children has collected outcome data to inform policies and practices. These data have played a major role in the recent efforts to introduce two research and behaviorally based services—cognitive behavior therapy (CBT) and parent management training (PMT). This article discusses the evolution of this effort, which has included implementing a number of the changes advocated by Hamerlynck (1980). However, we would have to admit that at times these changes were accomplished serendipitously.

Background

The Michigan Department of Community Health (MDCH), in partnership with Eastern Michigan University (EMU) and the Community Mental Health Service Programs (CMHSPs) in Michigan, began a collaborative effort in 1996 to determine the impact of treatment-as-usual on youth with severe emotional disturbance (SED; Substance Abuse and Mental Health Services Administration, 1993) served by the public mental health system. This outcome monitoring effort, referred to as the Level of Functioning Project (LOF), is implemented by EMU and is currently in its 9th year (Hodges & Wotring, 2004). CMHSP participation in the LOF project is voluntary, and since its inception, participation has grown to include most of the state.

On a monthly basis, the CMHSPs report client outcome, using the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 2000), as well as demographic and service delivery information. The CAFAS was selected because it is a clinically useful tool that facilitates designing an outcomes-oriented treatment plan and has strong psychometric evidence (Hodges, 2004c). The CAFAS score at intake predicts

service cost and utilization, including restrictiveness of care and number of treatment days, as well as school truancy and trouble with the law (Hodges, 2000).

The CAFAS measures a child's functioning across eight domains—school or work, home, community, behavior toward others, moods and emotions, self-harmful behavior, substance use, and thinking. Based on the rater's endorsements of behavioral items, the youth's level of impairment in functioning is determined, using a 4-point scale, as follows: *severe* (30), *moderate* (20), *mild* (10), or *minimal or no impairment* (0). The subscale scores can be summed to determine an overall score or used separately to determine different client types (Hodges, 2003, 2004b). The CAFAS is administered at intake, then quarterly and at exit for all of the children served. The CMHSPs can print out individual client assessment reports and treatment plans, as well as some aggregate reports, from the CAFAS software. For each CMHSP, the LOF prepares site-specific reports on a monthly and yearly basis. At the semi-annual LOF meetings, the CMHSPs learn from each other about how they are using the data and receive information on new initiatives that the state is planning.

Accomplishments

The LOF project has evolved over the years from determining rates of successful outcome with treatment-as-usual to identifying exemplary practices and, recently, helping to identify evidence-based practices that may be helpful. The initial challenge was to simply gather the data and create useful reports for the CMHSPs. The reports provided a natural reward to the CMHSPs for gathering the data, and their input was used to continually modify and improve the reports, which in turn contributed to their buy-in. Each CMHSP received data for their own site as well as statewide averages for the same indicators.

The LOF project provides data to support better decision making by practitioners, managers and directors of provider organizations, as well as managers and policymakers in state government. For example, in the initial data analyses, cluster analysis was used to identify subgroups of the youths served (Hodges & Wotring, 2000). Subsequently, a client typology identified group membership at intake (Hodges, 2004b), and outcomes by client type for the each CMHSP in the state database (Hodges, Xue, & Wotring, 2004b). As a result, the CMHSPs could evaluate their programs by comparing their outcomes for

the different client types to the state benchmarks, making reports helpful in the day-to-day management of their programs (Barckholtz, 2001). These reports identified cases that were not making progress in treatment as well as cases in which the youth's needs did not appear to match with the services the youth was receiving. All CMHSPs were able to achieve average or above-average results with at least one or more types of clients. The better outcomes were typically observed in service areas that were local "points of pride" (e.g., collaborative wraparound program with juvenile justice, home-based behavioral programming), and this appeared to help counter defensiveness associated with poorer outcomes.

The LOF decision support system also helps to identify "best practices" that can be shared with other programs in the state. Two CMHSPs that were identified as achieving superior results across different types of clients were found to be very community centered, strength based, responsive to families, and supported by a strong management structure (R. M. Friedman, written personal communication, Louis de la Parte Florida Mental Health Institute at the University of South Florida, 2004). At one of these sites, the reviewing site team found that families were strongly involved in reviewing their child's progress when the CAFAS was done quarterly, and in fact, kept graphs showing their child's progress on the eight subscales. This use of outcome data, that actively involves the client as an

informant and a consumer, fits with the spirit of Hamerlynck's (1980) suggestion that the system include client outcome as a centerpiece (Hodges, 2004c).

The LOF decision support data can be used to more carefully evaluate best practices as well. For example, propensity analysis was used to demonstrate that the home-based program that was locally developed and highly valued by the community had significantly better outcomes than a comparable sample of youths from the statewide database (Hodges & Grunwald, 2005). In addition, another program produced research results that supported an innovative program that was developed to generate more objective recommendations when conducting emergency evaluations for the local hospital (Wale, Denter, & Barckholtz, 2004).

Implementation of evidence-based practices recently has become a national priority (President's New Freedom Commission, 2003). The adoption and implementation of evidence-based programs makes sense when they can help to solve particular problems faced by communities and states. The LOF decision support data proved to be very useful in these efforts. Two years ago, a committee of various stakeholders was formed to discuss the needs of Michigan's youth in public mental health. The first step was to examine the statewide database to help identify the evidence-based practices that would be the most relevant to youth served by the public mental health system in Michigan. Data reports were widely dis-

seminated and discussion was encouraged at multiple levels and in different stakeholder groups. Information on the percent of youths with SED who met criteria for seven mutually exclusive, hierarchically arranged client types helped identify consumer needs. The client categories, which were based on the youth's profile on the eight CAFAS subscales, were thought problems, maladaptive substance use, self-harmful potential, delinquent behavior, behavioral problems with moderate mood disturbance, behavior problems, and moderate mood and/or mild behavioral problems (Hodges, 2004b). Figure 1 shows that approximately 50% of youths were best described as having severe behavioral problems (i.e., behavior problems, behavior problems with mood) and 47% had mood disturbances (i.e., self-harmful potential, behavior problems with mood, and mild mood and/or mild behavior problems). In addition, the rates of successful outcomes for these youths ranged from 38% to 58%, depending on the subgroup and the outcome indicator used (Hodges et al., 2004b).

Local CMHSP children's administrators, supervisors, and their staff were provided with information on the percentage of youths they served and outcomes for the different client types, which they could compare to the statewide data. CMHSPs were also given articles about the different evidence-based practices as well as a manual that described different client types and evidence-based treatments that might be used to achieve better outcomes for those client types (Hodges, 2004b). This manual, along with the data, has helped minimize resistance to the idea of using evidence-based treatments for youths with severe behavioral problems and for mood disturbance.

The committee's next step was to invite treatment manual developers who had conducted research in treatment of depression and severe behavioral problems to join our collaborative endeavor. The group consensus was to begin with cognitive behavioral treatment (CBT) for depressed children and to address treatment of behavioral disorders as the second initiative. Drs. Joan Asarnow and Margaret Rea from the University of California agreed to conduct our training. This training was conceptualized as a pilot project, with two sessions of training planned so that we could hopefully implement the lessons we had learned during the second session. The program was funded with limited resources from the state and approximately 50 clinicians from various CMHSPs throughout Michigan participated.

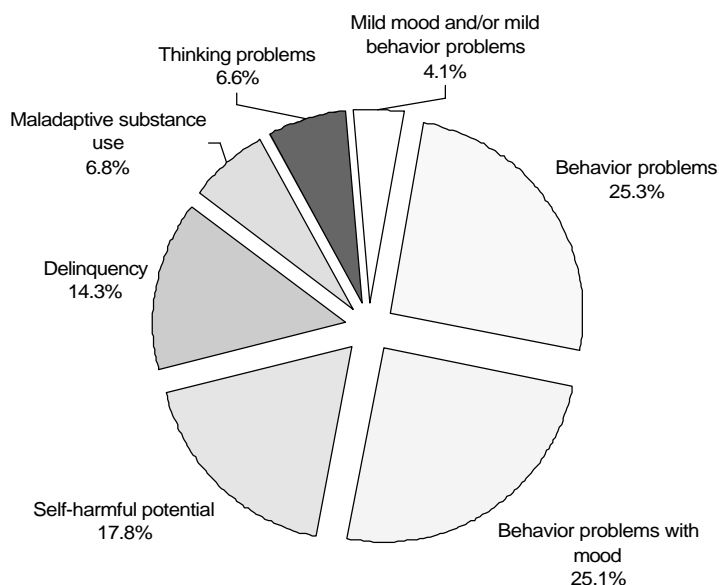


Figure 1. Client types for youths with SED served by Michigan Public Health.

Extensive role-playing was used in the CBT training workshops to illustrate the clinical techniques described in the training manual (Asarnow et al., 2003). During the next 6 months, biweekly telephone supervision/consultation of training cases were held for the clinicians in groups of four. The training proved to be a great success from many perspectives. The trainees were very pleased with the content, the training format, and the support and clinical expertise that characterized the ongoing clinical supervision (Rea et al., 2005). In some CMHSPs, exceptionally skilled trainees helped other staff with learning CBT. In the second training session, we found that approximately 80% of the training cases made significant improvements across life domains, as measured by the CAFAS (Hodges, Rea, Wotring, Pettee, & Asarnow, 2005). The training boosted practitioner morale, resulting in clinicians feeling more empowered to help clients, and dispelled some of the typical fears about evidence-based treatments (e.g., concerns about potential disregard for clinical skills, clinical judgment, or therapeutic alliance with the client).

Despite the overall positive experience, the state collaborative team learned that there were significant challenges to statewide training initiatives. Three major barriers were identified: insufficient release time from normal workloads, lack of timely access to clients who would be good training cases, and lack of sufficient support from supervisors (Hodges, Rea, et al., 2005). There was considerable variability

across trainees and agencies, and without a treatment fidelity measure, there was no way to know who was implementing CBT with fidelity. In addition, an infrastructure to support the training initiative was needed to clarify expectations, monitor compliance with expectations, collect outcome data, and problem solve issues as they arose.

In the interim, the state team intensified the data analysis to learn more about the youths with behavioral problems. A cluster analysis, in which outcomes by cluster were examined, revealed that youths who were behaviorally impaired across settings (e.g., in school, home, and general interactions with others) and had co-occurring mood disturbance had poorer outcomes than other behaviorally impaired youths (Hodges, Xue, & Wotring, 2004a). Regression analyses comparing pervasive behavioral impairment to other predictors of poor outcome found this characteristic to be the strongest predictor of poor outcome with treatment-as-usual (Xue, Hodges, & Wotring, 2004). Surprisingly, pervasive behavioral impairment was found across all age groups, with the range being 28% to 37% for youths 6 to 17 years old (see Figure 2). In fact, 29% of the 6-year-olds were pervasively impaired. With this information, the state could potentially prevent treatment failure by identifying these youths at intake and offering these families an evidence-based treatment specific to pervasive behavioral impairment.

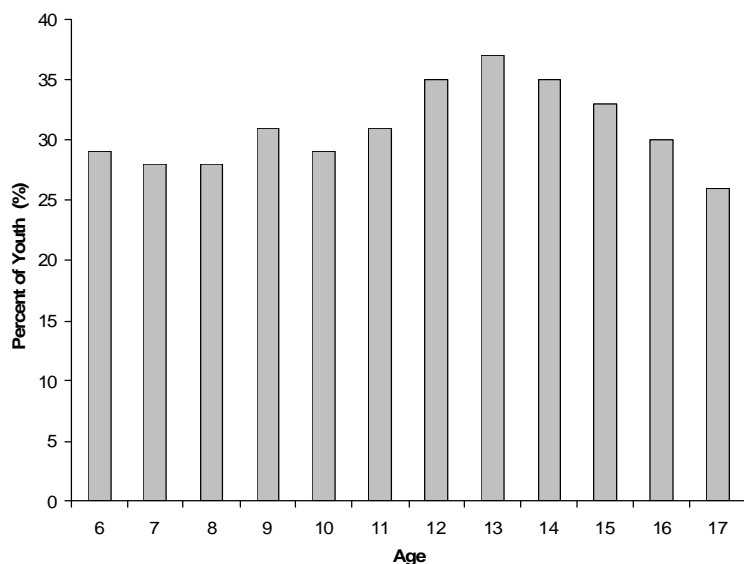


Figure 2. Pervasiveness predicts poorer outcomes at all ages. Percent of youth with 30 or 20 on School, Home and Behavior Towards Others subscales.

The state responded to an RFA and received funding from a "State Implementation of Evidence Based Practice: Building Science to Service" grant, jointly sponsored by the Substance Abuse and Mental Health Services Administration and the National Institute of Mental Health. The grant funding also paid for a consultant, a clinician with expertise in quality assurance, to visit 48 individual CMHSPs and meet with front-line children's staff and supervisors. During these visits, data specific to the sites were reviewed and ideas were discussed about how to improve outcome and services (Hodges, Wotring, & Wale, 2005). These site consultations increased interest in evidence-based treatments as well as membership in the LOF project. In addition, this funding was used to sponsor the writing of a pamphlet for families on evidence-based practices by an advocacy group, the Michigan chapter of the Association for Children's Mental Health (2004).

By this time, a statewide committee was formed in the Department of Community Health to address implementation of evidence-based treatments. During the discussions of issues for children's programs, emphasis was placed on using data to guide rational decision-making, ensuring input from all stakeholders including family advocates and providers, maintaining outcome monitoring, and the need to introduce a treatment fidelity measure. Data were presented on how many children in the public mental health system could potentially be impacted by PMT. The stakeholders' committee sought developers of PMT programs as the approach of choice for children with pervasive behavior problems, and Dr. Marion Forgatch of the Oregon Social Learning Center (OSLC) expressed interest in joining the collaborative effort. The model of PMT taught by the OSLC is referred to as PMTO (Patterson, 2005). Forgatch had introduced PMTO to Norway in 1998 as part of a nationwide implementation of the program, with an 18-month training cycle to produce a group of trainers.

Figure 3 provides a range of estimates of the number of children in Michigan that could benefit from PMTO, with a breakdown by age group. The sample consists of youths with SED who were referred for services to the LOF sites from 2000 to 2004. Up to 92.6% of all youths could benefit from PMTO, as this is the frequency of youth who have at least mild impairment on the Home or Behavior Toward Others subscales of the CAFAS. The Home sub-

scale assesses noncompliance in the home, whereas the Behavior Toward Other subscale mostly captures behavioral excesses that offend or annoy others. If the case were made that PMTO is only needed for more serious cases of noncompliance, then a more conservative estimate would be that 65.8% of the cases could benefit, as this is the frequency of severe or moderate impairment on either of these two subscales. If the goal were to identify cases in which PMTO would almost certainly be the treatment module of choice from the onset of services, a conservative estimate would be 34.8% of youths. This is the percentage of youths who display serious noncompliance in the home (i.e., severe or moderate impairment on Home subscale), have behavioral problems across settings (i.e., also moderately or severely impaired on the School or Behavior Toward Others subscale), and are absent behaviors that might evoke at intake another treatment as the primary treatment module (i.e., no severe impairment on Community [e.g., delinquent-like behaviors], Moods/Emotions, Self-Harmful [e.g., suicidal], Substance Use or Thinking [e.g., rational thought]). These cases could be considered “target PMTO cases,” in that it would be reasonable to ask why the family did not receive PMTO as the primary treatment endeavor.

Future

Michigan is currently facing the challenge of providing statewide training while assuring fidelity to the model and continuing to assess outcomes to ensure that the treatment has a positive impact on the children and families being served. This requires an intensive training protocol, implementation of a fidelity tool, evaluating client outcomes, and developing an infrastructure to monitor support for, and compliance with, training expectations. The OSLC has experience in installing a behavioral evidence-based intervention, and in partnership with them, we plan to train and import the model to Michigan.

A statewide committee has been meeting to build support for introducing the model and to develop a work plan to implement PMTO statewide. A logic model has been developed with five clear outcomes identified and measures to monitor performance. The outcomes and measures include: (a) implementation of PMTO statewide in 5 years (i.e., PMTO will be available in every CMHSP in 5 years); (b) improved child functioning as a result of the intervention, as measured by the CAFAS;

(c) improved staff performance as measured by the Fidelity of Implementation Rating System (FIMP), a treatment fidelity measure developed by Forgatch and colleagues (Forgatch, Patterson, & DeGarmo, 2005; Knutson, Forgatch, & Rains, 2003); (d) improved family satisfaction with services as measured with a brief satisfaction tool at the end of each session; and (e) improved parenting skills, as measured by a caregiver skills scale (Hodges, 2002). In addition, we are struggling with how to foster sustainability of the model within the local CMHSPs, so that coaching in the model can be maintained (Fixsen et al., 2005). We are learning strategies from the early adopters who currently are being trained in three regions of the state.

Challenges

Developing the LOF system to support decision making at clinical, managerial, and policy levels has taken time and effort. In the beginning of this project, the data reports were too complicated for CMHSP staff to understand. We provided additional training to help staff interpret the reports, including instructions on how to convert the reports into Excel graphs. Eventually it was decided that LOF should aggregate the data into graphs in order to facilitate the use of the data by the CMHSPs. Another related challenge at the start was the lack of

computer technology at the CMHSPs. Many agencies were just purchasing computers at the time and learning how to use them, which complicated the early adoption of the CAFAS software and added to the training time.

Supervisors also needed time to develop an appetite for data and to learn to use the data with their staff in a positive way. As we discovered how different CMHSPs were using the data, we highlighted these programs at LOF meetings, thereby creating a learning environment with a variety of different “champions.” The sites love comparing themselves to statewide averages because they all have one or perhaps two areas in which their numbers are better than the state’s. In fact, for some CMHSPs, publicity about their good outcomes has resulted in other child-serving agencies in their area (e.g., juvenile justice) being more willing to collaborate with the CMHSP on cases as well as generating grant applications for the community.

At the state level, it took time to develop confidence in the data. This was the first time we have been able to drill down and get client-level outcome information. Sometimes the data paint a larger picture that is very different from what clinicians tend to focus on. When asked about needs, clinicians often focus on cases that are the most discouraging because of the presence

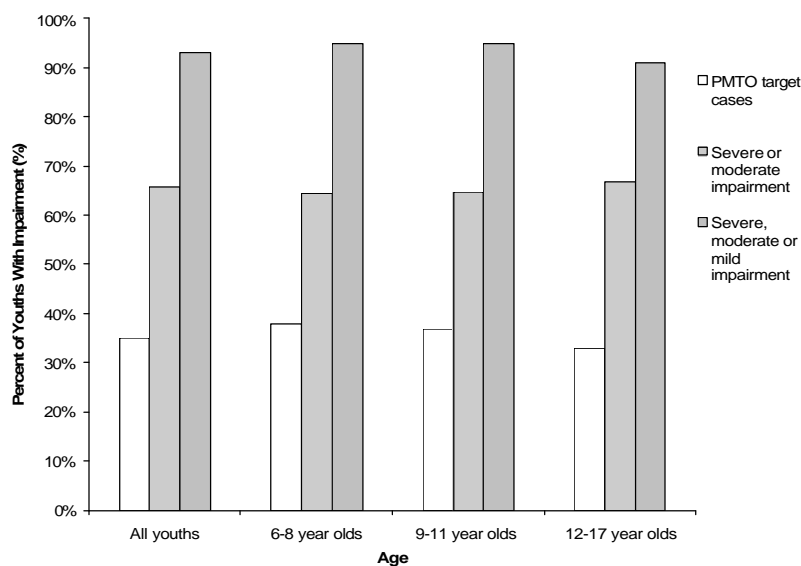


Figure 3. Percent of youths with behavioral impairment in the LOF dataset for the period from 2000–2004 ($N = 16,767$). *Note.* PMTO target cases = 30 or 20 on Home subscale of the CAFAS, 30 or 20 on School or Behavior Towards Others (BTO), and no 30's on Community, Moods/Emotions, Self-Harm, Substance Abuse, and Thinking subscales. Severe or moderate = 30 or 20 on Home or BTO subscales. Severe, moderate, or mild = 10, 20, or 30 on Home or BTO subscales.

of challenges in the caregivers or cases that appear to have no effective treatments (e.g., atypical cases in which multiple trials of medication have produced no improvement). However, when looking at their own data, clinicians could see that these were not the most common cases and that, even for the less difficult cases, rates of attrition and outcome were less than desirable. This is very powerful information and has to be used with an eye toward improving the service delivery system rather than used aversively against CMHSP staff. Using the information in a positive and supportive way promotes genuine continuous quality improvement activities. Used aversively, it would discourage voluntary participation in collecting outcome data and encourage attempts to “game” the outcome monitoring system.

A significant amount of time has to be devoted to planning and networking with stakeholders for the successful adoption of any new practice on a statewide basis. Involving others in this decision-making process will help ensure successful adoption of PMTO statewide. We have made the effort to ensure that CMHSP staff have input in the process. Staff at all levels have been involved in the decision making over which evidence-based services to introduce, assisted in planning the introduction of the model, and helped identify potential barriers to successful implementation of the training. In the implementation of PMTO in Norway the length of training for first-generation trainers was 18 months. In Michigan, some administrators have asked that we shorten the length of time and yet maintain fidelity to the model. In the current training of early adopters, the time has been shortened to 13 months. We hope to study the implementation of our large-scale training, and if possible, determine factors that influence the length of training needed to achieve good fidelity.

As a guide, we use the skills taught in PMTO as a framework for thinking about the processes for continued successful implementation. We want to use positive rewards whenever possible (e.g., recognizing exemplary programs), monitor behavior (e.g., use data to keep track of outcomes), promote positive involvement with the use of data (e.g., share data openly and avoid punishment), and problem solve together (e.g., introduce training in PMTO and the use of other best practices such as cognitive behavior therapy). Hopefully, with the use of outcome monitoring, positive rewards, supportive orientation, fidelity monitoring, and collaborative problem solving, we can

eliminate the aversive behavioral exchanges between those governing and those being governed and keep the welfare of the client in the forefront.

Building capacity in a human service system to collect and use client-level outcome information requires involvement of all stakeholders and is a complex process. One must be willing to listen to providers and produce reports they find useful to gain their buy-in to the process of outcome management. Consumer-level outcome information has the potential to increase an administrator's level of understanding about what is going on in their “marketplace.” We can now determine who and what types of clients are improving with what types of services. Consumer-level outcome information helps reduce the “noise” from providers, who generally complain that they do not have enough resources or that their clients are much worse than those served by others. The latter claim is used to support their belief that their clients cannot benefit from proven evidence-based practices. Consumer-level outcome information allows everyone to view consumer needs from the same perspective. It precludes arguments about many hypothetical issues and helps dispel unjustifiable concerns.

Consumer-level information must be handled with care. An administrator's focus should be on system improvement rather than on individual organizations. Additionally, the emphasis should be on shaping desired behaviors, modeling and encouraging with positive reinforcement, and organizational behavior that is supportive of genuine, continuous quality-improvement activities. The goal is to avoid unproductive negative coercive exchanges between state administrators and providers as described in Hamerlynk's (1980) article. Without question, this is difficult to achieve and we still have a lot to learn. However, when used properly, client-level outcome information is a powerful tool that can be helpful in achieving this goal, and ultimately, in improving services to consumer families.

References

- Asarnow, J., Jaycox, L., Rea, M., Clarke, G., Lewinsohn, P., Hops, H., & Rohde, P. (2003). *Stress and your mood: A manual for individuals*. Adapted from “Stress and Your Mood: A Manual for Groups.” Los Angeles: UCLA Neuropsychiatric Institute.
- Association for Children's Mental Health (2004). *For families—Evidence-based practice: Beliefs, definitions, suggestions*. Okemos, MI: Author.

- Barckholtz, P. R. (2001). The use of outcome data on the individual client level to manage treatment. In C. Newman, C. Liberton, K. Kutash, & R. M. Friedman (Eds.), *The 13th annual research conference proceedings: A system of care for children's mental health: Expanding the research base* (pp. 273-275). Tampa: University of South Florida, Louis de la Parte Florida Mental Health Institute, Research and Training Center for Children's Mental Health.
- Binder, C. (2005, November). *Ogden R. Lindsley (1922-2004). Performance Xpress*. Retrieved from www.performanceexpress.org/0411/mainframe0411.html#titlemeasure.
- Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M., & Wallace, F. (2005). *Implementation research: A synthesis of the literature*. Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network (FMHI Publication #231).
- Forgatch, M. S., Patterson, G. R., & DeGarmo, D. S. (2005). Evaluating fidelity: Predictive validity for a measure of competent adherence to the Oregon model of parent management training. *Behavior Therapy, 36*, 3-13.
- Hamerlynck, L. A. (1980). "When you pass the behavioral buck—make it contingent." *the Behavior Therapist, 3*, 5-10.
- Hodges, K. (2000). *Child and Adolescent Functional Assessment Scale* (2nd ed., rev.). Ypsilanti: Eastern Michigan University.
- Hodges, K. (2002). *Caregiver wish list*. Ypsilanti: Eastern Michigan University.
- Hodges, K. (2003). *CAFAS manual for training coordinators, clinical supervisors, and data managers* (2nd ed.). Ypsilanti: Eastern Michigan University.
- Hodges, K. (2004a). Child and Adolescent Functional Assessment Scale (CAFAS). In M. E. Maruish (Ed.), *The use of psychological testing for treatment planning and outcome assessment* (3rd ed., pp. 405-441). Mahwah, NJ: Lawrence Erlbaum.
- Hodges, K. (2004b). *Evidence-based treatments for children and adolescents: A compilation of resources and guide for matching CAFAS profiles to evidence-based treatments*. Ypsilanti: Eastern Michigan University.
- Hodges, K. (2004c). Using assessment in everyday practice for the benefit of families and practitioners. *Professional Psychology: Research and Practice, 35*, 449-456.
- Hodges, K., & Grunwald, H. (2005). The use of propensity scores to evaluate outcome for community clinics: Identification of an exceptional home-based program. *Journal of Behavioral Health Services & Research, 32*, 292-303.
- Hodges, K., Rea, M., Wotring, J., Pettee, M., & Asarnow, J. (2005). *Training state mental health workers in cognitive behavioral treatment for depression: A pilot study*. Paper accepted for presentation at the American Psychological Association, Washington, DC.
- Hodges, K., & Wotring, J. (2000). Client typology based on functioning across domains using the CAFAS: Implications for service planning. *Journal of Behavioral Health Services and Research, 27*, 257-270.
- Hodges, K., & Wotring, J. (2004). Role of monitoring outcomes in initiating implementation of evidence-based treatments at the state level. *Psychiatric Services, 55*, 396-400.
- Hodges, K., Wotring, J., & Wale, H. (2005, March). *Outcome data, state-university collaboration and individualized site visits advance interest in EBTs*. Paper presented at the 18th Annual Research Conference on "A System of Care for Children's Mental Health: Expanding the Research Base," University of South Florida, Tampa, FL.
- Hodges, K., Xue, Y., & Wotring, J. (2004a). Outcomes for children with problematic behavior in school and at home served by public mental health. *Journal of Emotional and Behavioral Disorders, 12*, 109-119.
- Hodges, K., Xue, Y., & Wotring, J. (2004b). Uses of the CAFAS to evaluate outcome for youths with SED served by public mental health. *Journal of Child and Family Studies, 13*, 325-339.
- Kazdin, A. E., & Kendall, P. C. (1998). Current progress and future plans for developing effective treatments: Comments and perspectives. *Journal of Clinical Child Psychology, 27*, 217-226.
- Knutson, N. M., Forgatch, M. S., & Rains, L. A. (2003). *Fidelity of Implementation Rating System (FIMP): The training manual for PMTO*. Eugene: Oregon Social Learning Center.
- Patterson, G. D. (2005). The next generation of PMTO models. *the Behavior Therapist, 28*, 25-32.
- President's New Freedom Commission on Mental Health. (2003). *Achieving the promise: Transforming mental health care in America. Final Report* (DHHS Pub. No. SMA-03-3832). Rockville, MD: U.S. Department of Health and Human Services.
- Rea, M., Hodges, K., Wotring, J., Schultz, K., Schrandt, B., & Asarnow, J. (2005). Training state mental health workers in cognitive behavioral treatment for depression: A pilot study. In C. Newman, C. Liberton, K. Kutash, & R. M. Friedman (Eds.), *The 17th Annual Research Conference Proceedings: A System of Care for Children's Mental Health: Expanding the Research Base* (pp. 223-226). Tampa: University of South Florida, Louis de la Parte Florida Mental Health Institute, Research and Training Center for Children's Mental Health.
- Substance Abuse and Mental Health Services Administration. (1993). Final notice establishing definitions for (1) children with serious emotional disturbance, and (2) adults

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with a serious mental illness. *Federal Register*, 58, 29422-29425.

Wale, H., Denter, L., & Barckholtz, P. R. (2004). Evidence for standardizing and tracking evaluations for hospitalization in a crisis intervention program. In C. Newman, C. Liberton, K. Kutash, & R. M. Friedman (Eds.), *The 16th Annual Research Conference Proceedings: A System of Care for Children's Mental Health: Expanding the Research Base* (pp. 427-430). Tampa: University of South Florida, Louis de la Parte Florida Mental Health Institute, Research and Training Center for Children's Mental Health.

Weisz, J. R., Donenberg, G. R., Han, S. S., & Weiss, B. (1995). Bridging the gap between laboratory and clinic in child and adolescent psychotherapy. *Journal of Consulting and Clinical Psychology*, 63, 688-701.

Weisz, J. R., & Jensen, P. S. (1999). Efficacy and effectiveness of child and adolescent psychotherapy and pharmacotherapy. *Mental Health Services Research*, 1, 125-157.

Xue, Y., Hodges, K., & Wotring, J. (2004). Predictors of outcome for children with behavior problems served in public mental health. *Journal of Clinical Child and Adolescent Psychology*, 33, 516-523.

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1983 tBT classic

[Original Editor's Comments] As research demonstrates the success of behavioral procedures, attempts will be made at large scale implementation of these procedures. However, the aspects necessary for successful large scale implementation are often divergent from those research activities, and even small scale implementation. Unanticipating this difference can doom large scale implementation to failure. The following solicited article by Dr. Hamerlynck offers a behavior analysis of a state-wide mental health and developmental disabilities program implementation from his view as director of these services over a four-year period.

Editor

[Excerpt]

“When You Pass the Behavioral Buck — Make It Contingent” or Reflection Upon Service in State Government

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Early in 1969 most of us were celebrating the reaffirmation of the Law of Effect by accelerating the drumbeats for “behavior modification.” My colleague Jerry Patterson, described the period as the “whoopie” stage of development. It seemed that everyone was pinpointing, recording, and reinforcing which was followed by a thunderous, “Whoopie, it works.” Thorndike rested easily while the Freudians and Rogerians pulled their wagons into circles. It was an exciting time for many as we saw the means for change appear to deal with the problems of living for the poor, the retarded, the underachievers, and the mentally ill. Most of us visualized a time when policies such as those of “War on Poverty” could lead to the vivid and valid developments. We talked about a world where human rights could be operationalized for all. This would be by demonstrating that, in part, deviance of the retarded and mentally ill was the result of deviant environments, not incubate and a host of related demons within the mind.

It was in the foregoing context that my colleagues and I at the University of Calgary planned the First Banff International Conference on Behavior Modification. The topic was Ideal Mental Health Services as a reflection of the interest of our sponsor, Dr. W. R. R. Blair. Buck Blair had just finished a white paper on mental health services for the provincial

government and offered his honorarium for the support of a conference on the topic. So we proceeded to invite as many leaders of the behavior modification movement as our budget would allow. The final roster was Gerald Patterson, Nate Azrin, Todd Risley, Dick Stuart, and Og Lindsley. Each agreed to present a paper at the conference reflecting their “blue sky” view of dimensions of Ideal Mental Health Services.

The conference was of significant success and initiated the series of which next year is the thirteenth. The speaker, the scenery, and the skiing combined for a memorable experience. Lindsley's presentation was dramatic as he argued for data-based services. In concluding, he challenged the audience with the statement, “The blood of your patients is on your hands.”

The proceedings were published, but there wasn't a chapter by Lindsley. It wasn't that he failed to fulfill his contract. He presented me with a one-line, nine-word paper. It read, “When you pass the behavioral buck—make it contingent.” As Chairman and Senior Editor of the proceedings, I was instrumental in the decision to exclude the Lindsley paper. Now, after more than a decade, which included a 4-year period in my career where I held the titles of Coordinator of Mental Health and Retardation, Administrator of Developmental Disabilities, and Coordinator of Mental Retardation, I publicly acknowl-

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