

# Implementing Practice Guidelines: Lessons From Public Mental Health Settings

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There is evidence that state-of-the-art psychiatric treatments are not being translated into community settings, resulting in the de facto denial of up-to-date psychiatric care for many Americans with mental illness. Although multiple models of evidence-based care exist, little is known about how to disseminate information regarding these models to clinicians in real-world practice. Suggested solutions have included the use of published practice guidelines, such as the American Psychiatric Association Practice Guidelines and the Expert Consensus Guidelines, or algorithm-based programs, such as the Texas Medication Algorithm Project. Unfortunately, the real-world utility of practice guidelines tends to be limited, because their implementation depends entirely on practitioner self-motivation. Similarly, the use of algorithm-based programs may be limited by their pervasive high specificity, practitioner resistance, and various patient misperceptions. Another solution is the implementation of evidence-based practices (EBPs), such as the Substance Abuse and Mental Health Services Administration (SAMHSA) EBPs. However, states' use of the SAMHSA EBPs has been hampered by misalignment of the funding structure, lack of information regarding EBPs, high costs to train and supervise staff, staff turnover, and a lack of resources. As a result, federal and clinical/professional agencies have called for a change in the nation's mental health care delivery system, supplying persuasive arguments for the economic and clinical superiority of integrated care models. One such model, the Missouri Medical Risk Management (MRM) Program for Medicaid Recipients with Schizophrenia, currently assists patients identified as being at high risk for adverse medical and behavioral outcomes. Preliminary results from the Missouri MRM Program are described.

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**E**vidence-based medicine effectively integrates 3 factors: (1) the best evidence from systematic research, (2) clinical expertise (proficiency and judgments acquired through clinical experience and practice), and (3) patient values.<sup>1,2</sup> Although multiple models of evidence-based care exist, little is known about how to disseminate information regarding these models to clinicians in real-world practice. In fact, as Unutzer and colleagues<sup>3</sup> recently observed, it actually may be more difficult to disseminate and implement an evidence-based model of care than it is to develop the model and establish its efficacy. The real-world impact of this dilemma was highlighted in the 1999 U.S. Surgeon General's Report on Mental Health,<sup>4</sup> which concluded that state-of-the-art psychiatric treatments are not being translated into community settings, resulting in the de facto denial of up-to-date psychiatric care for many Americans with serious mental illness. This failure to apply evidence-based models is not limited to psychiatry alone. It is a problem that also has been identified in the fields of neurology,<sup>5</sup> internal medicine,<sup>6</sup> family practice,<sup>7</sup> endocrinology,<sup>8</sup> and geriatrics.<sup>9</sup>

Why are established evidence-based models not implemented? Several authors<sup>10-12</sup> have addressed this issue and determined that implementation may be hindered by various clinician-

centered factors, including a lack of familiarity with evidence-based models. In 1995, Davidoff and colleagues suggested that the sheer volume of studies published in the medical literature at that time had already grown to the point that "most busy doctors lack the time or skill to track down and evaluate this evidence."<sup>12(p1085)</sup> More than a decade later, the deluge of medical information has become even greater.<sup>10</sup> In addition, some physicians simply lack the skills, initiative, or time required to perform a self-directed search for evidence and/or to critically appraise this evidence when found.<sup>12,13</sup>

A number of suggestions on how to disseminate and implement models of evidence-based care to clinicians in real-world practice have been proposed. Specific models include the use of published practice guidelines, such as the American Psychiatric Association (APA) Practice Guidelines<sup>14</sup> and the Expert Consensus Guidelines<sup>15</sup>; algorithm-based programs; evidence-based practices (EBPs); and a novel integrated care model, the Missouri Medical Risk Management (MRM) Program for Medicaid Recipients with Schizophrenia.<sup>16</sup>

## THE SIMPLEST SOLUTIONS: GUIDELINES AND ALGORITHMS

Several solutions have been proposed as a way of spurring clinician implementation of evidence-based models. First among these is the use of published practice guidelines, such as the APA Practice Guidelines and the Expert Consensus Guidelines. Practice guidelines are systematically developed statements designed to assist in clinical decision making by detailing the essential steps of patient assessment and management.<sup>17</sup> Unfortunately, the real-world utility of practice guidelines tends to be limited, typically because their implementation depends entirely on practitioner self-motivation (i.e., the responsibility for interpreting the guidelines and tailoring their application to a specific patient remains with the individual clinician).<sup>18</sup> As Switzer et al.<sup>19</sup> stated, the simple fact that a clinician is aware of a guideline's existence

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often is not enough to promote the actual use of the guideline in patient care. These investigators and others estimate that the true rates of guideline consultation and use among clinicians may be as low as 20%.<sup>19,20</sup>

A second solution is the use of algorithms, defined as evidence-based, consensually agreed upon, stepwise instructions for patient care.<sup>21</sup> When implemented on a large scale, such as was done in the Texas Medication Algorithm Project (TMAP),<sup>21</sup> algorithm-based programs seek to expedite the translation of evidence-based models into real-world patient care by providing the clinical and technical support necessary to allow the clinician to implement the algorithm. In addition, their efficacy can be tracked through the uniform documentation of care provided and the resulting treatment outcomes.<sup>21</sup> However, as with practice guidelines, the use of algorithms has inherent limitations. For example, the pervasive high specificity of algorithms may be seen by some clinicians as a challenge to their professional autonomy, resulting in practitioner resistance.<sup>22</sup> From the patient's perspective, the knowledge that algorithms are being used may fuel fears that available treatments are limited and that the use of these treatment algorithms is narrowly defined.<sup>22</sup> In addition, algorithms must be adapted to each new setting, and their requirements for staff support may make successful implementation too expensive for many organizations.<sup>22</sup>

### EBPs AND THE SAMHSA TOOLKITS

A third solution to bridge the gap between evidence-based models and real-world patient care is the implementation of EBPs. Federal and state mental health agencies have defined EBPs as mental health services supported by "research that has demonstrated they are effective in addressing mental illnesses."<sup>23(p1)</sup> Currently, the federal government's Substance Abuse and Mental Health Services Administration (SAMHSA) lists 6 EBPs for people with serious mental illness, including assertive community treatment (ACT), supported employment, integrated treatment for dual disorders, illness management, family psychoeducation, and medication guidelines.<sup>24</sup> For each of these EBPs, SAMHSA has made available an Evidence-Based Practices Implementation Resource Toolkit.<sup>25</sup> Each toolkit contains materials such as information sheets for stakeholder groups, introductory videos, practice demonstration videos, and a workbook or manual for practitioners.<sup>25</sup>

Federal grants have been made available for states to implement the various SAMHSA EBPs and, following implementation, measurements of fidelity to the SAMHSA models have been made.<sup>23</sup> Unfortunately, preliminary results<sup>23</sup> show that, as of fiscal year 2003, fewer than 50% of states (23 of 48 responding) had implemented all 6 EBPs, with an additional 11 states performing 4 or 5 of the 6 EBPs. Supported employment, the most commonly enacted EBP, was available statewide in 22 states, whereas only 10 states reported statewide implementation of ACT services.<sup>23</sup> Even fewer states had implemented medication algorithms, with just 13% of responding states reporting statewide adherence to algorithms for schizophrenia and 4% for bipolar disorder.<sup>23</sup>

To better promote implementation of SAMHSA EBPs, state mental health agencies have adopted various strategies, including consensus building, education, social marketing, grant opportunities, and provider contractual and financial incentives.<sup>26</sup> Despite these strategies, however, it is clear that, like guidelines

and algorithms, the implementation of EBPs through state mental health agencies' use of the SAMHSA toolkits has limitations. As shown in a 2004 survey conducted by the National Research, Inc. Center for Mental Health Quality and Accountability,<sup>26</sup> states' attempts to implement SAMHSA EBPs through the use of toolkits and other strategies have been limited by misalignment of the funding structure, provider lack of information regarding EBPs, high costs to train and supervise staff, staff turnover, and a lack of resources needed for statewide EBP implementation. In addition, outcomes must be integrated into EBP implementation, adaptations must be made to meet community needs, cultural issues must be addressed, and fidelity must be monitored.<sup>26</sup> These issues, combined with the relatively poor statewide implementation statistics discussed above, underscore the shortcomings of the use of EBPs and toolkits when attempting to implement evidence-based models of care through existing state mental health agency delivery systems.

### A NOVEL SOLUTION: CHANGING THE DELIVERY SYSTEM

If, as described with respect to EBPs, multiple factors within the existing mental health delivery system operate together to work against the implementation of evidence-based models of care, is it possible to change this delivery system to facilitate improvement in the level of care and, ultimately, achieve a more person-centered mental health system? This is precisely the strategy that has been proposed in the recommendations of the President's New Freedom Commission on Mental Health,<sup>27</sup> the Institute of Medicine (IOM),<sup>28</sup> and the National Association of State Mental Health Program Directors (NASMHPD).<sup>24</sup> According to the President's New Freedom Commission, reform of the present mental health delivery system is imperative because mental illness is "the only category of illness for which state and local governments operate distinct treatment systems, making comprehensive care unavailable."<sup>27(p86)</sup> To resolve the situation, the Commission advocated a "transformed system of care."<sup>27(p86)</sup> Specifically, the Commission emphasized that EBPs were not currently being implemented due to the presence of complex reimbursement policies (i.e., that current fee-for-service reimbursement systems for Medicaid, Medicare, and other payors did not allow providers to bill for essential components of many EBP programs, such as flexible case management, non-face-to-face services, or home visits). The Commission noted that, although Medicaid coverage of these EBP programs might be possible, reimbursement would need to be done under an option or waiver. To help correct the problem, the Commission proposed that public- and private-sector payors reframe their reimbursement policies to better support and implement EBPs. In addition to achieving better overall patient care that could "save lives,"<sup>27(p74)</sup> collaborative care models could be implemented in primary health care settings and reimbursed by public and private insurers.

Like the President's New Freedom Commission, a recent IOM report<sup>28</sup> highlighted several failures in the present mental health delivery system, including "disconnected care/delivery arrangements," multiple provider "hand-offs" of patients for different services, and prohibitions on information sharing. The IOM recommendations included strategies to facilitate information sharing, improve patient screening and monitoring, and increase collaboration among payors and providers.<sup>28</sup> At state and

local levels, the IOM suggested that policymakers should not only revise laws and policies that obstruct communication between providers, but also strive to create high-level mechanisms to improve interagency collaboration and coordination.<sup>28</sup>

With respect to NASMHPD, this organization's Medical Directors Council<sup>24</sup> has emphasized that, if key policymakers and administrators can be convinced to change regulatory and fiscal incentives to favor the use of evidence-based models of care, these incentives would inevitably drive changes in practice. One example of how this strategy might operate would be an effort to improve the utilization of the current monitoring and treatment guidelines for preventable medical conditions (e.g., metabolic disorders, cardiovascular disease, and diabetes) in people with serious mental illness. At the state level, the NASMHPD strategy could include working with Medicaid and public health agencies to track morbidity and mortality data in people with serious mental illness, as well as efforts to establish interagency partnerships for resource management and coordinated mental and general health care.<sup>24</sup> Consistent with the implementation of these strategies, provisions could also be made for staffing and staff training, as well as for linkages/integration among behavioral health and primary care delivery systems.<sup>24</sup> Of particular importance would be the establishment of a stable "primary care home" for patients with serious mental illness, a resource that NASMHPD equates in importance to stable housing and medication adherence.<sup>24</sup>

### INTEGRATING CARE INTO PRACTICE

As already mentioned, federal and clinical/professional agencies have called for a change in the nation's mental health delivery system, supplying persuasive arguments for the economic and clinical superiority of integrated care models that employ EBPs.<sup>29</sup> Real-life implementation of these models would entail obtaining both a "medical home" (i.e., a primary care provider responsible for overall coordination), as well as a "psychiatric home" (e.g., a local community mental health center), for the patient. Once this has been accomplished, a structured strategy for integrated disease management could be put into place. One such strategy, the Missouri MRM Program for Medicaid Recipients with Schizophrenia,<sup>16</sup> currently assists Medicaid recipients who have been identified as being at high risk for adverse medical and behavioral outcomes and whose combined behavioral and medical care expenditures have been significantly higher than those of other Medicaid recipients. The Missouri MRM Program is patient-focused and designed to keep physicians and case managers informed of both medical and psychiatric issues for each targeted patient. By gathering information taken from administrative claims data (e.g., medical services, behavioral services, pharmacy), the program uses predictive risk modeling to pinpoint which patients with schizophrenia are trending toward high-risk/high-cost disease states, allowing existing provider systems to proactively focus appropriate, evidence-based, clinical interventions.<sup>16</sup> On a regular basis (usually quarterly), the program provides physicians and case managers with patient medical profiles, medical briefs, and alert tracking reports. These structured instruments alert the patient's health care team to the possibility of potential problems, including emerging patient health risks, potentially dangerous drug interactions or side effects, any new prescriptions (i.e., within the previous 90 days), existing prescriptions that were not refilled in a timely fashion, and any recent outpatient or inpatient (medical or psychiatric)

care. The ultimate goal of the Missouri MRM Program is "a healthier patient quality of life"<sup>16</sup> through facilitation of greater patient adherence to treatment plans and fewer unplanned urgent, emergent, and inpatient hospitalization events. From a financial perspective, the state of Missouri also stands to benefit from the program as a result of a decrease in overall health care costs for each enrolled patient.<sup>16</sup> To date, preliminary findings<sup>30</sup> indicate that the program has been very successful in identifying those Medicaid recipients whose treatment is especially problematic due to their multiple health care conditions and complex and costly utilization patterns.

### CONCLUSION

In the past 20 years, a growing movement among mental health clinicians toward integrated care has given birth to only a few "young and struggling" models as to how this integration can be accomplished.<sup>29</sup> Disease management strategies, such as the Missouri MRM Program,<sup>16</sup> represent a possible solution for the cost-effective, expeditious, and patient-centered implementation of EBPs through integrated care. Only future outcomes analyses that assess the long-term impact on all interested parties (i.e., patients, providers, and the larger health care system) will confirm whether these strategies are ultimately effective.

*Disclosure of off-label usage:* The author has determined that, to the best of his knowledge, no investigational information about pharmaceutical agents that is outside U.S. Food and Drug Administration–approved labeling has been presented in this article.

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