

CHAPTER 1

Selecting an Evidence-Based Practice

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Several states and counties in the United States have specific governmental mandates to ensure that mental health providers who work in public mental health settings provide evidence-based practices (EBP). For example, California's Proposition 63 "Millionaire Tax" specifically provides funding to county mental health providers contingent on their provision of evidence-based practices. However, there has been very little guidance for mental health providers regarding processes and techniques for identifying those practices.

Identifying an EBP requires time and dedication. Breaking the process down into steps makes this daunting task more manageable. These steps include (1) identifying the target population, (2) researching EBPs for the target population, (3) deciding on the EBP, and (4) determining what to do if no EBP exists. In some situations, there will be no EBP at all; programs can either modify an EBP, or employ an *emerging practice* (EP, an intervention with some research support but not to the degree of an EBP) or a *service-informed practice* (SIP, an intervention widely and uniformly used in the community but having no scientific evidence base).

The purpose of this chapter is to detail how to implement these four steps. It can serve as a guide to community mental health programs searching for the best EBP for their community. See Figure 1.1 for a logic model to use in making decisions about an EBP selection.

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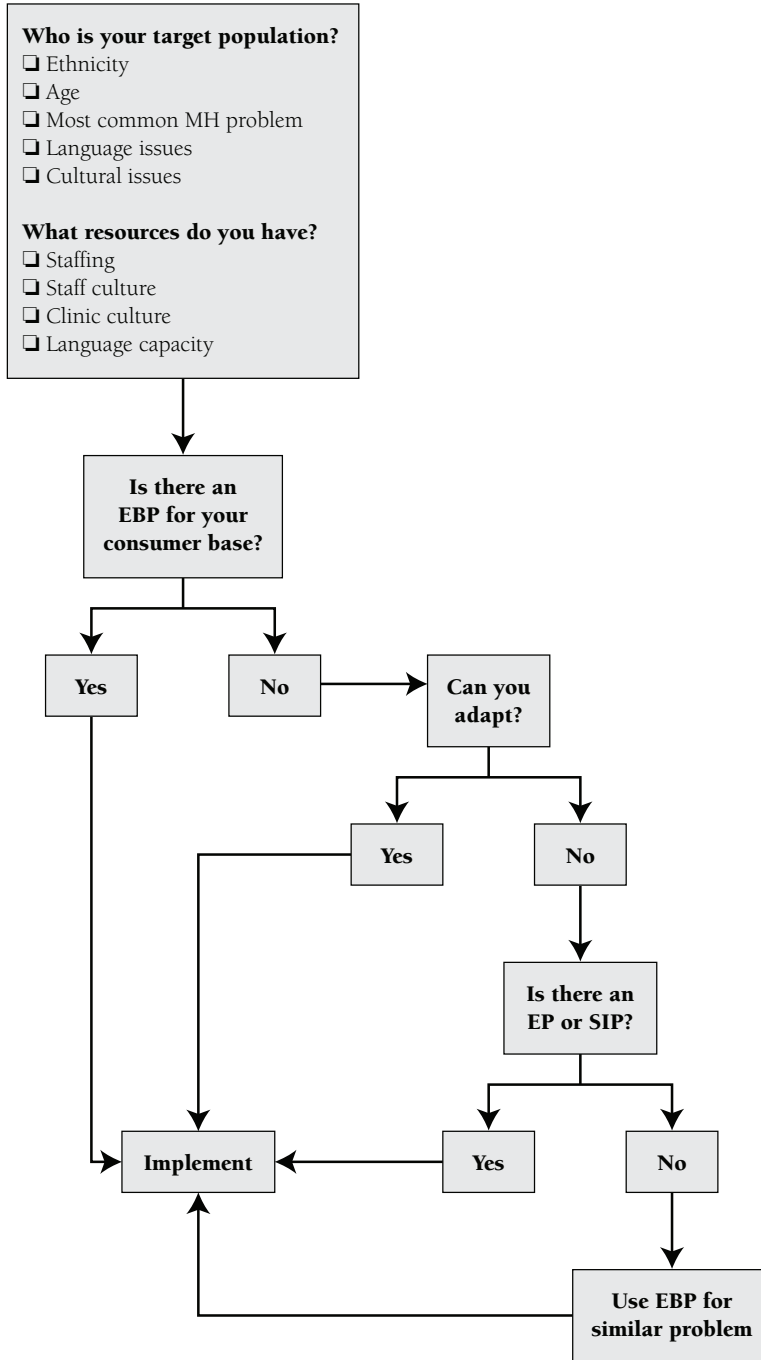


FIGURE 1.1 Logic model for EBP selection.

STEP 1: IDENTIFYING THE TARGET POPULATION

The first step in the process is to identify the target community. This step involves obtaining answers to the following questions: Which disorder is most common in your setting? Does your clinic represent mostly one minority group or is the clinic population diverse? Who are the staff members in the clinic and what skills do they possess (see Fig. 1.2)?

CASE STUDY

To illustrate how selecting an evidence-based practice works, we discuss our experience in moving EBPs for depression and agitation management to assisted living facilities. Our first step was to conduct a survey of needs that facility managers and frontline staff faced in working with their consumers. Our survey of more than 400 facilities in three northern California counties found facility managers wanted help with agitation management and depression. We then identified EBPs (based on the method described in Step 2) and presented the treatments to staff and managers in focus group settings to determine their interest, the fit of these models with their clientele, and the capabilities of the staff to implement these EBPs. Based on feedback from the groups, we determined that (1) the interventions needed to be adapted culturally, not only for the clients, but also for the staff providing them (many staff in assisted living facilities were monolingual, speaking Taglog and Spanish); (2) some EBPs needed to be delivered by outside professionals, while others could be delivered by existing staff; and (3) there would be a need for ongoing consultation as the new EBPs were implemented in these settings. This information helped in the selection of the best EBPs and the best model of dissemination.

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STEP 2: RESEARCHING EBPS

The second step is to conduct comprehensive research on the target problem and the EBPs that address the problem. This step involves reviewing the literature and developing an understanding of the details of the EBP. Researching EBPs requires time to go to the library, collect articles, sort information, and read through the details of the EBP. This step can at times be exciting as you learn more information about the target problem, and at other times frustrating as you discover how little there may be for you target population.

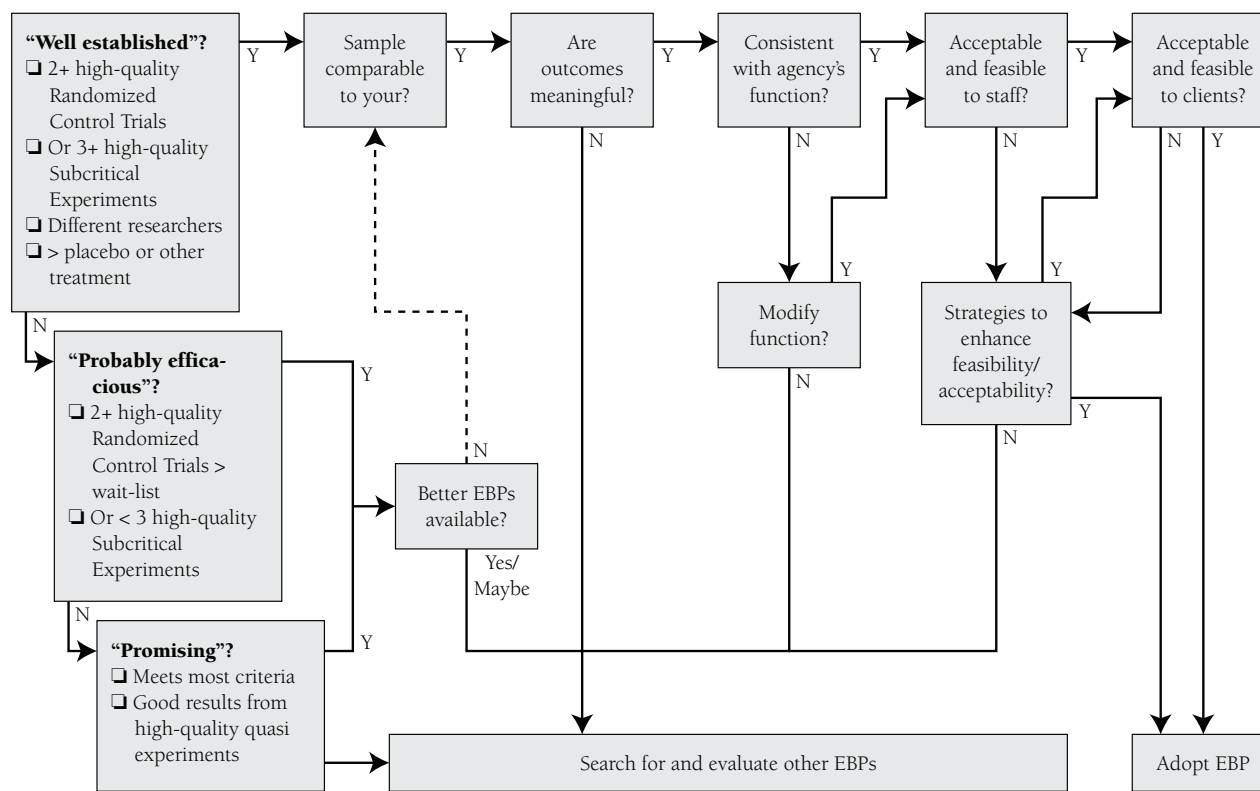


FIGURE 1.2 Decision making in selecting EBPs. (Note: We recognize that this evaluation process is not as linear and discrete as depicted in this figure, which is merely provided as a guide.)

Phase 1: The Literature Search

Search engines or large databases are helpful in identifying research articles and literature reviews with information on EBPs for your target population. Academic databases are excellent resources for finding these reviews and articles. Abstracts of most professional mental health and substance abuse publications (i.e., articles on empirical research studies, journals, books, book chapters) about older adults are included in PubMed and PsycInfo, which are accessible online. PubMed includes all publications abstracted in the Medline database and is available to the public at no cost. PsycInfo is a product of the American Psychological Association and is available to the general public for a fee. University libraries generally offer free public access to these databases; several professional organizations also provide access to these databases for their members.

PubMed and PsycInfo hold virtually all of the abstracts for research publications relevant to aging and mental health. In addition to empirical research studies, these databases also include literature reviews of journals, books, and book chapters. Literature reviews are an excellent place to start reading in a topic area, particularly for large topics for which it would be too time-consuming to read each research article (e.g., late-life depression). The primary benefit of searching these academic databases is the quality of publications. Journal articles included in these databases undergo a rigorous peer review process before being accepted for publication. Books and book chapters also usually go through a peer review process or at least an intensive peer-editing process. Another important benefit of using these databases is that all publications are catalogued by a variety of keywords, methodologies, and publication type, simplifying the document search. Finally, these databases allow users to set up searches that can be repeated at regular intervals and that will automatically e-mail the new publications that meet the search criteria. Likewise, many professional journals now offer *e-TOCs* (table of contents), in which users can sign up via the journal's Web site to receive the table of contents through e-mail whenever a new issue is released.

Most libraries throughout the United States provide tutorials on literature search methods. The most fruitful place to start your search is to use *keywords*, or general words that describe what you are looking for. For example, if you are interested in looking for evidence-based treatment for late life depression, common keywords to use are "depression," "late-life," "treatments," and "geriatric." It may take time to find the right keywords. If you are interested in treatment for Hispanic populations, you may have to use a variety of terms to get all the available information. For instance, in addition to "Hispanic," you may also have to use the terms "Latino," "Mexican,"

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“Cuban,” and “Puerto Rican” to get all the papers there are on the general Hispanic community. You can narrow your search by listing only recent articles by specifying years of publication. In PsycInfo, you can also limit the search to review articles, articles, or books.

Phase 2: Learning More About the EBP

Once existing EBPs for the target population have been identified, the second phase in this step involves locating the toolkits, guidelines, or manuals that describe the EBP in detail in order to make an informed decision among the available choices. *Toolkits* consist of instructions regarding the latest treatment for a mental health problem and provide tools to implement EBPs, including assessment tools for identifying the target problem, patient information materials regarding the problem, algorithms for medication management, and manuals for providing psychosocial interventions. The MacArthur Depression in Primary Care Tool Kit (www.depression-primarycare.org/clinicians/toolkits/) and the Substance Abuse and Mental Health Service Agency (SAMHSA) toolkits (<http://mentalhealth.samhsa.gov/cmhs/communitysupport/toolkits.asp>) are good examples of online toolkits. *Guidelines* are typically for medication management methods for mental health problems and include information on dosing and side effects for first- and second-line medications, how to decide on which medication to use, how the medication should be introduced (e.g., slowly), the time line for response, how often the provider should monitor side effects and symptom profiles, and when to change doses or medications. *Manuals* are typically guidelines for psychosocial interventions, and the theory behind the intervention, including step-by-step information about how to deliver the intervention. Most toolkits, guidelines, and manuals can be located easily online and are often available for free.

Online Resources

The most trusted sources of online information are government-sponsored Web sites, national and international organizations, and academic institutions. When reading online information, consider the source of the information and its consistency with other information and general research and clinical principles. New resources are regularly added or upgraded online, making it important to regularly update searches.

Government agencies provide relevant information online in order to facilitate dissemination of knowledge and implementation of EBPs. SAMHSA's Web site contains a range of online information and offers many publications

and treatment improvement protocols free of charge through its clearing-houses. For example, the SAMHSA Web site includes several treatment improvement protocols for substance abuse treatment, including a protocol tailored for older adults.

The Positive Aging Resource Center (PARC) was created in 2002 by a SAMHSA initiative to improve quality and access to mental health services for older adults. PARC provides information for older adults and their caregivers, health and social service providers, and policymakers. The section of the Web site for professionals (e.g., www.positiveaging.org) includes information on opportunities to connect with other professionals, training procedures, EBPs, assessment tools, and funding opportunities.

Other government agencies and professional organizations provide information about aging and mental health (National Institute of Mental Health at www.nimh.gov; National Institute on Aging at www.nia.gov). However, while much of this information is useful for consumers, the information for professionals is fairly general, with few details on specific EBPs. Similarly, professional organizations make available mental health information on their Web sites, some of which is specific to older adults, such as the American Association for Geriatric Psychiatry (www.aagp.org), International Psychogeriatric Association (www.ipa-online.org), American Psychiatric Association (www.psych.org), and American Psychological Association (www.apa.org). Organizations that focus on diseases common in late life also have useful information, such as the Alzheimer's Association or American Heart Association.

Some researchers and clinicians post information about EBPs on their institution's Web sites or create their own Web sites. One example is the Stanford Older Adult and Family Center (<http://www.med.stanford.edu/oac/>), which provides treatment protocols for psychosocial interventions for caregivers of older adults with dementia. Another example is the IMPACT (Improving Mood-Promoting Access to Collaborative Treatment) Web site (www.impact.ucla.edu), which provides links for researchers and clinicians to acquire training and resources on the IMPACT model of comprehensive care for late-life depression in primary care settings (Unützer et al., 2002). For many funded research studies, the results and information on how to access additional information are posted on the Web site of the funding agency.

Conferences and Professional Organizations

One of the main purposes of professional organizations and conferences is to provide a forum for sharing developments with colleagues. Research presentations, roundtable discussions, and informal social hours are all vehicles

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for networking with other professionals in the field and for sharing information about promising new practices. Additionally, many conferences offer workshops for clinicians to further develop specific skills. In the United States, national annual conferences with information specific to aging and mental health include the Gerontological Society of America, joint American Society on Aging/National Council on the Aging, and American Association of Geriatric Psychiatry. Other mental health and social service conferences often have some aging-related presentations. Regional conferences are often a productive forum for local networking opportunities. For example, the annual meeting of the Florida Coalition on Mental Health and Aging, one of several state coalition conferences, draws researchers, policymakers, clinicians of various backgrounds, and consumers. The Web site of the National Coalition on Mental Health and Aging (www.ncoa.org) includes links to local and state-level aging and mental health coalitions. Many organizations offer other resources for learning about best practices, including online materials for members only, directories, workshops, continuing education opportunities, and Listserve capabilities (whereby members can e-mail the entire body of members).

Personal Consultation

Contacting the authors of publications that look promising is another method for obtaining information. Being available for correspondence with interested readers is a responsibility of authors who publish peer-reviewed journal articles; their contact information should be available in the article and on their university or organization's Web site. Although it can be intimidating the first time you contact someone, you will find that most people are quite friendly and helpful. They are glad that someone is interested in their work and want to see effective methods be applied more widely. Some authors will want information about your setting and may require some training for you or your staff to use their protocols; most authors will provide direction toward resources for training and implementation.

Local colleagues in clinical or academic settings can be a resource for assistance in identifying EBPs. When consulting with someone, particularly if you do not have funds to pay consultation fees, consider other ways in which you could collaborate or help their professional efforts. For example, you might consult a local psychology professor on EBPs for suicide screening in primary care, while allowing her to develop empirical research methods to evaluate the success of your program or develop other research projects in your setting.

See Table 1.1 for selected Internet sources for information on aging and mental health.

TABLE 1.1 Selected Internet Sources for Information on Aging and Mental Health

Organization	Internet Address (http://)
<i>Scientific Databases</i>	
PubMed	pubmed.gov (free public access)
PsycInfo	www.apa.org/psycinfo (available for free at most university libraries, fees apply for general public access)
<i>EBPs, Treatment Guidelines</i>	
Substance Abuse and Mental Health Services Administration (SAMHSA)	www.samhsa.gov
Positive Aging Resource Center (PARC)	www.positiveaging.org
<i>Sample Researcher-Initiated EBP Web Sites</i>	
Stanford Older Adult and Family Center	www.med.stanford.edu/oac
IMPACT Depression Care Program	impact.ucla.edu
<i>Mental Health Information</i>	
National Institute of Mental Health (NIMH)	www.nimh.nih.gov www.nimh.nih.gov/HealthInformation/depoldermenu.cfm
American Association for Geriatric Psychiatry (AAGP)	www.aagpgpa.org
American Psychiatric Association (APA)	www.psych.org
American Psychological Association (APA)	www.apa.org www.geropsych.org (clinical geropsychology section) apadiv20.php.ufl.edu (aging division)
International Psychogeriatric Association (IPA)	www.ipa-online.org
<i>Aging Information</i>	
Administration on Aging	www.aoa.dhhs.gov/
Alzheimer's Association	www.alz.org/
American Society on Aging	www.asaging.org/
Gerontological Society of America	www.geron.org
National Council on the Aging	http://www.ncoa.org/
National Institute on Aging (NIA)	www.nia.nih.gov
<i>Advocacy Organizations, Coalitions</i>	
National Coalition on Mental Health and Aging	www.ncmha.org www.ncmha.org/coalitions.php3 (state coalitions)

STEP 3: DECIDING ON THE EBP

When gathering information about various practices that address the target population and treatment, it is important to consider the criteria by which to evaluate and choose among them. These criteria include the empirical evidence, as well as the cultural, social, and functional context of the patient population and setting.

Evaluating the Empirical Evidence

The premise of the EBP movement is to improve the quality of health care by applying those practices that have the strongest empirical support. There are two broad questions to consider when evaluating research studies: (1) Is there strong evidence that the treatment (as opposed to other variables) caused the improvements? and (2) How are the findings likely to generalize to the target population, problems, and setting? Evaluating the evidence of the treatment impact uses criteria detailed in Chapter 2 (Assessing Feasibility). The number and quality of randomized clinical trials will help determine if the practice is an EBP.

To evaluate the generalizability of the findings, consider factors such as the characteristics of the study sample in relation to the target population, including diagnostic category, age, sex, race/ethnicity, education, income level, rural or urban setting, and residential or medical setting. Research studies frequently have more homogenous participants than are found in typical clinical settings. For example, most studies of late-life depression have focused on major depressive disorder (MDD). Subthreshold forms of depression are more common in older adults across clinical settings, however, and still cause significant functional impairment (Lewinsohn, Solomon, Seeley, & Zeiss, 2000). Likewise, researchers historically have experienced difficulties enrolling sufficient numbers of racial and ethnic minority elders into clinical research (Areán & Gallagher-Thompson, 1996). Fortunately, recent advances have been made in terms of researching treatments for a wider range of diagnostic categories and diverse samples.

Consider the Context of the Setting and Population

A certain EBP may work well in a study, but it may not be feasible in a specific real-world clinical setting or applicable with a specific population. Therefore, one must also consider the multifaceted context for applying the

EBP, including the culture of the work setting, feasibility issues, and the cultural and social aspects of the target population.

Functional Context of Setting

First, consider how the EBP fits with mission and priorities of the organization. For example, many primary care clinics do not consider extensive mental health or substance abuse treatment to be part of their mission. EBPs that might fit within their mission include screening and referral procedures. In contrast, some federally funded community clinics provide interdisciplinary care that addresses medical, psychological, and social needs of its low-income community-dwelling older adults. Therefore, in addition to a primary care component, these clinics often have a social services component that employs case managers, social workers, and a clinical psychologist. It is feasible, then, for these clinics to consider integrating actual treatments into their settings.

The culture of the work setting and staff attitudes are also very relevant in selecting EBPs. When deciding among EBPs with similar levels of empirical support, it is useful to consider whether one better matches the general work climate or staff preferences of a given organization. With sufficient training and resources, professionals from different frameworks can learn a variety of new protocols, but training is simplified when the EBP in question is acceptable to the staff and is closer to their usual approach. Although trained therapists learn problem-solving therapy very well, we have found that therapists with a cognitive-behavioral background find the new techniques to be a more natural fit with their usual approach. However, we caution against *only* using EBPs that closely align with staff's current approaches as professionals often do benefit from looking at clinical situations from a new perspective.

Feasibility Issues

A number of feasibility issues related to implementation need to be addressed. What kinds of specialists are needed to implement a certain EBP? What type of training is needed? How much time and physical space are needed with clients? What types of payment options are available? Other sections of this book discuss implementation issues in greater detail (Chapter 2, Assessing Feasibility), but it is important to consider the implementation process while evaluating potential EBPs. Obviously, those practices that

require fewer resources, less time, and less specialized expertise will be more efficient to implement.

Cultural and Social Aspects of the Population

In examining the cultural and social aspects of the target population, one must ask: Will clients accept and participate in the service? For example, antidepressant medications are generally effective in treating late-life depression. However, several studies suggest that black adults are more likely to prefer and use psychotherapy and less likely to use antidepressant medications (Brown, Schulberg, Sacco, Perel, & Houck, 1999; Cooper et al., 2003; Dwight-Johnson, Sherbourne, Liao, & Wells, 2000); therefore, in settings that serve large numbers of black older adults, offering EBPs such as psychotherapy will be more effective than offering antidepressant medications. Stigma and lack of knowledge often contribute to unwillingness to accept mental health services, and it is therefore important to consider the general attitudes of the target population and methods for enhancing acceptability.

Older adults face a number of barriers to engaging in services, such as finances, transportation, physical disability and illness, and other constraints on their time, such as caregiving. Thus, for each potential EBP, one should ask: What barriers will clients face trying to access this service? What steps can be taken to remove these barriers? Older adults are more likely to access mental health and substance abuse services if they are integrated into medical and social service settings (Bartels et al., 2004). Generally, EBPs that are more portable, require fewer client responsibilities, have sufficient funding, and accommodate physical disability or illness will result in greater access and utilization.

CASE STUDY

(continued)

As described in Step 1, when we employed Step 3 for our assisted living project, we had to consider several factors. For each target disorder, we had EBPs that required training and resources that many of the facility staff did not have; we had to fit the EBP concepts into the cultural understanding of the frontline staff. We also found that no two facilities were alike. For instance, some facilities were corporately owned and housed a large number of beds, with different staffing layers (physicians or nurses), while others were family owned, having a small number of bed units and only administrators and certified nursing assistants

(CNAs). Further many of the CNAs did not speak English, an indication that training for an environmental intervention would be a challenge. We therefore created a model of implementing the EBPs that included training in depression and dementia that allowed for staff discussion of their conceptualization of these disorders, ongoing support from the training team, and buy-in from all levels of staff at the facilities.

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STEP 4: DETERMINING WHAT TO DO IF NO EBP EXISTS

In most circumstances, EBPs for mental health problems will not have a substantial evidence base for certain subpopulations, such as older adults with anxiety or older Asians with depression. The most common scenario is one where an EBP exists for a disorder but has yet to be studied extensively in a certain demographic group. The next likely scenario is a situation in which there is not yet any evidence in support of existing treatments for a disorder, as in the case of medication management for agitation (Holden & Gitlesen, 2004). There are solutions for both these scenarios.

Existing EBP with No Evidence for a Target Demographic Group

If there is an EBP that seems to be a good fit for a particular setting, but there is no evidence of its effectiveness with the target group, one should contact the creator of the EBP and inquire about any ongoing research of the EBP for the target demographic group. If there is no such research, one can ask the EBP creator to partner with the agency to adapt the intervention. For instance, an Asian-focused rehabilitation service for severely mentally ill wanted to employ an EBP for rehabilitation that had not been used on Asian populations. The agency contacted the EBP creator who agreed to assist in an adaptation of the model. This collaboration resulted in a fruitful partnership; the agency was able to obtain implementation guidance from an expert in the EBP and the expert was able to collect data to support a larger trial testing the model in Asian communities. If the creator of the EBP is not able to assist with an adaptation, a mental health clinician who has expertise working with the target group may be able to assist with the adaptation.

No EBP Exists

In those cases where no EBP exists, one may use either an emerging best practice or an SIP. The method for identifying emerging best practices is

similar to the methods for identifying EBPs. Identifying SIPs is more difficult. SIPs are often spread by word of mouth, and thus networking with other agencies that serve a similar population may yield a potentially useful SIP. In the event that none of these methods yield results, try to identify an EBP that targets a similar problem or population. For instance, if the target mental health issue is dysthymia and no EBP exists, using an EBP for major depression may be the next best intervention.

CASE STUDY *(continued)*

To illustrate with our assisted living example, we identified all the research that had been done on treatment for depression and agitation in older adults with physical and cognitive impairments. We found that while the evidence base for psychotherapies in cognitive impaired adults was weak, there was a good evidence base for medication management for depression. Conversely, while there was no good evidence base for medication management of agitation, there was a solid evidence base for environmental interventions. Because we were committed to offering consumers both behavioral and medication treatment options for both mental health problems, we found that we would need to investigate further to find an alternative EBP for depression and to find medication alternatives for agitation. That process is discussed in more detail in Step 4.

Our struggle to find an evidence-based psychotherapy program for depression in late life and an evidence-based medication management program for agitation fell under this category. For the psychotherapy program, we decided to investigate emerging best practices that had potential for our population. We settled on one therapy that not only reported one very positive result for older adults with cognitive impairment and depression but was also an intervention that could be delivered by non-mental-health providers, fitting our desire to have nursing staff learn to manage depression behaviorally. The medication management for agitation posed a bigger challenge. By searching the National Institute of Mental Health Web site for funded studies on agitation management, we discovered that a multisite study was underway using a treatment algorithm that mirrored what was felt to be the best practice available for agitation. We were able to obtain the algorithm for our purposes.

In sum, identifying an EBP with the best fit for your staff and consumer base is a challenge. The most important step is a thoughtful consideration of the target population and the available resources. All steps following should flow naturally from your mission.

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