Course Materials for Continuing Education Course

10003 Evaluating Your Program for the Treatment of Depression in Older Adults [1 Credit]

Course Syllabus is on Page 2

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Course Syllabus

Course Description: This online text-based course discusses the importance of program evaluation for treating depression in older adults. It includes instructions to aid the psychologist in conducting process and outcome assessments and tips on how to use the data to help validate and improve on evidence-based practices (EBPs) for treating depression in older adults.

Course Objectives (Learning Outcomes): By successfully completing this course, the learner will be able to:

1. Identify and discuss three reasons program evaluation is important for psychologists working with older adults.
2. Describe process and outcome evaluations of psychological care.
3. List five tips on the use of data to improve evidence-based practice for treating depression in older adults.

Course Category: Program Development and Community Service

Credits: 1.0

Fees: $10.00 to register for CE Credit (Must pass Course Quiz to earn credit). Refund Policy.

Last Revision: February, 2016

Audience, and Course Level: This course is appropriate for **Psychologists**, **Mental Health Counselors**, **Social Workers**, and **Marriage and Family Therapists** who work with the elderly population, especially those who treat older adults suffering from or at risk of depression and/or dysthymia. This course is considered **introductory** since it introduces the learner program evaluation for this population and no prerequisite training is required.

Course Utility and Potential Risks/Conflicts: This course was designed to offer both rationale and instructions on program evaluation specific to this population, including how to improve evidence-based practice. Discussion of specific treatments is not intended to be considered clinical training or certification. This course is not sponsored by any commercial organizations and no potential conflicts of interest are noted.

Course Instructors: This course was developed by Chris Heffner, PsyD, PhD, LP and was reviewed by Catherine Crews, PhD, LP.

Course Materials: The materials for this course were produced for the Substance Abuse and Mental Health Services Administration (SAMHSA) by Abt Associates, Inc., and the National Association of State Mental Health Program Directors (NASMHPD) Research Institute under contract number 280-04-0095 and Westat under contract number 270-03-6005, with SAMHSA, U.S. Department of Health and Human Services (HHS). Pamela Fischer, Ph.D., served as the Government Project Officer.

Publication Date: September, 2011

Format: PDF (CustomCE Course 10003.pdf)

Technical Requirements: Internet Access for Course Quiz, PDF Viewer (e.g., Acrobat Reader) for Course Materials.

Additional Requirements: None

Suggested Prerequisites: None

10003 Course Supplemental

Published course materials can become outdated quickly and new materials take time to develop and publish. To fill this gap, we work to add updates and other important information related to each course as a Course Supplemental. This information, typically in the form of meta-analyses, review articles, and updated assessment or treatment protocols, is provided below in abstract format.

Hoeft, T. J., Hinton, L., Liu, J. & Unutzer, J. (2016). Directions for Effectiveness Research to Improve Health Services for Late-Life Depression in the United States. The American Journal of Geriatric Psychiatry, 24:1, 18-30.

Considerable progress has been made in the treatment of late-life depression over the past 20 years, yet considerable gaps in care remain. Gaps in care are particularly pronounced for older men, certain racial and ethnic minority groups, and those with comorbid medical or mental disorders. We reviewed the peer-reviewed literature and conducted interviews with experts in late-life depression to identify promising directions for effectiveness research to address these gaps in care. We searched the PubMed, PsychInfo, and CINHAL databases between January 1, 1998, through August 31, 2013, using terms related to late-life depression and any of the following: epidemiology, services organization, economics of care, underserved groups including health disparities, impact on caregivers*, and* interventions*.*

The results of this selective review supplemented by more current recommendations from national experts highlight three priority research areas to improve health services for late-life depression: focusing on the unique needs of the patient through patient-centered care and culturally sensitive care, involving caregivers outside the traditional clinical care team, and involving alternate settings of care. We build on these results to offer five recommendations for future effectiveness research that hold considerable potential to advance intervention and health services development for late-life depression.

EVIDENCE-BASED PRACTICES

KIT

Knowledge Informing Transformation

Guide to EBPs

Evaluating
Your Program

The Treatment of Depression in Older Adults

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Substance Abuse and Mental Health Services Administration
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EVIDENCE-BASED PRACTICES

KIT

Knowledge Informing Transformation

Guide to EBPs

Evaluating Your Program

This booklet describes why you should evaluate your program for treating depression in older adults. You will also find instructions for conducting process and outcome assessments and tips on how to use the data to improve your evidence-based practices (EBPs) for treating depression in older adults.

Treatment of Depression in Older Adults

For references, see the booklet, *The Evidence*.

This KIT is part of a series of Evidence-Based Practices KITs created by the Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.

This booklet is part of The Treatment of Depression in Older Adults Evidence-based Practices KIT, which includes 10 booklets:

How to Use the Treatment of Depression in Older Adults Evidence-Based Practices KIT

Depression and Older Adults: Key Issues

Selecting Evidence-Based Practices for Treatment of Depression in Older Adults

Evidence-Based Practices Implementation Guides:

- **Older Adult, Family, and Caregiver Guide on Depression**
- **Practitioners' Guide for Working with Older Adults with Depression**
- **Guide for Agency Administrators and Program Leaders**
- **Leadership Guide for Mental Health, Aging, and General Medical Health Authorities**

Evaluating Your Program

The Evidence

Using Multimedia to Introduce Your EBP

EVIDENCE-BASED PRACTICES

KIT

Knowledge Informing Transformation

Guide to EBPs

What's in *Evaluating Your Program*

The Treatment of Depression in Older Adults

EVIDENCE-BASED PRACTICES

KIT

Knowledge Informing Transformation

Guide to EBPs

Evaluating Your Program

Evaluating Your Program **shows practitioners, administrators, and quality assurance team members how to evaluate evidence-based practices (EBPs) for older adults with depression. This booklet describes why you should evaluate your program for treating depression in older adults. You will also find instructions for conducting process and outcome assessments and tips on how to use the data to improve your EBP for treating depression in older adults.**

Evaluating Your Program **also identifies assessment measures to use with older adults. These include the following:**

- **Process measures that are specific to EBPs for older adults with depression; and**
- **Outcome measures that are specific to older adults with depression.**

Why Evaluate Your Treatment Program for Depression?

Key stakeholders who are implementing depression programs for older adults may find themselves asking two questions:

- Has this EBP been implemented as planned?
- Has this EBP resulted in the expected outcomes?

Asking these two questions and using the answers to help improve your EBP are critical for ensuring the success of your program.

To answer the first question, collect process measures to capture how services are provided. To answer the second question, collect outcome measures to capture the program's results. This information can inform the use of EBPs at different levels.

Administrators can use data to ensure that EBP implementation is on track and producing desired outcomes. Supervisors and program leaders can use data to improve the quality of services. Practitioners, as well as older adults and their family members or caregivers, can use data to determine if the EBP is effective and to understand the value of the EBP.

As you prepare to implement an EBP for treating depression in older adults, we strongly recommend that you develop a quality assurance system using both process and outcome measures to monitor and improve the quality of the program from the startup phase and continuing through the life of the program.

Developing a quality assurance system will help you achieve the following aims:

- Diagnose your program's strengths and weaknesses;
- Formulate action plans for improving your program;
- Help older adults achieve their goals for recovery; and
- Deliver depression treatment both efficiently and effectively.

How to Use Process Measures to Evaluate Your EBP

Process measures give you an objective, structured way to determine if you are delivering the EBP in the way that research has shown will result in desired outcomes. Process measures assess key aspects of service delivery or program implementation. Some EBPs for older adults have specific instruments for measuring process data, called *fidelity measures*. These process measures allow you to understand whether you are providing services that are faithful to the EBP model (also called *high-fidelity services*).

Experience suggests that process assessment is an excellent method to diagnose program weaknesses while helping to clarify program strengths. Once your EBP reaches high fidelity, ongoing monitoring allows you to test local innovations while ensuring that your program does not drift from the core components of the EBP. Studies have shown that outcomes are superior when interventions are delivered with high ratings of fidelity in implementing the selected EBP.

Process measures also give mental health, aging, and general medical health authorities a comparative framework to evaluate the quality of EBP programs across the state or across a large health care system. They allow these authorities to identify systemwide trends and outliers.

How to conduct process assessments

Optimally, EBPs will have accompanying fidelity procedures and scales that describe the specific staffing requirements, methods, and quality standards that are needed to implement the EBP with a high level of adherence to the original model program. However, many EBPs for older adults with depression do not have fidelity measures. *Assessment Measures to Use with Older Adults* in this booklet identifies EBPs with procedures for assessing fidelity.

- In the absence of a fidelity measure that identifies key EBP features, you can evaluate the quality of EBP implementation by considering the following procedures and questions for assessing fidelity (Gorman-Smith, 2006). You also may wish to consult with developers or other expert consultants.

As you begin to conduct process assessments, you will need to do the following:

- Identify the key features of the EBP that must be closely adhered to and monitored; and
- Establish methods for monitoring implementation of key EBP features.

Identify key features of the practice that must be closely adhered to and monitored

Carefully reviewing the EBP program manual and discussions with the developer of the EBP will help you identify key features of the treatment that must be closely adhered to and monitored.

Staffing and training

- How many practitioners and supervisors are needed to successfully deliver the intervention?
- How many older adults can each practitioner treat (for example, what is the recommended caseload)?
- What academic degrees or previous experience do practitioners need?
- How much training will practitioners and supervisors need before delivering the intervention and on an ongoing basis?
- Who delivers the training and what particular qualifications do trainers require?
- In what settings and formats are the initial and ongoing training provided?

Intervention methods and delivery

- Do the needs of the older adults being served match the specific practice?
- What is the location or setting in which the practice is delivered?
- What is the expected content of each treatment contact or session (for example, problem-solving treatment delivered within an outreach model)?
- What is the expected nature of the interaction between the practitioner and the older adult (for example, directive or non-directive, focused on everyday challenges that interfere with the older adult's functioning)?
- What is the expected frequency and duration of each treatment contact or session?
- How many treatment sessions should the older adult receive?
- Are the older adults served satisfied with the practice as it is being delivered?

Establish methods to monitor implementation of key EBP features

To ensure that you are implementing the EBP as it was designed and evaluated, you must implement a system to monitor the extent to which your program closely follows the key features and delivery methods of the EBP. This can be done through using checklists, direct observation, or videotaped observation.

Frequency of process assessments

You should conduct your first process assessment before you begin providing your new depression treatment program. This will help you determine whether your organization has the core components in place. During the first 2 years of implementing your new EBP, plan to assess your program every 6 months. After your program has matured and achieved high fidelity, you may choose to conduct process assessments once a year.

Organizations that have successfully implemented EBPs indicate that you must continue to evaluate the process to ensure that you do not revert to previous practice patterns.

Once your program has achieved high fidelity to the evidence-based model, practitioners may tailor the program to meet individual needs of the community. If you continue to use process evaluations along with outcomes monitoring, you will be able to understand the extent to which your changes result in your program's departure from model fidelity and whether the changes positively or negatively affect older adults.

Assessors

We recommend enlisting two assessors to conduct your process evaluation. Having two assessors collect data simultaneously increases the likelihood that information will be reliable and valid.

Organizations that have successfully implemented EBPs have taken different approaches to identify assessors. Some organizations train advisory committee members as assessors and rotate the responsibility of completing assessments. Others have pre-existing quality assurance teams and simply designate members of the team to complete the assessments. In other cases, the mental health, aging, or general medical health authority has designated staff to conduct process assessments.

Assessments can be conducted either internally by your organization or by an external review group or external consultants. The goal is to select objective and competent assessors. For the purposes of this booklet, we assume that assessors will be part of your quality assurance team.

Organizations can use fidelity scales or other process measures to rate their own programs. The validity of these ratings (or any ratings, for that matter) depends on the following:

- The knowledge of the person making the ratings;
- Access to accurate information pertaining to the ratings; and
- The objectivity of the ratings.

If you conduct your assessments using internal staff, beware of potential biases of raters who are invested in seeing the program "look good" or who do not fully understand the treatment model. It is important for ratings to be made objectively and that they be based on hard evidence.

Circumstances will dictate decisions in this area, but we encourage organizations to choose a review process that fosters objectivity in ratings (for example, by involving a practitioner who is not centrally involved in providing the EBP).

Only people who have experience and training in interviewing and data collection procedures (including chart reviews) should conduct assessments. Additionally, assessors must understand the nature and critical ingredients of the EBP.

If your organization chooses to use a consultant or trainer to help implement your EBP, involving that person in the assessment process will enhance the technical assistance you receive. Whichever approach you choose, we encourage you to make these decisions early in the planning process.

Methods for collecting process data

A number of activities take place before, during, and after a process assessment. In general, assessments include the following activities:

- Interviewing administrators, the program leader, practitioners providing the EBP, and older adults and their family members or caregivers;
- Interviewing other staff (that is, therapists, psychiatrists, or nurses);
- Shadowing EBP practitioners;
- Observing a treatment team meeting and a supervisory meeting; and
- Conducting a chart review.

Collecting information from multiple sources helps assessors more accurately capture how services are provided. A daylong site visit is the best way to learn this information.

Assessment Measures for Use with Older Adults later in this booklet describes several specific process measures that can be used to evaluate programs for older adults with depression.

How to Use Outcome Measures for Evaluating Your EBP

Outcome measures can help you evaluate the effectiveness of your EBP for older adults with depression. You can use outcome measures to identify older adults with depression and to evaluate the outcomes of their treatment. This section describes why you should collect outcome measures.

While process or fidelity measures capture how services are provided, outcome measures capture the program's results. Every mental health service intervention has both immediate and long-term goals for participants. In addition, older adults have goals for themselves, which they hope to attain by receiving mental health services. These goals translate into outcomes and the outcomes translate into specific measures.

Research Has Shown That You Can Expect These Outcomes from Depression Treatment Programs

- Reduction in depression symptoms;
- Prevention of relapse, recurrence of symptoms, and suicidal thinking;
- Improvement of cognitive and functional status; and
- Development of skills for coping with disability or other problems.

How to conduct outcome assessments

Think about several issues as you begin to conduct outcome assessments:

- Choosing your outcome measures;
- Developing data collection procedures; and
- Ultimately, expanding your outcome measures.

Choose your outcome measures

Unlike process measures which must be used in full to comprehensively understand how services are provided, you must decide which outcome measures will be most informative for your EBP.

Initially, your quality assurance system should be simple to use and maintain. Complexity has doomed numerous well-intended attempts to collect and use outcome data. One way to simplify is to limit the number of outcome measures used. Select your outcome measures based on the type of information that will be most useful to your organization.

Develop procedures

Organizations may choose to develop from scratch the outcomes portion of their quality assurance system or use existing outcomes monitoring systems. A number of electronic evaluation programs are available to help you develop comprehensive, integrated, user-friendly quality assurance and outcome monitoring systems.

Examples include both commercially and publicly available tools, such as the Consumer Outcomes Monitoring Package (**http://www.socwel.ku.edu/projects/ebp/**) or the Decision Support 2000+ Online (**http://www.ds2kplus.org**).

Evaluation processes and templates also are available from some EBP developers, such as IMPACT (*Improving Mood, Promoting Access to Collaborative Treatment*) and PEARLS (*Promoting Engagement in Active, Rewarding Lives for Seniors*). For more information about these programs, see *Selecting Evidence-Based Practices for Treatment of Depression in Older Adults* in this KIT.

When deciding whether to use an existing outcomes monitoring package or to design your own, it is important to keep in mind your organization's capabilities. The system must not create undue burden for EBP team members, and it must provide information to them that is useful in their jobs.

The system should fit into the workflow of the organization, whether that means making ratings on paper, using the Consumer Outcomes Monitoring Package (COMP) computer application, or developing your own outcomes monitoring package. Begin with whatever means are available and expand the system from there. In the beginning, you may collect data with a simple report form, and you can report hand-tallied summaries to EBP team members.

A computer with a spreadsheet program (for example, Excel) makes data tabulation and graphing easier than if it is done by hand. A computerized system for data entry and report generation presents a clear advantage, and it may be the goal, but do not wait for it.

How often should you collect outcomes data?

The timeframe for collecting outcome data depends on how the data will be used.

- Plan to monitor outcome data used for program-level quality improvement efforts every 3 months and share the data with your EBP team.
- Data used by practitioners to monitor the progress of individual older adults can be collected at time intervals that match the duration of the treatment. Practitioners may find it useful to collect outcome data from older adults when they begin and complete treatment, particularly for some of the brief, time-limited psychotherapy interventions described in this KIT.
- Collecting data at regular and short intervals will enhance the reliability of your outcomes data. While we recommend that you design a system for collecting outcomes early in the implementation process, you should not expect to see the desired results until the EBP is fully operational.
- Feedback does not have to come from a sophisticated computer system to be useful. It is more important that it is meaningful and frequent.

How should you identify data collectors?

Agency administrators or mental health, aging, or general medical health authorities may assign the responsibility for collecting outcomes data to one of the following:

- The EBP leader;
- Members of the EBP advisory committee;
- The quality assurance team;
- Independent consultants, including older adults and their family members or caregivers; and
- Other staff.

Unlike collecting process measures, collecting outcome measures does not require a day-long assessment process. Some standard outcome measures, such as depressive symptoms or level of functioning, will be information that EBP team members can report from their daily work with older adults. It is important to develop a quick, easy, standardized approach to collect outcomes data. For example, create a simple form or computer database that EBP team members can routinely update.

Expand your outcome measures

Once you have established your core outcomes monitoring system, learned how to routinely collect data, and are accustomed to using it to improve your EBP program, you will be ready to expand your outcome measures. Consider seeking input from older adults and their family members or caregivers about how to improve EBP services, both practically and clinically.

Older adults and their family members or caregivers are important informants for organizations seeking to improve outcomes. Organizations may want to know the following:

- If older adults are satisfied with their services;
- How services have affected their quality of life; and
- Whether they believe the services are helping them achieve their recovery goals.

While collecting data from older adults and their family members or caregivers requires more staff time than the information that may be reported quickly by EBP team members, older adults and their family members or caregivers can give EBP team members valuable feedback.

It is difficult to obtain a representative sample of older adult and family or caregiver respondents since mailed surveys are often not returned and interviews may be done only with people who are cooperative and easy to reach.

Avoid bias in your data by using a variety of mechanisms to conduct your assessments. For example, consider combining feedback collected through surveys with data obtained from focus groups. Another option is to hire a consultant to conduct qualitative interviews with a small group of older adults or their family members or caregivers.

What challenges might you encounter in assessing older adults?

Collecting outcome data from older adults can be more challenging than collecting data from younger adults. Data collectors must be prepared for challenges that may arise due to the following conditions:

- Vision problems;
- Hearing problems;
- Memory problems;
- Physical disability; and
- Social isolation.

Using large-print questions and providing spoken (auditory) versions can help accommodate vision problems.

Data collectors can improve interviews or surveys conducted over the telephone by slowing the rate of their speech, raising their voice level, and reminding older adults to use assistive devices such as hearing aids.

To improve their ability to collect accurate data from older adults with cognitive impairment, data collectors should ask simple, brief questions or ask questions of family members or caregivers.

Data collectors also can improve data collection by being aware of the stigma associated with depression. Use a confidential, sensitive, and non-confrontational approach for asking questions. Questions should be worded to be age-appropriate and to avoid judgmental or stigmatizing language.

Assessment Measures for Use with Older Adults later in this booklet describes several specific outcome measures that can be used with older adults with depression.

Steps You Can Take

- Develop a data measurement team and establish ownership of the process.
- Target data collection to answer specific questions.
- Use available data or measure small, representative samples.
- Use both qualitative and quantitative data.
- Define data collection processes and measures so that different people can consistently collect data.
- Build process and outcome measurement into the daily work of practitioners and other staff.
- Analyze data and provide useful, easily understood reports.
- Display key measures that show trends over time

Using Data to Improve Your EBP for Older Adults with Depression

As you develop a quality assurance system, EBP practitioners will weave it into the fabric of their daily routines. Process assessments will give you a window into the demanding work done every day. Outcome reports will give you tangible evidence of the use and value of services, and they will become a basis for decisionmaking and supervision.

At some point, your EBP team may wonder how they did their jobs without an information system as they come to view it as an essential ingredient of a well-implemented EBP.

Create reports from your assessments

Evaluators of process and outcome data should write a report explaining their findings. The report should include the following:

- An interpretation of the results of the assessment;
- Strengths and weaknesses of the EBP program; and
- Clear recommendations to help the EBP program improve.

The report should be informative, factual, and constructive.

For your outcomes data, start with simple, easy-to-read reports. Then let experience determine what additional reports you need. You can design your reports to give information about individual older adults, a single practitioner's caseload, or the program as a whole.

For example, reports generated for older adults may track their participation in the services and outcomes over time. You could enter these reports in their charts and those reports could be the basis for discussions about progress.

Use tables and graphs to understand your outcomes data

After the first process and outcomes assessments, it is often useful to provide a visual representation of a program's progress over time. We recommend that you use tables and graphs to report the results.

By graphing your process measures, you have a visual representation of how your program has changed over time. For your process data, you may simply graph the results using a spreadsheet and include this in your report.

When your program shows greater fidelity over time, the graph will display it and reinforce your efforts. Another feature of graphing assessment scores is to identify the cutoff score for *fair* or *good* implementation. Your program can use these scores as targets.

Here are three examples of tables and graphs that can help you understand and use your outcomes data.

Example 1: Periodic summary tables

Periodic summary tables summarize your outcomes data each quarter and address these kinds of questions:

- How many older adults participated in our program during the last quarter?
- How many older adults achieved symptom remission or recovery during the last quarter?
- How many older adults with a depression diagnosis are receiving depression treatment?

Agencies often use this type of table to understand older adult participation or to compare actual results with agency targets or goals. These tables are also frequently used to describe agencies' services in annual reports or for external community presentations.

Table 1: Sample Periodic Summary Table of Enrollment in EBPs

	Not eligible	Eligible but NOT in EBP service	Enrolled	Percent of eligible older adults enrolled
Problem-solving treatment	30	30	60	67%
Cognitive behavioral therapy	30	60	40	40%

This agency provides both problem-solving treatment (PST) and cognitive behavioral therapy (CBT). The PST team serves 90 older adults. Of those, 60 receive services, while 30 are eligible but receive a service other than PST. Consequently, 67 percent of older adults eligible for PST currently receive the service.

Example 2: Movement tables

Tables that track changes in older adult characteristics (called *movement tables*) can give you a quick reference for determining service effectiveness. For example, Table 2 compares status of depression diagnosis between two quarters.

Table 2: Sample Diagnosis Movement Table

From FY '07 Qtr 2		Major depression	Partial symptoms	Remission	Total
	Major depression	4	1	3	8
	Partial symptoms	3	8	3	14
	Remission	1	3	5	9
	Total	8	12	11	31

Above the diagonal
Below the diagonal
Within the diagonal

To create this table, the data were collapsed into the three broad categories. The horizontal data cells reflect the diagnostic status for older adults for the beginning quarter. The vertical data cells reflect the most recent quarterly information. The status categories are then ordered from the least desirable (major depression) to the most desirable (remission).

The data in this table are presented in three colors. The dark green cells are those above the diagonal, the light green cells are those below the diagonal, and the white cells are those within the diagonal. The data cells above the diagonal represent older adults who moved into a more desirable status between quarters. As you can see, three older adults moved from major depression to remission. The data reported in the diagonal cells ranging from the upper left quadrant to the lower right reflect older adults who remained in the same status between quarters. As you can see, four older adults had major depression for both quarters of this report.

The cells below the diagonal line represent older adults who moved into a less desirable status between quarters. Three people moved from partial symptoms to major depression. The column totals show the number of older adults in a given status for the current quarter, and the row totals show the prior quarter.

You can use movement tables to portray changes in outcomes that are important to older adults, supervisors, and policymakers. The data may stimulate discussion on the progress that older adults are making or the challenges with which they are presented.

Example 3: Longitudinal plots

A longitudinal plot is an efficient and informative way to display participation or outcome data for more than two successive periods. The goal is to view performance in the long term. You can use a longitudinal plot for an older adult, a caseload, a specific EBP, or an entire program. A single plot can also contain longitudinal data for multiple older adults, caseloads, or programs for comparison.

Figure 1: Sample Longitudinal Plot for Percent of Older Adults with Screenning for Depression

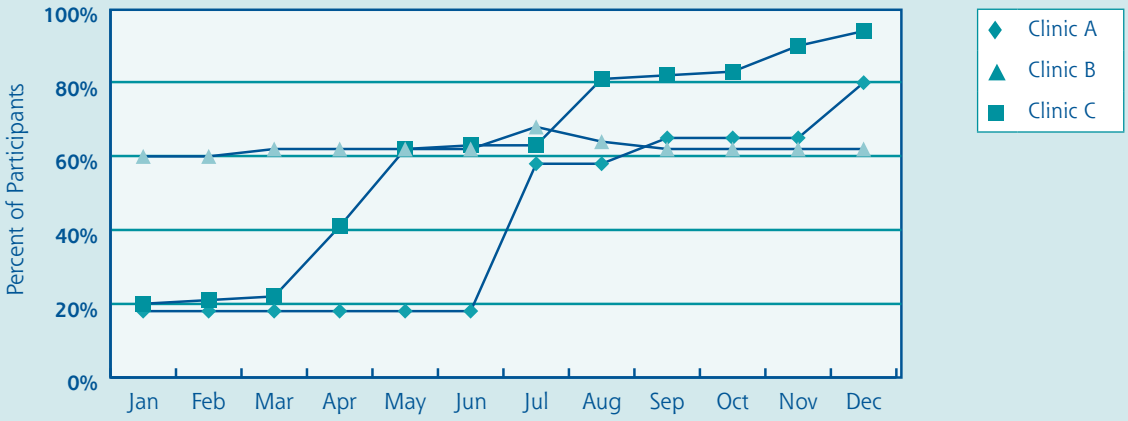

Figure 1 presents an example of a longitudinal plot comparing the percentage of older adults who are screened for depression at three clinics over a 12-month period. This plot reveals that two of the three clinics showed a substantial improvement in screening rates.

Screening for depression was nearly three times more likely in Clinic A, compared to Clinics B and C in January. Clinics B and C began quality improvement programs in April and June, respectively. Their efforts resulted in a substantial increase in screening. By December, Clinics B and C were screening more than 80 percent of patients, whereas Clinic A was screening about 65 percent. This graph shows where improvement occurred and can be tied to important changes in clinical practice and management. The graph can be used to show areas that have improved or need improvement.

Longitudinal plots are powerful feedback tools because they permit a longer range perspective on participation and outcome, whether for a single older adult or a group of older adults. They enable a meaningful evaluation of the success of a program, and they provide a basis for setting goals for future performance.

Share your results

The single factor that will most likely determine the success of an information system is its ability to give useful and timely feedback to practitioners.

It is fine to worry about what to enter into a system, but ultimately the system's worth is in converting data into meaningful information. For information to influence practice, it must be understandable and meaningful, and it must be delivered in a timely way. In addition, the quality assurance system must tailor the information to suit the needs of various users and to answer their questions.

Sharing results with practitioners

After each assessment, dedicate time during a supervisory meeting to discuss the results. Numbers that reflect above average or exceptional performance should trigger recognition, compliments, or other rewards. Data that reflect below average performance should provoke a search for underlying reasons and should generate strategies that offer the promise of improvement. By doing this regularly, EBP team leaders will create a "learning organization" characterized by adaptive responses to information that aim to improve older adult outcomes.

Sharing results with your EBP advisory committee or quality assurance team

You also may use this information to keep external stakeholders engaged. Sharing information with vested members of the community; staff from your mental health, aging, or general medical health authority; and older adults and their family members or caregivers can be valuable.

Through these channels, you may develop support for the EBP, increase older adult participation, and raise private funds for your organization.

Sharing results internally

Organizations may distribute reports during all staff and manager-level meetings to keep staff across the organization informed and engaged in the process of implementing the EBP. Organizations with successful EBP programs highlight the importance of developing an understanding and support for the EBP across the organization.

Additionally, integrating older adult-specific reports into clinical charts may help you monitor their progress over time. Reporting older adult-specific outcomes information at the treatment team meetings also helps keep the team focused on older adults' goals.

Sharing results with older adults and their families or caregivers

Organizations may highlight assessment results in older adult and family meetings. Increasing older adults' and families' or caregivers' understanding of the EBP may motivate them to participate in the treatment process and build trust in the relationship with their practitioner.

Furthermore, sharing results may create hope and enthusiasm for your program. Sharing information motivates people and stimulates changes in behavior. Sharing the results of your assessments with a variety of stakeholders is the key to improving your program.

Assessment Measures to Use with Older Adults

Practitioners and program administrators who provide EBPs to older adults have several options for screening older adults for depression and for evaluating treatment outcomes. This section describes instruments that you can use to assess your EBP. These include the following:

- Fidelity measures;
- Depression outcome measures; and
- Other outcome measures for evaluating your EBP, including the following:
  - Suicidal thoughts;
  - Functional abilities; and
  - Mental status, substance abuse, anxiety, and physical health status.

Fidelity measures

Fidelity measures are available for several EBPs for treating depression in older adults, as follows:

- Cognitive behavioral therapy;
- Problem-solving treatment;
- PEARLS: Program to Encourage Active, Rewarding Lives for Seniors; and
- IMPACT: Improving Mood, Promoting Access to Collaborative Treatment.

You will find information about the availability of these measures in the brief descriptions of the EBPs found in *Selecting Evidence-Based Practices for Treatment of Depression in Older Adults* in this KIT.

Cognitive behavioral therapy

The Cognitive Therapy Scale for use with CBT is available through the Internet site of the Academy of Cognitive Therapy. For the rating scale and its manual, go to:

http://www.academyofct.org/Upload/Documents/CTRS.pdf

http://www.academyofct.org/Upload/Documents/CTRS_Manual.pdf

Problem-solving treatment

The Problem-Solving Therapist Adherence Checklist (PSTAC) for use with PST is available from Dr. Areán at the University of California–San Francisco.

PEARLS: Program to Encourage Active, Rewarding Lives for Seniors

Quality assurance forms for the PEARLS program are provided by the program developers to help supervisors monitor implementation fidelity. A fidelity measure is being developed for a CDC-funded dissemination research study.

IMPACT: Improving Mood, Promoting Access to Collaborative Treatment

The IMPACT fidelity scale assesses performance in six broad areas, including setting, staffing, and supervising collaborative care; patient education; treatment planning and delivery; tracking treatment outcomes; delivering treatment based on outcomes (that is, stepped care); and relapse prevention planning. For the rating scale, go to:

http://impact-uw.org/files/FidelityScale-Dec2010.pdf

A set of six defined quality indicators can also be used to evaluate the core components of the IMPACT model. These include the percent of patients with depression screening, confirmation of diagnosis, initiation of treatment, measurement of treatment outcomes, adjustment of treatment based on outcomes, and symptom reduction.

What you can do when fidelity measures don't exist

Many EBPs for older adults with depression do not have fidelity measures. In the absence of these measures, you can use other process questions to determine how closely your program follows the core components of the EBP.

You can work with program developers or your EBP implementation team to identify the core features of the program. The following are important features to consider:

- Characteristics of the overall program operation (for example, staff selection, training, coaching, and administrative support);
- Characteristics of service delivery (for example, frequency, duration, location, and focus of the intervention); and
- The application of principles and practices specific to the EBP.

The overall quality of your practice also can be evaluated by assessing the degree to which indicators such as the following are met (Chen et al., 2005):

- Percent of older adults at risk for depression who are screened using standardized instruments, clinical examination, or other methods;
- Percent of older adults with depression who receive specialized services from a practitioner with appropriate training and expertise;
- Percent of older adults with depression who receive psychotherapy; and
- Percent of older adults with major depression who receive an appropriate dose of antidepressant medication.

Depression measures

A number of assessment instruments for evaluating depression exist. In clinical practice with older adults, the scales that are the easiest to conduct, have proven validity and reliability in older adults, and are the most commonly used include the following:

- Patient Health Questionnaire (PHQ-2 and PHQ-9);
- Geriatric Depression Scale (GDS); and
- Centers for Epidemiological Studies – Depression Scale (CES-D).

These assessment instruments are described in the following pages. In overview, the PHQ-2 and GDS are commonly used as screening measures for identifying depression in older adults. All of these measures, with the exception of the PHQ-2, can be used to monitor treatment outcomes.

Patient Health Questionnaire (PHQ-2)

The PHQ-2 is a brief screening measure. Older adults with a positive screen should have a full diagnostic evaluation for depression.

The PHQ-2 is available in the public domain and is free of charge.

Patient Health Questionnaire (PHQ-2)

Over the past 2 weeks, how often have you been bothered by any of the following problems?

Little interest or pleasure in doing things.

0 = Not at all

1 = Several days

2 = More than half the days

3 = Nearly every day

Feeling down, depressed, or hopeless.

0 = Not at all

1 = Several days

2 = More than half the days

3 = Nearly every day

Total score: _____

Score > 5: Probability of major depression is > 50 percent.

Score > 3: Probability of any depressive disorder is 75 percent.

For more information, see "The Patient Health Questionnaire-2: Validity of a two-item depression screener," by K. Kroenke, R. L. Spitzer, and J. B. Williams, 2003, Medical Care, 41, pp. 1284 – 1292.

Patient Health Questionnaire (PHQ-9)

The PHQ-9 is commonly used in physical health care settings. The questions of the PHQ-9 align with the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) diagnostic criteria for depression, and the PHQ-9 can be used to help make a depression diagnosis. The PHQ-9 has been especially promoted for use in primary care as an accurate approach to assessing the presence of a possible diagnosis of depression. It also is useful in tracking the effectiveness of depression treatment over time.

The PHQ-9 has been translated into multiple languages (for example, Spanish, Chinese, and many others).

To learn more about the PHQ-9, go to:
http://www.depression-primarycare.org/clinicians/toolkits/materials/forms/phq9/

Patient Health Questionnaire (PHQ-9)

Rate question 1: Over the last 2 weeks, how often have you been bothered by any of the following problems?

	Not at all 0	Several days 1	More than half the days 2	Nearly every day 3
a. Little interest or pleasure in doing things				
b. Feeling down, depressed, or hopeless				
c. Trouble falling asleep, staying asleep, or sleeping too much				
d. Feeling tired or having little energy				
e. Poor appetite or overeating				
f. Feeling bad about yourself, feeling that you are a failure, or feeling that you have let yourself or your family down				
g. Trouble concentrating on things such as reading the newspaper or watching television				
h. Moving or speaking so slowly that other people could have noticed. Or being so fidgety or restless that you have been moving around a lot more than usual				
i. Thinking that you would be better off dead or that you want to hurt yourself in some way				

Rate question 2: If you checked off any of these problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

	Not difficult at all	Somewhat difficult	Very difficult	Extremely difficult
Total score (Questions 1a-1i): _____				

A score > 10 is indicative of depression when problems cause at least some difficulty.

For more information, see "Validation and utility of a self-report version of PRIME-MD: The PHQ Primary Care Study," by R. Spitzer, K. Kroenke, and J. B. Williams, 1999, *Journal of the American Medical Association, 282*, pp. 1737-1744. Copyright 1999 © Pfizer Inc.

Geriatric Depression Scale (GDS)

The GDS is one of the most common depression screening tools for older adults. The short form of the GDS is a 15-item screening tool designed specifically for older adults who may need further evaluation for depression. The GDS is available in the public domain and is free of charge.

It has been translated into multiple languages (for example, Spanish, French, Japanese, Korean, Chinese, and many others) and is available at **http://www.stanford.edu/~yesavage/GDS.html**

The GDS is commonly used in mental health settings. It can be used to screen for depression and to monitor outcomes of depression treatment.

Geriatric Depression Scale (Short Form)

Instructions: Check the best answer for how you have felt over the past week.

YES	NO	
		1. Are you basically satisfied with your life?
		2. Have you dropped many of your activities and interests?
		3. Do you feel that your life is empty?
		4. Do you often get bored?
		5. Are you in good spirits most of the time?
		6. Are you afraid that something bad is going to happen to you?
		7. Do you feel happy most of the time?
		8. Do you often feel helpless?
		9. Do you prefer to stay at home rather than going out and doing things?
		10. Do you feel that you have more problems with memory than most?
		11. Do you think it is wonderful to be alive now?
		12. Do you feel worthless the way you are now?
		13. Do you feel full of energy?
		14. Do you feel that your situation is hopeless?
		15. Do you think that most people are better off than you are?

Scoring: Score 1 point if you answered NO to Questions 1, 5, 7, 11, 13.
Score 1 point if you answered YES to Questions 2, 3, 4, 6, 8, 9, 10, 12, 14, 15.
Total your points.

Total score: _____

A score > 5 is suggestive of depression and a score > 10 is almost always indicative of depression.

For more information, see "Development and validation of a geriatric depression screening scale: A preliminary report," 1983, by J. A. Yesavage, T. L. Brink, T. L. Rose, O. Lum, V. Huang, M. Adey, and V. O. Leirer. *Journal of Psychiatric Research, 17*, pp. 37 – 49.

Center for Epidemiological Studies – Depression Scale (CES-D)

The CES-D consists of 20 questions that are rated on a 4-point scale and measure the frequency of symptoms over the past week. The CES-D is commonly used in research studies and has the advantage of being especially sensitive to changes in depression severity over time.

In addition to rating severity of depression prior to initiating treatment, it also is used to monitor symptoms of depression. The CES-D is available in the public domain and takes approximately 5 minutes to complete. It has been translated into several languages, including Chinese (Cantonese and Mandarin), French, Greek, Japanese, and Spanish.

Centers for Epidemiological Studies – Depression Scale (CES-D)

Rate the questions:

During the past week—	**Rarely or none of the time (less than 1 day);**	**Some or a little of the time (1-2 days);**	**Occasionally or a moderate amount of time (3-4 days);**	**Most or all of the time (5-7 days)**
	0	**1**	**2**	**3**
1. I was bothered by things that usually don't bother me.				
2. I did not feel like eating; my appetite was poor.				
3. I felt that I could not shake off the blues even with help from my family or friends.				
4. I felt I was just as good as other people.				
5. I had trouble keeping my mind on what I was doing.				
6. I felt depressed.				
7. I felt that everything I did was an effort.				
8. I felt hopeful about the future.				
9. I thought my life had been a failure.				
10. I felt fearful.				
11. My sleep was restless.				
12. I was happy.				
13. I talked less than usual.				
14. I felt lonely.				
15. People were unfriendly.				
16. I enjoyed life.				
17. I had crying spells.				
18. I felt sad.				
19. I felt that people disliked me.				
20. I could not get "going."				

Scoring: The scoring of positive items is reversed.
Possible range of scores is 0 to 60, with the higher scores indicating the presence of more depressive symptoms.
A score of 16 indicates the presence of clinically relevant depression.

For more information, see "The CES-D scale: A self-report depression scale for research in the general population," by L. S. Radloff, 1977, *Applied Psychological Measurement, 1*, pp. 385 – 401.

Other measures of depression

You also can use other assessment instruments to rate symptoms of depression in older adults. Other common instruments include the following:

- Hamilton Rating Scale for Depression (HRSD, HAM-D) (Hamilton, 1960);
- Beck Depression Inventory (BDI) (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961);
- Montgomery-Asberg Depression Rating Scale (MADRS) (Montgomery & Asberg, 1979);
- Cornell Scale for Depression in Dementia (CSDD) (Alexopoulos, Abrams, Young, & Shamoian, 1988); and
- Zung Depression Status Inventory (DSI) (Zung, 1965).

Suicidal thoughts

Several assessment instruments for evaluating suicidal thoughts in older adults exist.

Paykel Suicide Questions

The Paykel Suicide Questions provide practitioners with a quick assessment to determine if suicidal thoughts are present.

The Paykel Suicide Questions

Check the best answer:

YES 1	NO 2	
		1. Has there been a time in the last year when you felt life was not worth living?
		2. Has there been a time in the last year that you wished you were dead, for instance that you would go to sleep and not wake up?
		3. Has there been a time in the last year that you thought of taking your own life, even if you would not really do it?
		4. Has there been a time in the last year when you reached the point where you seriously considered taking your own life, or perhaps made plans how you would go about doing it?
		5. In the last year have you made an attempt on your life?

Scoring: Moderate to high risk: Total score > 2 or Yes to item 5 plus any other item or any endorsement of item 4.

For more information, see "Suicidal feelings in the general population: A prevalence study," by E. S. Paykel, J. K. Myers, J. J. Lindenthal, and J. Tanner, 1974, *British Journal of Psychiatry, 124*, pp. 460 – 469.

Other measures of suicidal thoughts

You also can use other instruments to assess suicidal thoughts in older adults. These include the following scales:

- Harmful Behaviors Scale (HBS) (Draper et al. 2002);
- Geriatric Suicide Ideation Scale (GSIS) (Heisel & Flett, 2006); and
- Reasons for Living Scale – Older Adults Version (RLS-OA) (Linehan, Goodstein, Nielsen, & Chiles, 1983; Edelstein, McKee, & Martin, 2000).

Assessment Measures for Depression and Suicidal Thoughts

Scale type and name	Characteristics				
	Number of items	Application	Administered by	Citation	Availability
Depression					
Patient Health Questionnaire-2 (PHQ-2)	2	Screening	Self, practitioner	Lowe, Kroenke, and Gräfe (2005); Kroenke et al. (2003)	Public domain http://www.commonwealthfund.org/usr_doc/PHQ2.pdf
Patient Health Questionnaire-9 (PHQ-9)	9	Screening, symptom monitoring	Self, practitioner, interviewer	Kroenke, Spitzer, and Williams (2001); Spitzer et al. (1999)	Public domain http://www.depression-primarycare.org/clinicians/toolkits/materials/forms/phq9/
Geriatric Depression Scale (GDS)	30 (long form); 15 (long form)	Screening, symptom monitoring	Self, practitioner, interviewer	Brink et al. (1982); Sheikh and Yesavage (1986); Yesavage et al. (1983)	Public domain http://www.stanford.edu/~yesavage/GDS.html
Center for Epidemiologic Studies – Depression Scale (CES-D)	20	Screening, symptom monitoring	Self, interviewer	Radloff (1977)	Public domain
Suicidal thoughts					
Paykel Suicide Questions	5	Screening, symptom monitoring	Self, practitioner, Interviewer	Paykel, Myers, Lindenthal, and Tanner (1974)	Public domain

Functional abilities

A number of scales for assessing functional abilities in older adults exist. In general, these scales measure self-care skills (activities of daily living or ADLs) and community living skills (instrumental activities of daily living or IADLs).

ADLs include activities such as bathing, dressing, feeding, and toileting. IADLs include activities such as taking transportation, using the telephone, and managing finances.

Among the most commonly used measures of functioning in older adults are the Katz Index of Activities of Daily Living (a six-item measure of the need for assistance with ADLs) and the Lawton Instrumental Activities of Daily Living Scale (an eight-item measure of the need for assistance with IADLs).

Assessment Measures for Functional Ability

	Characteristics				
Scale type and name	**Number of items**	**Application**	**Administered by**	**Citation**	**Availability**
Katz Index of Activities of Daily Living	6	Screening, symptom monitoring	Practitioner, interviewer	Katz, Ford, Moskowitz, Jackson, and Jaffe (1963)	Public domain
Lawton Instrumental Activities of Daily Living	8	Screening, symptom monitoring	Practitioner, interviewer	Lawton and Brody (1969)	Public domain

Mental status, substance abuse, anxiety, and health status

Other important outcome measures include assessments of cognitive functioning, alcohol and substance use, anxiety symptoms, and general health status.

Several measures of cognitive functioning have been validated in older adults. Among the most commonly used instruments include the Mini-Mental State Examination (MMSE) and the 10-item Short Portable Mental Status Questionnaire (SPMSQ). The Mini-Cog is a three-item scale consisting of a short-term memory and clock drawing task that has been strongly correlated with longer measures such as the Mini-Mental State Examination.

A small number of measures of substance abuse have been specifically developed and validated in older adult populations. The Short Michigan Alcoholism Screening Test-Geriatric Version (SMAST-G) is a brief measure of problem drinking and alcohol abuse. The SMAST-G includes 10 questions on the consequences of alcohol use over the last 3 months that are rated either "1" or "0" based on a response of "Yes" or "No" respectively. A score of 2 or greater indicates a probable alcohol use disorder.

A limited number of measures of anxiety have been used in screening older adults. The Symptom Questionnaire includes 23 questions rated "Yes" or "No." The General Health Questionnaire (GHQ) evaluates psychiatric distress related to general medical illnesses. It addresses the inability to carry out normal activities and the appearance of new stressors. The GHQ is available in 60-, 30-, 28- or 12-item versions.

The GHQ-12 is a brief screening measure that rates depression and anxiety symptoms on a 4-point scale. It is valid in older adults and in numerous language translations, settings, countries, and cultures. The 21-item Beck Anxiety Inventory (BAI) also can be used to measure the severity of self-reported symptoms of anxiety and was designed to minimize confounding with symptoms of depression.

Several scales measure general health status and have been applied across the life span. The Medical Outcomes Study, 12-item Short Form (SF-12) is a valid measure of general health status in older adults. The SF-12 is validated in different populations, cultures, and countries and is translated into numerous languages.

Other outcome measurement instruments

You may wish to consult books and other resources that review outcome and screening assessment measures. The following resources highlight measures to use with older adults.

- McDowell, I. (2006). *Measuring health: A guide to ratings scales and questionnaires* (3rd ed.). Oxford, England: Oxford University Press.
- Rush, A. J., First, M. B., & Blacker, D. (2008). *Handbook of Psychiatric Measures (2nd ed.)*. Washington, DC: American Psychiatric Publishing, Inc.

Assessment Measures for Mental Status, Substance Abuse, Anxiety, and Health Status

Scale type and name	Characteristics				
	Number of items	Application	Administered by	Citation	Availability
Mental status					
Mini-Mental State Examination (MMSE)	30	Screening, symptom monitoring	Practitioner, interviewer	Folstein, Folstein, and McHugh (1975)	Proprietary: http://www4.parinc.com/
Short Portable Mental Status Questionnaire (SPMSQ)	10	Screening	Practitioner, interviewer	Pfeiffer (1975)	Public domain
Mini-Cog	3	Screening	Practitioner, interviewer	Borson, Scanlan, Brush, Vitaliano, and Dokmak (2000); Scanlan and Borson (2001)	Public domain
Substance abuse					
Short Michigan Alcoholism Screening Test-Geriatric Version (SMAST-G)	10	Screening	Self, practitioner, interviewer	Blow (1991); Blow et al. (1992)	Public domain
Anxiety					
Beck Anxiety Inventory (BAI)	21	Screening, symptom monitoring	Self, practitioner, interviewer	Beck, Epstein, Brown, and Steer (1988)	Proprietary: http://www.pearsonassessments.com/pai
General Health Questionnaire (GHQ)	60, 30, 28, and 12-item versions	Screening	Practitioner, interviewer	Goldberg (1972) Goldberg and Williams (1988)	Proprietary: http://www.globalhealingcenter.com/general-health-questionnaire.html
Symptom Questionnaire	92	Screening	Self, practitioner, interviewer	Kellner (1987)	Public domain
Health Status					
Medical Outcomes Study, Short Form-12 (SF-12)	12	Screening, symptom monitoring	Self, practitioner, interviewer	Ware, Kosinksi, and Keller (1996, 1998)	Proprietary: http://www.qualitymetric.com

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