expanding your world

Promotion  Prevention  Treatment  Recovery

Becoming a Preventionist

Making Prevention Part of Your Mental Health Practice

A Continuing Education Course

National Association of State Mental Health Program Directors
66 Canal Center Plaza, Suite 302, Alexandria, VA 22314

2012
Becoming a Preventionist: Making Prevention Part of Your Mental Health Practice

A Continuing Education Course

Patricia J. Mrazek
Gail F. Ritchie
Acknowledgments

Numerous people contributed to the development of this publication, a continuing education course (see appendix C, "Advisory Committee Roster"). It was prepared in 2002–2003 by Patricia J. Mrazek, M.S.W., Ph.D. and Gail F. Ritchie, M.S.W. for the Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services (HHS) and updated in 2010 by Nancy Davis, Ed. D.

SAMHSA generously shared this resource with the National Association of State Mental Health Program Directors (NASMHPD) to make it available to NASMHPD's members and other interested stakeholders across the country.

Public Domain Notice

All material appearing in this publication is in the public domain and may be reproduced or copied without permission. Citation of the source is appreciated.

Recommended Citation

Foreword

We are living in exciting times. The field known as “prevention science” has made enormous strides in advancing the health of those at risk for a number of illnesses, such as cancer and heart disease. The research community is also yielding promising results for the mental health field. In February 2009, the National Research Council (NRC) and the Institute of Medicine (IOM) released *Preventing Mental, Emotional, and Behavioral Disorders Among Young People: Progress and Possibilities*. Building on a prior 1994 IOM report on prevention, this new report optimistically concludes:

> The scientific foundation has been created for the nation to begin to create a society in which young people arrive at adulthood with the skills, interests, assets, and health habits needed to live healthy, happy, and productive lives in caring relationships with others. (NRC and IOM, 2009, p. 387)

Mental health practitioners trained to deliver preventive interventions can join their public health colleagues in advancing the benefits of prevention in the mental health field. *Becoming a Preventionist: Making Prevention Part of Your Mental Health Practice; A Continuing Education Course* is a self-guided teaching tool using a gradual progression to show practitioners how to incorporate promotion and prevention into their practices. Special attention is given to those interventions that have a strong evidence base. The course includes a written exam (post-test) and answers that may be used by any professional organization to offer continuing education credits. It is also a sourcebook in prevention science to which they can add more materials.
## Contents

The Vision ............................................................................................................................................ 1
What You Will Learn in This Course .................................................................................................... 7
The Burden of Mental Health Problems ................................................................................................. 8
Using a Public Health Approach in Mental Health Practice ...................................................................... 9
Understanding Definitions, Theories, and Major, Principles .................................................................. 13
  Understanding Promotion and Prevention .............................................................................................. 16
  Risk and Protective Factors .................................................................................................................. 18
  Life-Span Development .......................................................................................................................... 22
  Cultural Competence ............................................................................................................................. 22
Historical Perspective ................................................................................................................................. 24
Incorporating Prevention into Mental Health Practice ............................................................................. 27
  Step 1. Provide Prevention-Minded Treatment: Indirect Interventions for Family Members ............... 27
  Step 2. Provide Prevention-Minded Treatment: Direct Interventions With Family Members ............ 27
  Step 3. Provide Evidence-Based Indicated Preventive Interventions .................................................. 28
    Need for Evidence ................................................................................................................................ 36
    Need for Opportunities for Training in Evidence-Based Programs .................................................. 38
  Step 4. Provide Evidence-Based Selective and Universal Preventive Interventions ............................ 39
  Step 5. Advise Systems and Become an Advocate ................................................................................. 44
  Step 6. Partner With Researchers ........................................................................................................ 47
Strategies to Overcome Barriers to Clinical Preventive Practice .............................................................. 51
  Use a Transdisciplinary Focus to Overcome Barriers .......................................................................... 51
  Persuade Reluctant Administrative Systems ....................................................................................... 52
  Use New Strategies to Obtain Reimbursement .................................................................................... 54
  Involve Consumers to Create More Market Demand for Preventive Services .................................... 58
  Increase Transdisciplinary Training Opportunities ............................................................................... 58
Strategies to Stay Current in the Prevention Field ..................................................................................... 60
  Appendix A: Details of Several Preventive Intervention Research Programs ................................... 62
  Appendix B: Resources .......................................................................................................................... 72
  Appendix C: Advisory Committee Roster* ............................................................................................ 74
  Appendix D: Incorporating Preventive Services for Mental Health and Substance Abuse Problems Into Managed Health Care Settings* ................................................................. 76
Glossary .................................................................................................................................................. 78
References ............................................................................................................................................... 80
Continuing Education Post-Test, Answer Form, and Answer Sheet ....................................................... 101
Acronyms

To reduce clutter and ease reading, we have used acronyms instead of the full phrasings for organizations, programs, and other items referenced more than once in this book. For the reader’s convenience, the list is organized alphabetically by acronym.

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AACAP</td>
<td>American Academy of Child and Adolescent Psychiatry</td>
</tr>
<tr>
<td>ACE</td>
<td>Adverse Childhood Experiences (a research study)</td>
</tr>
<tr>
<td>AMI</td>
<td>acute myocardial infarction</td>
</tr>
<tr>
<td>DSM-IV</td>
<td>Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition</td>
</tr>
<tr>
<td>FFT</td>
<td>Functional Family Therapy</td>
</tr>
<tr>
<td>GBG</td>
<td>Good Behavior Game</td>
</tr>
<tr>
<td>HHS</td>
<td>U.S. Department of Health and Human Services</td>
</tr>
<tr>
<td>HMO</td>
<td>health maintenance organization</td>
</tr>
<tr>
<td>IOM</td>
<td>Institute of Medicine</td>
</tr>
<tr>
<td>MEB</td>
<td>Mental, emotional, and behavioral</td>
</tr>
<tr>
<td>MHA</td>
<td>Mental Health America (formerly the National Mental Health Association)</td>
</tr>
<tr>
<td>MVBCN</td>
<td>Mid-Valley Behavioral Care Network</td>
</tr>
<tr>
<td>NAMI</td>
<td>National Alliance on Mental Illness</td>
</tr>
<tr>
<td>NMHA</td>
<td>National Mental Health Association</td>
</tr>
<tr>
<td>NRC</td>
<td>National Research Council</td>
</tr>
<tr>
<td>NREPP</td>
<td>National Registry of Evidence-Based Practices and Programs</td>
</tr>
<tr>
<td>PATHS</td>
<td>Promoting Alternative Thinking Strategies</td>
</tr>
<tr>
<td>PIP</td>
<td>Preventive Intervention Project</td>
</tr>
<tr>
<td>PREP</td>
<td>Prevention and Relationship Enhancement Program</td>
</tr>
<tr>
<td>PRP</td>
<td>Penn Resiliency Program</td>
</tr>
<tr>
<td>PWG</td>
<td>prevention work group</td>
</tr>
<tr>
<td>SPR</td>
<td>Society for Prevention Research</td>
</tr>
</tbody>
</table>
The Vision
When was the last time you, as a trained mental health practitioner, wished you could have helped prevent the problems you are now treating? Maybe you were taught in graduate school that prevention was light-years away—and maybe you still believe that is so. For some of the severe mental disorders, it is true that the time for prevention has not yet come—although the possibilities are foreseeable. But for many mental health problems and related behavioral disturbances, the time for prevention in fact has arrived. Here is just some of the evidence:

Did you know that a cognitive behavioral group intervention delivered to high school students identified as being at high risk for depression because of very early symptoms prevented depressive disorders in those teens (Clarke et al., 1995; Clarke et al., 2001; Garber et al., 2007; Garber et al., 2009)? Because of the known link between depression and substance abuse, this intervention also has the potential to contribute to the prevention of substance abuse.

Did you know that child abuse can be reduced by 80 percent if nurses make home visitations prenatally and during the first 2 years of a child’s life (Olds, Henderson, Chamberlin, et al., 1986; Olds et al., 1997; Olds & Kitzman, 1990; Olds et al., 1998; Kitzman et al., 1997; Olds, 2002; Olds et al., 2004; Olds, 2006)? Child abuse has strong links to a wide range of negative mental health effects as well as to the child’s level of educational attainment and involvement in juvenile justice.

Parental divorce increases children’s risk for mental health and substance abuse problems in young adulthood. Did you know that a group intervention to promote effective parenting for divorced mothers of 8- to 15-year-old children significantly decreased psychiatric symptoms and diagnoses, alcohol use, marijuana use, aggression, and high-risk sex among the children at 6-year follow-up? The strongest effects were seen in the children at highest risk (Wolchik et al., 2002; Haine, Sandler, Wolchik, Tein, & Dawson-McClure, 2003; Tein, Sandler, MacKinnon, & Wolchik, 2004). This intervention, known as the New Beginnings Program, is described in detailed manuals for clinicians who lead the groups (Wolchik et al., 2000; Wolchik, et al., 2002; Wolchik, Sandler, Winslow, & Smith-Daniels, 2005; Wolchik, Sandler, Weiss, & Winslow, 2007; Zhou, Sandler, Millsap, Wolchik, & Dawson-McClure, 2008).
Many forms of parent training have become powerful preventive interventions and are being used around the world. In Norway, the entire country is using a program developed at the Oregon Social Learning Center to reduce early behavioral problems in the nation’s youth (Forgatch, 2002). The program, initiated and funded as a joint venture by Norway’s Ministry of Children and Family Affairs and the Ministry of Social and Health Affairs, is delivered by clinicians who have had extensive training and supervision from Norway’s National Implementation and Research Center (Ogden, Forgatch, Askeland, Patterson, & Bullock, 2005). The clinicians are delivering the intervention as it was originally designed, but with cultural adaptations agreed to by the original investigator.

Did you know that many families whose children are at risk for disruptive behavior disorders, especially immigrant families that speak English as a second language, prefer to enroll in large-group, community-based parenting programs rather than attend clinic-based parenting courses? Not only do programs offered to such large community groups result in greater improvements in behavior problems at home, even at 6-month follow-up, but they also are six times more cost-effective than clinic programs (Cunningham, Bremner, & Boyle, 1995).

In the area of substance abuse, did you know that the proportion of 14-year-olds who start smoking can be reduced by 40 percent by interventions in first and second grade classrooms (Kellam & Anthony, 1998; Kellam et al., 2008; Petras et al., 2008)? And did you know that drug use can be reduced by 44 percent in high school seniors as a result of life skills training begun in the seventh grade (Botvin, G. J., Baker, Dusenbury, Botvin, E. M., & Diaz, 1995; Botvin et al., 2000)?

In the area of AIDS prevention, effective programs abound. For example, the number of adolescents engaging in unprotected sexual encounters can be reduced by 63 percent by providing behavior skills training (St. Lawrence et al., 1995).

Some of the early prevention research trials begun 15 to 20 years ago with children now are documenting significantly positive long-term results on a wide range of behaviors with participants who are approaching adulthood (Hawkins, Catalano, Kosterman, Abbott, & Hill, 1999; Lonczak, Abbott, Hawkins, Kosterman, & Catalano, 2002; Olds et al., 1997; Olds et al., 1998; Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2002; Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004; Hawkins, Kosterman, Catalano, Hill, & Abbott, 2005).

Findings from the Adverse Childhood Experiences (ACE) study show a strong relationship between childhood abuse and multiple risk factors for several of the leading causes of death in adults. People who had experienced four or more categories of
One of the earliest randomized controlled trials of a preventive intervention investigated prevention of depression in Hispanic women with low incomes in public-sector primary health care facilities (Munoz, Ying, Armas, Chan, & Gurza, 1987; Muñoz & Ying, 1993). The intervention consisted of a course in cognitive behavioral methods to gain greater control of mood, and it was successful in decreasing depressive symptoms. The program, now adapted for nonminority populations, is used in both public and private settings in many parts of the world (Munoz, 2002; Munoz et al., 2001; Muñoz, Le, Clarke, Barrera, & Torres, 2008).

A preventive intervention also has helped individuals who recently had lost their jobs to decrease their depressive symptoms and to develop the coping skills necessary to find other jobs (Price, van Ryn, & Vinokur, 1992; Vinokur, 1998; Vinokur, van Ryn, Gramlich, & Price, 1991; Curran, Wishart, & Gingrich, 1999; Vinokur, Schul, Vuori, & Price, 2000; JOBS II: Michigan Prevention Research Center, 2003). This protocol is being used across the United States and in China, Finland, and Ireland (Price, 2002; Vuori, Silvonen, Vinokur, & Price, 2002; Barry, 2005; Price, 2006).

Recent bereavement is a high-risk time for senior citizens who have lost a spouse, and it has been demonstrated that a preventive intervention can help ease the transition (Vachon, 1979; Vachon et al., 1980; Vachon et al., 1982). The Widow-to-Widow program, which provides one-to-one support for one widow by another,

These examples may lead you to think that the only effective prevention programs are designed for children and adolescents. Not so. For example, the Prevention and Relationship Enhancement Program (PREP), a universal preventive intervention (see the discussion in Step 4, page 30, on universal interventions), is targeted toward couples who already are married or planning marriage and not currently experiencing relationship difficulties (Renick et al., 1992). PREP aims to prevent later distress and divorce by providing group sessions with other couples and focusing on communication skill-building. Five-year results show greater marital satisfaction, fewer instances of physical violence with one’s spouse, and fewer divorces among PREP participants than among people in the control group (Markman, Renick, Floyd, Stanley, & Clements, 1993). This work currently is used across the United States and internationally (Markman, 2002).

adverse childhood experiences compared to those who had experienced none had health risks increased four to twelve times for alcoholism, drug abuse, depression, and suicide attempts; and a two- to fourfold increase in smoking, poor self-rated health, total number of sexual partners exceeding 50, and sexually transmitted disease. The more instances of childhood exposures showed a graded relationship to the presence of adult diseases including ischemic heart disease, cancer, chronic lung disease, skeletal fractures, and liver disease (Felitti et al., 1998).
was developed in response to this research. This program facilitates practical help in locating community resources and participating in small-group meetings. As a result of these services, social withdrawal and depressive symptoms lessened (Silverman, 1988; Silverman, 2004).

These programs illustrate what is happening in the field known as prevention science. And there are many more programs. Increasingly, research methodologies are improving, mental health outcomes are being documented, and more evidence-based prevention programs are ready to be moved into practice. For more details about these programs, see appendix A, “Details of Several Preventive Intervention Research Programs,” and appendix B, “Resources.” An additional resource is the National Registry of Evidence-Based Practices and Programs (NREPP) at http://www.nrepp.samhsa.gov. It is a searchable online registry of more than 170 interventions supporting mental health promotion, substance abuse prevention, and mental health and substance abuse treatment.

The clinical practice of tomorrow already is being reshaped. Prevention will be as much a part of practice as treatment is now. This broader practice will be based on exciting new scientific developments, such as new methods of identifying populations at risk, new empirically based interventions delivered in a wide variety of settings, innovative methods of engaging individuals and communities, and new outcome evaluation strategies. The complexity of the knowledge and skills that are necessary for the promotion of mental health and prevention of mental and behavioral disorders requires that mental health practitioners work together to formulate an integrated, science-based, biopsychosocial understanding of problems and their solutions. Even though not enough clinicians are providing treatment, especially in rural areas, even fewer are providing clinical preventive services. One way this situation will change is by a reorientation and learning process that enables clinicians to shift their practices gradually to include preventive services and consultation, thus reaching many more people.

Our vision is for others to become preventionists: clinicians who take advance measures against the possible or probable onset of mental, emotional, or behavioral disorders in individuals, members of their families, or both.

*The field of prevention science encompasses both the promotion of mental health and the prevention of mental, emotional, and behavioral disorders. (See “Understanding Definitions, Theories, and Major Principles” for an explanation and clarification of these terms.)*
Becoming a Preventionist:

An Award-Winning Story

The American Academy of Child and Adolescent Psychiatry (AACAP) presents its annual Irving Philips Award for Prevention to one of its members who has made significant contributions to the field of prevention of mental illness in children and adolescents. AACAP presented its 2002 award to James C. MacIntyre II, M.D., of Albany, NY.

During his honors lecture, Dr. MacIntyre described how he incorporated prevention into his practice and career in the public children’s mental health system—using the steps presented in this course.

Child psychiatrists and others interested in learning more about Dr. MacIntyre’s experience and about prevention can contact him at cocfjcm@omh.state.ny.us.
This continuing education course was written for mental health practitioners of all disciplines who are new to the field of prevention science. This self-guided teaching tool uses a step-wise process to help you incorporate prevention into your own practice. A high premium is placed on interventions that have a strong evidence base; that is, they are based on empirical research rather than on theory alone. We encourage you to use this manuscript as a sourcebook and to continue to accumulate additional prevention materials. This document serves as a training packet complete with a written exam and answers that may be used by any professional organization to offer continuing education credits.

The course was created with the guidance of an advisory committee from the fields of clinical psychology, clinical social work, general and child/adolescent psychiatry, and psychiatric nursing, as well as family advocates and prevention science researchers (see appendix C, “Work Group Roster”). Each of the professional organizations selected work group participants who shared the vision that prevention can become a fully integrated and effective component of mental health intervention. Several additional “stakeholder clinicians” also participated. When we say “we” in this course, the combined wisdom of these work group members is represented.

We begin the course by providing you with a grounding in promotion, prevention, and the public health model, including a focus on definitions and the need for promotion and prevention due to the enormous burden of mental illness. Then we discuss how to broaden your office practice and incorporate prevention into the services you currently provide. Finally, we propose ways of expanding on that knowledge and moving outside of your office and into the community by assuming new roles you might not have considered previously.

“No mass disorder afflicting humankind has ever been brought under control or eliminated by attempts at treating the afflicted individual nor by training large numbers of therapists.”

—John Gordon, Professor of Epidemiology at Harvard University, in the 1950s (Albee, 1985, p. 213)

We hope that this course provides enough specifics to give you good guidance and enough examples to elicit your enthusiasm. Ultimately, we hope this course will lead you to seek more opportunities to learn about promotion and prevention and to expand your mental health practice.
The prevalence of mental health problems in this country and around the world is staggering (Murray & Lopez, 1996). It is estimated that approximately 450 million people worldwide have a mental health problem (World Health Organization, 2001). In the United States alone, in the early 2000s, almost one-third of adults reported having a mental illness in the last 12 months, up from one-fourth in the early 1990s. About half the adults with a mental illness said their illness started by age 14, and three-quarters by their mid-20s (Kessler, Chiu et al., 2005; Kessler et al., 1997; and Kessler, Berglund et al., 2005 in NRC and IOM, 2009, p. 35).

A 2006 survey found that 7.9 percent of adolescents age 12 and over reported having a major depressive episode in the past year (National Survey of Drug Use and Health, in NRC and IOM, 2009, p. 46). Researchers estimated that the annual economic cost of mental, emotional, and behavioral disorders among young people totaled about $247 billion in 2007 dollars (NRC and IOM, 2009, p. 241). Other researchers estimate that problem behaviors—i.e., underage drinking, heroin or cocaine abuse, high-risk sex, youth violence, smoking, dropping out of high school, and suicidal actions—among young people cost $557.3 billion in 2007 dollars. Taken together, these findings mean an average cost of $15,744 per youth ages 12–20 in 2007 dollars (NRC and IOM, 2009, p 252).

Employers are becoming increasingly astute at recognizing the costs of mental health problems, especially depression, on their bottom lines. For example, a large manufacturing corporation (approximately 23,000 employees nationwide) documented the cost of depression to the company, particularly the cost in lost work days, to be as great or greater than the cost of many other common medical illnesses (Druss, Rosenheck, & Sledge, 2000). This type of data motivates employers to try to maximize the mental health and work productivity of their employees.

Mental health treatment services are essential, but alone they will never be capable of meeting the need for effective interventions. The field of public health has long recognized the imperative of including health promotion and disease prevention in any effort to contain a major health problem. In this regard, mental health problems are no different from physical problems. As former U.S. Surgeon General Dr. David Satcher asserted, “Preventing an illness from occurring is inherently better than having to treat the illness after its onset” (HHS, 1999, p. 62).
Using a Public Health Approach in Mental Health Practice
A new movement within the mental health field is under way: Mental health and mental illness are beginning to be seen as public health issues (HHS, 1999). A public health framework requires inclusion of health promotion and illness prevention as essential components of a comprehensive mental health system, alongside treatment and aftercare services. This conceptual framework applies in all settings, both public and private. Medical research has shown that this type of comprehensive approach to health care has worked in such areas as cardiovascular well-being. Promotion of healthy diets, adequate exercise, and prevention of high blood pressure and other risk factors are as important in the overall strategy to decrease the incidence, prevalence, and morbidity of heart attacks as cardiac bypass procedures and rehabilitation are for heart attack patients.

Public health approaches have a much longer history combating physical illnesses than mental and behavioral illnesses. Training and focus within mental health have concentrated heavily on treatment and aftercare. Only lip service is paid to the promotion of healthy lifestyles and prevention of first onset of problems and disorders. Most mental health practitioners are not trained in the public health approach; that is, they are not trained in the principles of epidemiology, risk assessment, promotion of mental health, or prevention of the onset of an illness. Instead, their training focuses on accurate and reliable diagnosis of psychiatric illnesses, a range of treatments for these illnesses, and consumer access to high-quality care.

So why has a public health orientation never taken hold in mental health? Why haven't professional training and service delivery systems focused more on promotion and prevention? Overwhelmingly, practitioners and the public at large have believed, and continue to believe, that prevention of first onset of mental disorders and behavioral problems is not possible. This course demonstrates otherwise. Clear definitions of promotion and prevention now exist; reasonable theories underlie promotion and prevention interventions; standards exist by which to assess the outcomes of these interventions; and evidence exists that promotion and prevention can work.

In 1994, the Institute of Medicine (IOM) of the National Academy of Sciences issued the
The past decade and a half has witnessed an explosion in knowledge regarding how to help young people experience healthy development. The evidence that these efforts can have a positive impact on the trajectory of their lives makes a compelling case for them.

NRC and IOM, 2009, p. 19

landmark report *Reducing Risks for Mental Disorders: Frontiers for Preventive Intervention Research*. An esteemed group of scientists, including some severe critics of a preventive approach in mental health, examined the state of the field and arrived at the following conclusion:

Public health experience has shown that when a critical mass of knowledge regarding a specific health problem accumulates and a core group of expert researchers has been identified, the time is ripe for launching a larger, coordinated research and training endeavor. The committee believes that such a moment has arrived for the field of mental health (IOM, 1994, p. 467).

And prevention science researchers set about to prove them right. The 2009 NRC and IOM report notes that “the volume and quality of research since 1994 have increased dramatically” (NRC and IOM, 2009, p. 2). The key areas of progress since 1994 include evidence of all of the following:

- Mental, emotional, and behavioral disorders are common and begin early in life.
- The greatest prevention opportunity is among young people.
- Multiple preventive interventions on reducing substance abuse, conduct disorder, antisocial behavior, aggression, and child maltreatment have multiyear effects.
- It is possible to reduce the incidence of depression among pregnant women and adolescents.
- School-based violence prevention can reduce the base rate of aggressive problems in an average school by one-quarter to one-third.
- Preventive interventions may be effective in targeting schizophrenia.
- Improving family functioning and positive parenting serves as a mediator of positive outcomes and can moderate poverty-related risk.
- School-based preventive interventions aimed at improving social and emotional outcomes may also improve academic outcomes.
- Interventions that target families dealing with such adversities as parental depression and divorce can reduce risk for depression among children and increasing effective parenting.
- Benefits of some preventive interventions exceed costs, with the available evidence strongest for early childhood interventions.
Promotion and prevention can offer realistic hope for containing what has become a major public health crisis—the poor mental health of so many people.

> Modifiable environmental factors may interact with expression of genes linked to behavior to lead to behaviors associated with positive health outcomes.

Also since 1994, we have seen the emergence of all of the following:

> Greater understanding of the biological processes that underlie both normal brain function and the pathophysiology of mental, emotional, and behavioral disorders,

> New and approaching opportunities for the integration of genetics and neuroscience research with prevention research, and

> Advances in implementation science, including recognition of implementation complexity and the importance of relevance to the community. (NRC and IOM, 2009, p. 4).

Promotion and prevention can offer realistic hope for containing what has become a major public health crisis—the poor mental health of so many people. Increasingly, mental health services for the promotion of mental health and prevention of mental and behavioral disorders must become part of what each community offers its citizens. Promotion and preventive services must be available, along with treatment and aftercare services, as part of a comprehensive public health approach.

All mental health clinicians can be part of the public health approach, even if they limit their practice to treatment, if they appreciate the need for the full spectrum of interventions to be offered within a community. Even if they do not choose to incorporate promotion and prevention into their own practice, they might encourage others to do so. »
Understanding Definitions, Theories, and Major Principles »»
This course uses the concepts and definitions presented in the NRC and IOM’s 2009 report, *Preventing Mental, Emotional, and Behavioral Disorders Among Young People: Progress and Possibilities*. The creators of this report utilized and expanded the definitions and a spectrum of mental health interventions developed by the committee that produced the 1994 report, *Reducing Risks for Mental Disorders: Frontiers for Preventive Intervention Research*. The most significant difference in the definitions and spectra of the two reports is that, because a science base for mental health promotion has been developing in recent years, this concept has been added to the 2009 spectrum. (See Figure 3-1, *The Mental Health Intervention Spectrum for Mental Disorders*.)

The course also describes the concept of prevention-minded treatment that Koilpillai and his colleagues developed. Prevention-minded treatment involves incorporating promotion and prevention practices into mental health treatment. (See Figure 3-2, *A Model for Prevention in Mental Health*).

Historically, researchers have been funded to prevent disorders and not necessarily to promote health; hence the name of the field is prevention science. However, we often prevent bad things by promoting good things; for example, we prevent heart disease by promoting healthy eating and exercise, and we prevent youth violence by promoting problem-solving and social skills in children and adolescents. The 2009 NRC and IOM report notes that:

The primary charge for this committee is prevention, but we add to our focus the emerging field of mental health promotion, an important and largely ignored approach toward building healthy development in all young people. Prevention emphasizes the avoidance of risk factors; promotion strives
Treatment interventions, which are therapeutic in nature, are provided to individuals who meet diagnostic levels put forth in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). Two components are present in treatment interventions: case identification and standard treatment for the known disorder. Through case identification, clinicians identify individuals who meet DSM-IV diagnostic levels. Standard treatment frequently includes interventions to halt the occurrence of other disorders in the patient, a phenomenon known as co-morbidity.

Maintenance interventions, which are supportive, educational, and/or pharmacological in nature, are provided on a long-term basis to individuals nature, are provided on a long-term basis to individuals who have met DSM-IV diagnostic levels and whose illness continues. Best-practice standards for treatment and maintenance interventions require an active focus on the individual patient to reduce relapse and disability. Such standards

to promote supportive family, school, and community environments and to identify and imbue in young people protective factors, which are traits that enhance well-being and provide the tools to avoid adverse emotions and behaviors. While research on promotion is limited, emerging interest and involvement in it and the potential it holds for enhancing health warrant its inclusion in the consideration of how the nation can improve its collective well-being (NRC and IOM, 2009, pp. xiv–xv).

In the NRC and IOM model, mental health promotion forms the basis for all types of interventions. Some promotion activities exist in and of themselves, and others are fundamental to prevention, treatment, and maintenance. Some promotion, and all preventive, interventions are provided before the initial onset of a disorder.
also require an active focus to increase disease self-management, vocational and residential possibilities, and family psychosocial education about the disease. Prevention-minded treatment moves from best practice for an individual patient to a focus on other family members.

As noted in Figure 1, promotion, prevention, prevention-minded treatment, treatment, and maintenance interventions lie along a spectrum. If a clinician wants to reorient his or her practice to include promotion and prevention, he or she moves figuratively from the right side of the spectrum to the left side. Examples of opportunities for intervening at each stage of the spectrum are presented in Figure 3-3, Opportunities for Prevention and Early Intervention.

**Understanding Promotion and Prevention**

The terms *promotion* and *prevention* mean different things to different people. You may be familiar with the original public health classification system that uses the terms *primary prevention, secondary prevention,* and *tertiary prevention.* This system was developed by the Commission on Chronic Illness in 1957 for the classification of medical illnesses. In this classification, *primary prevention* seeks to decrease the number of new cases of an illness; *secondary prevention* seeks to lower the rate of established cases of the illness in the population; and *tertiary prevention* seeks to decrease the amount of disability associated with an existing illness.

The 1994 IOM report on prevention recommended against using these classifications. Rather, it recommended using the term...
“prevention” to refer only to activities that occur prior to the onset of an illness. According to this new classification system, prevention activities may be classified into three types—universal, selective, and indicated. As noted above, the 2009 NRC and IOM report advocates for the inclusion of promotion as a separate category of intervention. The report defines these terms as follows:

**Mental Health Promotion**

*Mental health promotion interventions:* Usually targeted to the general public or a whole population. Interventions aim to enhance individuals’ ability to achieve developmentally appropriate tasks (competence) and a positive sense of self-esteem, mastery, well-being, and social inclusion, and strengthen their ability to cope with adversity.

*Examples:* Programs based in schools, community centers, or other community-based settings that promote emotional and social competence through activities emphasizing self-control and problem-solving (NRC and IOM, 2009, p. 66).

**Prevention of Mental, Emotional, and Behavioral Disorders**

Prevention activities aim to prevent, or at least delay, the onset of a disorder. The three types of preventive interventions are described below.

*Universal preventive interventions:* Targeted to the general public or a whole population that has not been identified on the basis of individual risk. The intervention is desirable for everyone in that group. Universal interventions have advantages when their cost per individual are low, the intervention is effective and acceptable to the population, and there is a low risk from the intervention.

*Examples:* School-based programs offered to all children to teach social and emotional skills or to avoid substance abuse. Programs offered to all parents of sixth graders to provide them with skills to communicate to their children about resisting substance use.

*Selective preventive interventions:* Targeted to individuals or a population subgroup whose risk of developing mental disorders is significantly higher than average. The risk may be imminent or it may be a lifetime risk. Risk groups may be identified on the basis of biological, psychological, or social risk factors that are known to be associated with the onset of a mental, emotional, or behavioral disorder. Selective interventions are most appropriate if their cost is moderate and if the risk of negative effects is minimal or nonexistent.

*Examples:* Programs offered to children exposed to risk factors, such as parental divorce, parental mental illness, death of a close relative, or abuse, to reduce risk for adverse mental, emotional, and behavioral outcomes.

*Indicated preventive interventions:* Targeted to high-risk individuals who are identified as having minimal but detectable signs or symptoms foreshadowing mental, emotional, or behavioral
disorder, or biological markers indicating predisposition for such a disorder, but who do not meet diagnostic levels at the current time. Indicated interventions might be reasonable even if intervention costs are high and even if the intervention entails some risk.

**Examples:** Interventions for children with early problems of aggression or elevated symptoms of depression or anxiety. (NRC and IOM, 2009, p. 66)

In addition to the above definitions of promotion and prevention, three other critical concepts are essential to the science and practice of promotion and prevention: risk and protective factors, life-span development, and cultural competence.

### Risk and Protective Factors

The concept of risk is used in both prevention and treatment, but the key question is “At risk for what?” Treatment focuses on reduction of risk for relapse and for disability. Prevention focuses on reduction of risk for initial onset—the first time an individual meets full criteria for a specific diagnosis. The risks for onset of a disorder are likely to be somewhat different from the risks involved in relapse of a previously diagnosed condition.

The optimal treatment protocol for an individual with a serious mental condition aims to reduce the length of time the disorder exists, halt the progression of severity, and halt the recurrence of the original disorder or, if that is not possible, to increase the length of time between episodes.

To achieve any of these aims requires an assessment of the individual’s specific **risks for recurrence**. On the other hand, to prevent the first onset of a disorder requires an assessment of the individual’s **risks for first onset**.

In prevention science, risk factors are defined as those characteristics, variables, or hazards that, if present for a given individual, make it more likely that this individual, rather than someone selected at random from the general population, will develop a disorder (Werner & Smith, 1992; Garmezy, 1983). To qualify as a risk factor, the variable must pre-date the onset of the disorder. Some risks, such as gender and family history, are fixed; that is, they are not malleable to change. Certain other risk factors, such as lack of social support, inability to read, and deteriorating neighborhoods, are malleable. They can change relative to a developmental phase or a new stressor in one’s life, and they may change as a result of a strategic intervention.

Promotion, prevention, treatment, and maintenance all use the concept of **biopsychosocial risk** because of the shared understanding that risks can occur in many spheres of an individual’s life, including biological (of which genetics are one component), psychological, and social. Risks can reside within the individual—or within the family, community, or institutions that surround the individual, including the larger culture.

Since the 1994 IOM report was published, considerable research has focused on the interplay...
Environment and experience have powerful effects on brain structure and function at all stages of development in young people. Intervention strategies that modify environment and experience have great potential to promote healthy development of the brain and to prevent MEB (mental, emotional, and behavioral) disorders.

NRC and IOM, 2009, p. 146

between biological and neurological risk factors and psychosocial risk factors. The concept of biological determinism has become increasingly obsolete in the mental health field. Genes and hormones play a tremendously important role in many of the conditions that are of concern, but environmental factors play a considerable role in whether and/or how they are expressed (NRC and IOM, 2009).

The 2009 NRC and IOM report supports the assertion of Dr. Eric Kandel, a winner of the Nobel Prize for Physiology and Medicine, that all behavior is shaped by an interplay of genes and the environment, and that environmental experiences can act directly on genes to turn them on or off (Kandel, 1998). A key question for mental health practitioners then becomes, “How does life experience alter gene expression in vulnerable individuals?” (Frank & Kupfer, 2000). Do traumatic experiences actually change the basic structure and function in brain cells? The answer is yes. “The single most significant distinguishing feature of all nervous tissue—of neurons—is that they are designed to change in response to external signals” (Perry, Pollard, Blakley, Baker, & Vigilante, 1995). For example, an infant who experiences chronic maltreatment also experiences changes in her or his developing brain (LeDoux, Cicchetti, Zagoraris, & Romanski, Indelibility of subcortical emotional memories, 1989; LeDoux, Cicchetti, Zagoraris, & Romanski, 1990).

As scientists begin to comprehend such phenomena more fully, new possibilities will arise to use preventive interventions to alter the environmental context so that the expression of a gene or a chemical imbalance can be prevented, delayed, or at least muted when it does occur.

The concept of protective factors relates to promotion, prevention, treatment, and maintenance. All of these ways of increasing public health and wellness focus not only on risks associated with a particular illness or problem, but also on protective factors, that is, those “influences that modify, ameliorate, or alter a person’s response to some environmental hazard that predisposes [him or her] to a maladaptive outcome” (Rutter, 1985). Such factors, which can reside within the individual, the family, the school or workplace, or the community, may make an appreciable difference on the influence exerted by risk factors.

A core set of individual characteristics, such as above-average intelligence, positive temperament, and social competence, as well as sources of social support (e.g., effective schools, positive parenting, safe communities) can buffer the
effects of both biological and psychosocial risk factors in childhood and adulthood (IOM, 1994; Rutter, 1985; NRC and IOM, 2009, Chapter 4). The importance of these factors varies across cultural groups and community settings.

Risk and protective factors do not operate in isolation from each other. One risk factor can exacerbate another, protective factors may balance out the potential adverse effects of a risk factor, or risk factors can accumulate to the point that the existing protective factors are not sufficient to prevent the first onset of an illness.

The term resilience is often used to describe people who do well despite multiple and/or severe challenges. The NRC and IOM define the term as “the ability to recover from or adapt to adverse events, life changes, and life stressors” (NRC and IOM, 2009). Resilience is a dynamic process encompassing positive adaptation within the context of significant adversity (Luthar, Cicchetti, & Becker, 2000). It is important to note that resilience is not a static trait of an individual. Rather, resilient adaptation in the face of adversity comes about as a result of the interaction between personal characteristics (e.g., good problem-solving skills) and resources in the environment (e.g., positive parenting and effective schools). Although we cannot measure resilience directly, we can infer it based on measurement of risk (the adverse condition under consideration) and competence (indicators of successful adaptation that are developmentally and culturally appropriate) (Luthar & Cushing, 1999).

The concepts of risk and protective factors, risk reduction, and enhancement of protective factors are central theoretical underpinnings in most empirically based promotion and prevention programs (Davis, 2002). Researchers use risk status to identify populations for intervention. They target risk factors thought to be causal and malleable; they also target protective factors that may be able to be enhanced.

If the interventions are successful, protective factors increase and the likelihood of the onset of the potential mental or behavioral disorder decreases (hence, the term risk reduction).

If every mental health disorder had a unique set of risk and protective factors associated with its onset, each problem would require a different preventive intervention. It is true that some risk factors may be specific to a particular disorder (see the box below “Risk Factors Likely to Be Associated With the Onset of Depression”). When genes contribute significantly to the illness, it is especially likely that specific risk factors will be associated with that illness. Fortunately, many problems, especially those that arise in childhood, share some of the same risk factors for initial onset. Targeting those factors can result in positive outcomes in multiple areas. Some risk factors common to many disorders include

» poverty, including factors such as food insecurity, disadvantaged neighborhoods, and low-quality schools (NRC and IOM, 2009, p. 261);
» family difficulties such as marital conflict and poor parenting;

» problems such as failure and poor peer relations in schools; and

» aversive experiences such as bullying and violence in communities (NRC and IOM, 2009, p. 106).

Even when all other risk factors are controlled, three factors have been shown to be significant predictors of more than one problem outcome:

» parental mental illness

» a mother-stepfather home

» maternal inattention (Cohen et al., 1990 in NRC and IOM, 2009, p. 88)

Risk Factors Likely to Be Associated With the Onset of Depression

» Having a parent or other close biological relative with a mood disorder. The mechanism may be genetic, psychosocial, or both.

» Having a severe stressor such as a loss, divorce, marital separation, unemployment, job dissatisfaction, a physical disorder such as a chronic medical condition, a traumatic experience or, in children, a learning disorder.

» Having low self-esteem, a sense of low self-efficacy, and a sense of helplessness and hopelessness.

» Being female.

» Living in poverty.

» In infancy, having insecure attachment, having a difficult temperament, being difficult to soothe, and displaying a lower level of activity.

» In childhood and adolescence, being socially inhibited, reticent, and easily upset; having negative affect and a depressogenic cognitive style (i.e., a tendency to ruminate and to see the world without optimism and as not in one’s control), being hostile to peers, and having poor grades/low achievement. (IOM, 1994, p. 168; NRC and IOM, 2009, p. 92)

Certain individual risk factors can lead to a state of vulnerability in which other risk factors have more effect. For example, low birth weight is a general risk factor for multiple physical and mental outcomes, but when low birth weight is combined with a high-risk social environment, the combination has consistently poorer outcomes (McGauhey, Starfield, Alexander, & Ensminger, 1991). The accumulation of risk factors usually increases the likelihood of onset of disorder, but the presence of protective factors can attenuate the risks to varying degrees.

Risks may accumulate in such a way that they accentuate other risks, creating pathways that make it possible to figuratively “break the chain at its weakest link.” Some risks, even though they contribute significantly to onset, may be nonmalleable, or may be less malleable to
interventions. The preventive strategy, then, is to change the risks that are most easily and quickly amenable to intervention. For example, it may be easier to prevent a child from being disruptive and isolated from peers by altering his or her classroom environment and increasing academic achievement and social skills than it is to change the home environment characterized by severe marital discord.

Because mental health relates so intrinsically to physical and social health, it is imperative to consider the interactions of risk and protective factors, causal or etiological links across domains, and multiple outcomes when providing preventive interventions. For example, unemployment (an indicator of the social health of a community) and chronic illness can be risk factors for the onset of depression.

Conversely, depression may lead to poor job performance and eventually to job loss, and it can lead to inattention to physical health problems. Intervening at any point along such a causal chain could be productive for mental, physical, and social health.

Life-Span Development

Life-span developmental principles are important in promotion, prevention, treatment, and maintenance services. Disorders usually have complex causal chains with multiple risk factors that occur over a significant period of time. Risk factors that are constantly present may contribute more to the onset of a disorder at a particular point in development; likewise, risk factors may be more malleable at particular developmental points. Protective factors also may be activated in developmentally sensitive periods. Figure 3-4, Preventive interventions by developmental stage, presents types of interventions that are appropriate at developmental stages ranging from the time before conception through young adulthood.

Cultural Competence

Cultural competence consists of a set of knowledge, skills, and attitudes that allow individuals, organizations, and systems to work effectively with diverse racial, ethnic, religious, and social groups (HHS, 2000). Such competence is crucial in the delivery of all mental health services, including promotion and prevention (HHS, 1999, 2000, 2001; IOM, 1994; NRC and IOM, 2009). It is virtually impossible for any clinician to know about all the cultures that exist. The road to cultural competence, then, must emphasize openness to diversity, a spirit of inquiry, and an understanding that clients or communities are experts on their own cultures.

In prevention three main questions pertain to culture:

» What are the differences in risk and protective factors for first onset of mental and behavioral disorders across cultures?

» Can promotion and prevention programs developed in one culture be used effectively by another?
SAMHSA’s Health Information Network has a glossary of terms used in the child and adolescent mental health field. It defines the term cultural competence as follows:

Help that is sensitive and responsive to cultural differences. Caregivers are aware of the impact of culture and possess skills to help provide services that respond appropriately to a person’s unique cultural differences, including race and ethnicity, national origin, religion, age, gender, sexual orientation, or physical disability. They also adapt their skills to fit a family’s values and customs. (http://mentalhealth.samhsa.gov/publications/allpubs/CA-0005/default.asp)

What is the best way to recruit, retain, and train staff who reflect and respond to the values and demographics of the communities served?

These issues are complex, but researchers and practitioners must be cognizant of their importance. Perceptions of need, the meanings of problems, the goals of individuals as they face their problems, and the types of interventions depend upon the culture in which they are based (Thorton & Garrett, 1995). Preconceived promotion and prevention solutions cannot be assumed to transfer easily across diverse and changing populations (IOM, 1994; NRC and IOM, 2009). The knowledge base regarding cultural competence specific to promotion and prevention is growing as more interventions are delivered in more diverse communities, and as the aspects of interventions that do and do not work are thoroughly documented.

Figure 3-4. Preventive Interventions by Developmental Phase
Before you take the first step in incorporating prevention into your mental health practice, it may be helpful to consider the status of clinical intervention from a historical perspective. In the past, people with mental illnesses often were never treated, were undertreated, or were treated with ineffective and sometimes dangerous procedures. The families of people with mental illnesses typically were neglected and ignored. The situation today has improved broadly—but not nearly enough and not for everyone. The concept of prevention-minded treatment for a whole family, in which an individual receives appropriate treatment interventions and a spouse and children receive preventive interventions, is still so new that it is rarely applied in clinical practice. The time has now come to do so.

In “The Story of Kate” (see Vignette A), we learn of the devastating effects of bipolar illness on a young mother, written retrospectively from her adult daughter’s perspective.
Before the hospitalization, our family life was nearly idyllic. Ma had left behind her career to spend full time engaging her family in a variety of activities from gardening and raising chickens to sewing and cooking. She supported and encouraged activity, creativity, and individuality. I will never forget the homemade french fries and fried dough that warmed us on cold winter days. Even though her hospitalization began when I was 8 years old, she left with me a rich array of skills I have used all my life and a love for the natural world that has sustained me through many hard times.

Sometimes, when we went to visit my mother, she was in a very severe depression, thin and unkempt. She pulled her hair back tightly and always wore the same clothes. She hardly knew we were there. She would repeat over and over words we didn’t understand while she walked in circles, wringing her hands and crying. At other times, she was very exuberant, laughing and talking loudly, behaving in a manner that was bizarre and embarrassing.

When she had her first episode of deep depression, she had no support. I am not sure anyone knew how to give her the kind of support she desperately needed. Close family members lived far away. My father was away for weeks at a time working on the railroad. We lived in a rural setting, and the task of caring alone for five small children may have overwhelmed her. She had no opportunity to get together with other women.

I often wonder how she might have responded when that first depression set in. Instead of being taken off to the hospital and isolated from the people who loved her and the world she knew, I wonder how she would have responded if she had been surrounded with loving, caring friends and family members. They could have taken over her responsibilities for a while; perhaps someone could have taken her on a vacation. Suppose they had just sat with her, listened to her, and held her while she cried. Instead, she was separated from the few people she did have in her life. In the hospital, no efforts were made to encourage patients to support each other, and there was little staff available to nurture the multitudes of patients.

Her doctors told us to forget about her, that she was incurably insane and would never get well. We (her five children) went to visit her every Saturday, even after the doctors told us not to come anymore.
Imagine the effects of this young mother’s illness on her children and her husband. They, too, endured the stigma of mental illness and the effects of the inadequacy of the mother’s treatment.

Were the husband and, especially, the children of Kate at risk for the onset of their own emotional problems? What could have been done to prevent them from having their own stress-induced reactions and depression? What if someone had focused on their needs and had offered them preventive interventions? What benefits might this kind of help have had in their lives? And what about Kate herself? What is now known about bipolar illness? Is it possible that some day it, too, might be prevented—or at least delayed in its onset?

This material was excerpted from “The Story of Kate” by Mary Ellen Copeland (2001), the true story of the author’s mother.
Step 1. Provide Prevention-Minded Treatment: Indirect Interventions for Family Members

The first step in becoming a preventionist is to practice prevention-minded treatment. With this approach, the practitioner provides the usual treatment for the patient/client in the consultation room, and the practitioner (1) is consciously open to considering effects on family members who are not in the room and (2) provides indirect preventive interventions through the patient to the family members.

This approach is described in Vignette B, “Catching Problems Early: An Example of Prevention-Minded Treatment.” A clinical social worker is treating an adult male patient when issues regarding his relationship with his soon-to-be stepdaughter arise. The therapist does not intend at first to undertake preventive interventions in the course of the treatment, but she does so when the need and opportunity arise. Prevention can occur within the context of a therapeutic relationship with a prevention-minded therapist. The therapist may not have a specific evidence-based protocol to follow, but the interventions should be based on well-known, empirically based theories in such areas as attachment, child development, and family systems.

Step 2. Provide Prevention-Minded Treatment: Direct Interventions With Family Members

A second step in prevention-minded treatment is intentionally to invite a patient’s family members, especially children, into some or all sessions. As part of this step, the therapist should be open to the possibility of providing preventive interventions directly to family members,
although such interventions would be secondary to the treatment of the primary client.

In Vignette C, “A Prevention-Minded Therapist at Work,” a therapist who is treating a mother invites the mother’s young child to accompany her into the sessions. This contact with the child brings to light new issues, and the therapist undertakes preventive interventions directly relevant to the child’s developmental needs.

**Step 3. Provide Evidence-Based Indicated Preventive Interventions**

If you provide psychotherapy or treatment to individuals and families and you have begun to practice prevention-minded treatment, you may wonder how to move on to the next level of preventive services. Despite comfort with your own clinical judgment, you might want to be surer of the results of prevention work. How can you begin to provide evidence-based preventive interventions? What counts as good evidence? Are protocols, manuals, training, and consultation available to help you learn?

In Step 3, mental health practitioners move from prevention-minded treatment to evidence-based indicated prevention services. As a practitioner, you target indicated preventive interventions to individuals at high risk who have minimal but detectable signs or symptoms foreshadowing a mental disorder, or biological markers indicating predisposition for mental disorder, but who do not meet DSM diagnostic levels at the current time.

By first implementing indicated preventive services, rather than selective or universal services, you may as a clinician be on more familiar ground. The first task is to learn about evidence-based indicated preventive services. The next task is to acquire training to deliver these services—to help you get the best possible results. Several indicated prevention services are described in this section, and Appendix A provides additional details on research designs and outcomes for a number of them. Appendix B lists contact information and other resources you can access to learn more about preventive interventions.

Some of the best-known evidence-based indicated preventive interventions have their roots in treatment. For example, Webster-Stratton developed a treatment intervention for young children with conduct-disorder and their families that later was modified into an indicated preventive intervention for children with early symptoms. She again modified the curriculum as a selective intervention for Head Start children, who all were considered to be at high risk; teachers, parents, and family service workers participated together in an intervention whose primary aim was to strengthen protective factors. This body of work is an excellent example of how techniques developed for one population can be adapted for use with another (Webster-Stratton & Taylor, 2001; Reid, Webster-Stratton, & Beauchaine, 2001; Webster-Stratton & Hammond, 1997; Webster-Stratton, 1984, 1990, 1994, 1996; Webster-Stratton, Kolpacoff, & Hollinsworth, 1988; Webster-Stratton, Hollinsworth, & Kolpacoff, 1989; Patterson, *continues on page 33*
John is a 40-year-old single male, a recovering alcoholic who enters treatment with presenting problems of loneliness and angry outbursts. He is experiencing an agitated depression with serious interference with sleep. John, a postal worker, has maintained several years of sobriety and is still somewhat active in Alcoholics Anonymous meetings. After several months of therapy, John begins a relationship with Mary, a divorced woman who has a 9-year-old daughter, Michelle. John and Mary see each other with increasing interest for several months and decide to move in together with the eventual goal of marrying. John begins to speak not only about his relationship with Mary, but also about Michelle.

It seems to the therapist that numerous issues concerning John and Michelle might endanger Michelle’s emotional development. John speaks about Michelle’s biological father. He is angry at the way the father treats both Michelle and Mary, although the anger does not appear to be justified. He has declared that the father is unwelcome in the home, that the father must call on a separate telephone line, and that he and the father cannot both be present at any event at the same time. John is furious when Michelle expresses her desire to be with her father. He feels that she is not caring about his, John’s, feelings when this happens. Michelle, in turn, ends up in tears, alone in her room.

Regardless of the etiology of John’s anger, it appears that it could affect Michelle. If prevention of relationship problems for Michelle is a concern, then the therapist must find a creative way to address this issue directly. An intervention in which the therapist asks John whether he feels he is competing with the father for Michelle’s affection, surprises him. The therapist helps John understand that it is a normal developmental need for Michelle to want to have contact with her father. Further discussion about developmentally appropriate relationships evolves, and John asks for this guidance to be recorded on his telephone answering machine so that he can remind himself between sessions that Michelle’s need for contact with
her father is understandable. Although the therapy is not usually conducted in this way, having the therapist’s voice and reminder message at his disposal enables John to moderate his reactions at home.

Such prevention-minded interventions can occur even without all parties present. The therapist had never met Michelle. The intervention was customized in this clinical setting because the therapist understood that Michelle needed and wanted contact with her biological father. The therapist hoped that the intervention would influence John’s actions outside the presence of the therapist and would have positive ripple effects throughout the family.

The intervention was customized in this clinical setting because the therapist understood that Michelle needed and wanted contact with her biological father.

This clinical vignette, written by Barbara Berger, Ph.D., is based on the experiences of a real family, but the names and some details have been disguised.
Janice is a 32-year-old married woman who comes to therapy because she is having trouble dealing with family-of-origin issues. A father with an antisocial personality disorder, a mother with a dependent personality disorder, and an adult sister with mental illness are creating stress that has an impact on Janice’s marriage. Janice and her husband are encountering difficulties. They have lost interest in doing things together. They hardly speak or communicate, except about issues concerning their daughter, Sarah, who is about 18 months old when her mother enters treatment. Sarah often comes with her mother for sessions.

The therapist observes that Sarah’s behavior is disturbed. Sarah is exceptionally frightened and clings to her mother week after week, terrified to be put down. Even a movement of the therapist to shift position in her own chair causes Sarah to react with terror. After a time, it becomes apparent that Sarah hasn’t developed speech. She communicates mainly by facial expression and pointing. Her mother is very attentive and soothing to her, eager to parent to the best of her ability.

Although the purpose of the sessions relates to Janice’s presenting problems and her ensuing depression, it appears that Sarah has a developing, unacknowledged problem. Unless parenting issues are addressed, it can be predicted that when the mother returns to work and Sarah enters day care or school, a serious emotional and behavioral situation will be present.

The therapist begins to make interventions that include Sarah as part of Janice’s treatment in an attempt to prevent pathological developments. Such interpretations as, “I wonder if you are being too good a mother” evoke conversation about the importance of encouraging the child to discover, explore, and make her own way in the world while the mother provides support that encourages growth. And such suggestions as, “Maybe exposure to more experiences outside your home will help Sarah to be less frightened. Have you taken her to places where there
are interesting things for children her age?” invite an interchange about addressing Janice’s anxiety about her daughter’s fear of people, adults, and other children.

Within a few months Sarah begins to speak, and her language skills advance rapidly. The fearfulness seems to be lessening, but it will require time to abate sufficiently for Sarah to have confidence in her ability to separate and develop necessary social skills. Attention to Janice’s therapeutic issues continues without interference, alongside the prevention of further problems for Sarah.

The need for prevention for Sarah was apparent to the therapist because she had the opportunity to see the problem as it was developing. The therapist had not intended to provide a preventive intervention, but because she was open to it—that is, “prevention-minded”—she could incorporate it into her intervention plan.

Such interventions as those provided by Janice’s therapist often are difficult to accomplish with families with multiple problems. Getting everyone into the office may be impossible, and home visits may be the only practical strategy. Additionally, cultural and ethnic factors may influence which family members should be contacted and when and how. For example, a grandmother who is the main caregiver should be included, or a father who has seasonal work patterns will be unable to participate in sessions during certain times of the year.

The therapist had not intended to provide a preventive intervention, but because she was open to it—that is, “prevention-minded”—she could incorporate it into her intervention plan.

This vignette, written by Barbara Berger, Ph.D., is based on her clinical practice.
DeGarmo, & Forgatch, 2004; Reid, Webster-Stratton, & Beauchaine, 2001; Linares, Montalto, & Oza, 2006; Gardner, Burton, & Klimes, 2006; Hutchings et al., 2007). The curriculum is now known as The Incredible Years. (For details about this program, see Vignette E, “Mid-Valley Behavioral Care Network,” and Appendix B).

Another evidence-based indicated preventive intervention, Functional Family Therapy (FFT), is an example of a program developed originally as a treatment for older adolescents at risk for institutionalization (Alexander et al., 1998). FFT combines a systems perspective with behavioral techniques. It also can be used as an indicated preventive intervention with adolescents and their siblings who have less serious symptoms (see Appendix A).

The following evidence-based indicated preventive interventions also have their roots in clinical practice but were not derived specifically from treatment protocols as the two examples above were:

» An indicated preventive intervention designed by Strayhorn & Weidman (1989, 1991) illustrates how a mental health practitioner can supervise the intervention work of paraprofessionals with parents of preschoolers with attention-deficit and internalizing symptoms. In this intervention, the parents participated in group training that involved instruction and role-playing practice, as well as individual sessions that involved modeling and written materials (Parent-Child Interaction Training). The training was delivered by research-assistant para-professionals supervised by a psychiatrist. The parents reported improvement in their children’s attention-deficit and internalizing symptoms. The improvement was confirmed by a blind measure of videotaped interaction between parent and child. At 1-year follow-up, teacher ratings of child behavior, including attention-deficit and hyperactivity symptoms, showed definite improvement. Repeated studies have shown this intervention to be successful for families with children who have behavior problems (Eyberg et al., 2001; Bell & Eyberg, 2002; Zisser & Eyberg, 2009), including Chinese families (Leung, Sanders, Leung, Mak, & Lau, 2003; Leung, Tsang, Heung, & Yiu, 2009) and Mexican American families (McCabe & Yeh, 2009). It has also been proven effective for families whose children have mental retardation and engage in disruptive behavior (Bagner & Eyberg, 2007) and in domestic violence populations (Borrego, Gutow, Reicher, & Barker, 2008).

» Over the past 40 years, Patterson and colleagues have repeatedly shown that harsh and inconsistent parenting practices contribute to aggressive and uncooperative behavior in children and that positive reinforcement of desirable behavior contributes to cooperative and prosocial behavior, or behavior that benefits others and/or demonstrates caring, concern, and empathy for others.
(e.g., Patterson, 1974, 1982; Patterson, Reid, Jones, & Conger, 1975; Patterson, DeGarmo, & Forgatch, 2004). A number of programs have based their parenting interventions on those of Patterson’s group (e.g., Patterson & Gullion, 1968; Patterson, 1974). All of these programs encourage parents to:

- use praise and rewards to reinforce desirable behavior;
- replace criticism and physical punishment with mild and consistent negative consequences for undesirable behavior, such as time-out and brief loss of privileges; and
- increase positive involvement with their children, such as playing with them, reading to them, and listening to them.

One such program is Triple P: Positive Parenting Program, a multilevel intervention with universal, selective, and indicated components. It focuses on the general population, not just individual families, and has components tailored to at-risk groups (such as young single mothers) or children with behavioral problems. The program includes five levels of parenting guidance:

- The universal level provides information via mass media about effective parenting and solutions to common child-rearing problems.
- The second level provides brief advice to parents for dealing with specific concerns, such as toileting or bedtime problems; parents are typically reached through contact with primary health care providers, such as pediatricians.
- The third level provides skills training for parents who are having problems with children’s aggressive or uncooperative behavior.
- The fourth level (standard Triple P) provides up to twelve 1-hour sessions on parenting skills for parents whose children have multiple behavioral problems, particularly aggressive behavior.
- The final level, enhanced Triple P, provides skills and support to deal with parental depression, marital discord, or other family challenges.

Different levels of Triple P have repeatedly demonstrated positive effects in randomized controlled trials (Sanders, Markie-Dadds, Tully, & Bor, 2000; Ireland, Sanders, & Markie-Dadds, 2003; Sanders et al., 2004). For example, a study of the mass media component found that children of parents who watched a 12-episode Triple P television series had significantly lower levels of disruptive behavior (based on parental reports), and parents expressed higher levels of competence (Sanders, Montgomery, & Brechman-Toussaint, 2000). A comparable trial (accompanied by a media campaign) in 18 South Carolina counties showed significant positive effects of Triple P on the entire population (Prinz, Sanders, Shapiro, Whitaker, & Lutzker,
in the experimental condition showed a much lower rate of major depressive episodes (9.3 percent) than those in the control group (28.8 percent). A team of researchers recently replicated these results in a four-site randomized trial involving 316 at-risk youths. Unfortunately, adolescents who had a parent with current depression did not experience a significant reduction in rates of depression (Garber et al., 2007; 2009). Nevertheless, an analysis of costs and benefits suggests that this program not only prevents depression in a number of high-risk adolescents, but that it is cost-effective as well (Lynch et al., 2005).

Preventing the first episode of full-blown depression is not the only focus of current prevention research with adolescents. Given that people with severe illnesses such as bipolar disorder and schizophrenia have a very high lifetime risk for suicide (Palmer, Pankratz, & Bostwick, 2005) and early mortality (Fenton, 2000), it is understandable that clinicians and researchers would want to prevent these illnesses if at all possible. A number of clinics across the world have programs for intervening before the onset of psychosis, when symptoms are in the prodromal stage (e.g., McGorry & Jackson, 1999; McFarlane, 2007). The clinician/researchers provide training to mental health professionals, school and community professionals, and the general public regarding early warning signs of psychosis and how to refer someone to the clinic, where the person is offered atypical antipsychotic drugs and/or psychosocial interventions. A meta-analysis estimated that about...
11 percent of people treated in the programs go on to develop a full-blown psychotic episode, compared to about 36 percent of controls—i.e., people who are either untreated or receive treatment as usual (McFarlane, 2007).

Although programs to prevent psychosis offer great promise for young people, an especially vulnerable group, caution is warranted. All interventions have important ethical implications, and indicated preventive interventions are no exception. Challenges regarding (1) the level of evidence that a preventive intervention will help and not harm, (2) the costs to a family and to the individual, and (3) the need for informed consent and confidentiality all must be met with utmost integrity. Additional research is needed, and national trials in the public and private sector continue.

Need for Evidence

Standards of evidence that a particular intervention is effective with a patient or population group are increasingly important in the mental health field. The strength of the evidence often is referred to as the level of evidence. The Surgeon General’s report (HHS, 1999), most Federal and State mental health agencies, and professional associations support the use of evidence in clinical practice. But using evidence is not so easy as it appears. Considerable differences exist in what people see as constituting evidence—from expert opinion to multiple randomized controlled trials conducted by independent investigators with diverse population groups. In 1998, Chambless and Hollon published a landmark paper on standards by which to measure the effectiveness of specific treatment interventions. The paper alerted the field of the need to understand whether treatment interventions produce positive outcomes. Standards for assessing the effectiveness of promotion and preventive interventions are equally important. Through agreed-upon standards, organizations, agencies, policymakers, service providers and community stakeholders seeking to identify prevention programs to replicate in their communities would be confident that an intervention was well tested.

The Society for Prevention Research (SPR) developed criteria or standards of evidence for preventive interventions to be judged efficacious. Through agreed upon standards, organizations, agencies, policymakers, service providers and community stakeholders seeking to identify prevention programs to replicate in their communities would be confident that an intervention was well tested. The monograph, Standards of Evidence: Criteria for Efficacy, Effectiveness and Dissemination was adopted by the Board of SPR on April 12, 2004. (An electronic copy may be found at http://www.preventionresearch.org/StandardsOfEvidencebook.pdf).

The 2009 NRC and IOM report strongly recommends the use of evidence-based programs and the evaluation of these programs with multiple populations:

Federal and state agencies should prioritize the use of evidence-based programs and promote the rigorous evaluation of prevention and
To determine the adequacy of evidence, one should review six major content areas: targeted population group, risk and protective factors addressed, the intervention program, the research design, evidence concerning implementation, and evidence concerning the outcomes.

1. **Targeted population group.** Specifying which population group is targeted and how the group was recruited is important for replicating the intervention—and for determining if the intervention is likely to work with the individual or group with whom you plan to use it. For example, in Clarke and colleagues’ study (1995), the target population was all ninth- and tenth-grade students in a high school who had been through two screenings—a questionnaire on mood and then an interview. Members of the recruited group received high scores on depressive symptomatology, but did not have a current depressive disorder.

2. **Risk and protective factors addressed.** Consider whether the intervention addresses known and agreed-upon risk and/or protective factors for a particular behavioral health status. The risk factor of high depressive symptoms is known to be a precursor for full-blown disorder, so reducing those symptoms was the goal in Clarke et al.’s work (1995).

3. **Intervention program.** The intervention program should be thoroughly described, including goals, content, site, methods of delivery, and length. Intervention manuals and training sessions should be offered.

4. **Research design.** The research design should be thoroughly described, including types of control or comparison groups, randomization procedures, measurement tools, attrition rates, and statistical techniques.

5. **Evidence concerning implementation.** Evidence concerning implementation pertains to the concept of fidelity. Fidelity means that the intervention actually was implemented as it originally had been.
designed. For example, perhaps only 30 percent of an intervention group actually participated, or the majority of the participants attended fewer than half of the sessions, or the clinician who provided the intervention substantially altered the content without the agreement of the original program designer. If any of these scenarios occurred, the intervention will not have been delivered with fidelity, and the validity of the results will be questionable.

6. Evidence concerning outcomes. Evidence of both short-term and long-term outcomes should be reviewed. Initially, evidence may emerge that risk factors have been reduced, such as fewer depressive symptoms or less family violence, or that protective factors have increased, such as the involvement of a supportive grandmother or teacher. Eventually, more evidence may emerge regarding an actual reduction in the observed rate of new cases of a disorder or a delayed onset of the disorder. (IOM, 1994)

Need for Opportunities for Training in Evidence-Based Programs

Clinicians, including psychologists, social workers, nurses, and physicians, must be prepared to recognize risks and appropriately intervene within the scope of their clinical practice. The committee considers core aspects of training to include activities that enhance the knowledge, skills, attitudes, and experience of professionals who will carry out the various elements of programs addressing prevention of mental, emotional, and behavioral disorders. Training must be directed to achieve research capabilities, teaching skills, and the capability to implement prevention programs as well as collect and analyze data on outcomes from such efforts. (NRC and IOM, 2009, p. 357–358)

To achieve the best outcomes, the practitioner needs the best training available in order to deliver the intervention with fidelity. Increasingly, researchers are designing detailed implementation protocols for their preventive programs. The manuals highlight the underlying theories, including risk and protective factors, as well as targeted population groups, the content of the interventions, and evaluation strategies. Although the manuals usually provide detailed descriptions regarding the interventions, there is often some latitude in the delivery of the intervention in a real-world setting.

To bolster what a clinician can learn from the manuals, it is critical to arrange some face-to-face training and ongoing supervision with the original researcher or someone he or she has trained. The practitioner may believe that some adaptations to the intervention are needed for a particular target group, especially if the target population is from a different culture. These types of changes should be made only through consultation with the original researcher or program designer.
Step 4. Provide Evidence-Based Selective and Universal Preventive Interventions

It seems almost inevitable that, once a practitioner begins to provide indicated preventive services, he or she will also become interested in intervention for selective and universal populations. Selective interventions are targeted to individuals or a subgroup of the population whose risk of developing mental disorders is significantly higher than average. It may be an imminent or lifetime risk. Risk factors may be identified on the basis of biological or psychosocial factors that are known to be associated with the onset of a mental disorder. Potential selective populations are children of adults with serious mental illness, children who have witnessed school violence, or adults experiencing a severe stressor.

Universal interventions on the other hand are targeted to the general public or a whole population group that has not been identified on the basis of individual risk. An example of a universal intervention would be a brief psychosocial intervention focusing on issues of attachment and caregiving that is delivered to all first-time mothers while they are still in the hospital after delivery. Potential universal populations include all pregnant women in a community or a clinic or all senior citizens living by themselves.

Mental health practitioners may be involved in selective and universal preventive services in three ways. They may provide direct services, supervise other professionals or paraprofessionals, or provide consultation to the directors of these programs.

The programs described below are among many that have demonstrated significantly positive outcomes:

» Beginning in 1977 in a small, semi-rural county in New York State, a selective program now known as the Nurse-Family Partnership began providing nurse home visitation to pregnant women (mainly Caucasian). Visits continued until the children were two years old. The intervention focused on three aspects of maternal functioning:

- health-related behaviors during pregnancy and the early years of the child’s life;
- the care parents provided to their children; and
- maternal personal life-course development (family planning, educational achievement, and participation in the workforce).

To help support the women, the nurses linked families with needed community services and attempted to involve other family members and friends in the pregnancy, birth, and early care of the child (Olds, 2002; Olds, Henderson, Tatelbaum, & Chamberlin, 1986a; Olds, Henderson, Chamberlin, & Tatelbaum, 1986b; Olds, Henderson,
• 79 percent reduction in child abuse and neglect;

• 44 percent reduction in maternal behavioral problems due to their use of alcohol and drugs;

• 69 percent fewer arrests among the mothers;

• 50 percent increase in marriage among the mothers;

• 54 percent fewer arrests and 69 percent fewer convictions among the 15-year-old adolescents;

• 58 percent fewer sexual partners among the 15-year-old adolescents;

• 28 percent fewer cigarettes smoked and 51 percent fewer days consuming alcohol among the 15-year-old adolescents; and

• 4 dollars saved for every dollar invested. (Olds et al., 1997, 1998).

The Nurse-Family Partnership program has been replicated in Memphis, TN with a mostly African-American population (Kitzman et al., 1997; Olds et al, 2007), and in Denver, CO with a large proportion of Hispanics in the trial (Olds et al, 2004). Both replications have demonstrated significant benefits for participants when compared to a control group. As of July 2008, the Nurse-Family Partnership was being implemented in 25 States. A 2005 study reported that the per-child cost of the Nurse-Family Partnership program was about $7,000. The study reported that the program produced total benefits of about $9,000 per child for lower-risk children, and $41,000 per child for higher-risk children (Karoly, Kilburn, & Cannon, 2005 in NRC and IOM, 2009, p. 254).

Promoting Alternative Thinking Strategies (PATHS) teaches elementary and preschool children about emotion, self-control, and problem solving (Kusche and Greenberg, 1994). The PATHS curriculum has varied across studies as appropriate to the age and ability of the children. The program generally consists of about 60 lessons delivered throughout a school year. The lessons teach students to stop, calm themselves, and think about how to handle stressful situations.
Randomized controlled trials have shown that PATHS increased the students’ ability to understand and articulate emotions (Greenberg, Kusche, Cook, & Quamma, 1995). It has also shown significant cognitive, social, and emotional benefits for deaf children in elementary grades (Greenberg & Kusche, 1998), as well as for children in special education classrooms (Kam, Greenberg, & Kusche, 2004). At 3-year follow-up of the latter group, PATHS student had significantly fewer depression and behavior problems than control students. In yet another study, students in PATHS classrooms had lower levels of aggression and hyperactivity, and the atmospheres of their classrooms were more positive, but they did not differ from controls in terms of teacher ratings of classroom behavior (Conduct Problems Prevention Research Group, 1999a, 1999b).

A 3-year study in Head Start sites in two moderate-sized cities in Pennsylvania found that, compared to a control group, the children who received the PATHS intervention scored higher in emotional knowledge skills and were more socially competent with peers at the end of a school year (Domitrovich, Cortes, & Greenberg, 2007).

The Busselton Study in Western Australia (Cullen, 1976; Cullen & Cullen, 1996) illustrates how preventive interventions can be delivered in the course of routine health care. In the child’s first year of life, the family’s general practitioner conducted four counseling sessions, 20 to 30 minutes in length, followed by two interviews per year for the next 4 years. One general practitioner provided all the intervention counseling, which aimed to enhance the self-worth of the mother, to foster gentle physical interaction with the child, and to encourage the mother to adopt a positive attitude about modifying the child’s behavior. The initial positive behavioral and health benefits seen at 6 years of age appear to have lasted through ages 27 to 29. This universal preventive intervention was delivered by a general practitioner, but the study raises the possibility that mental health practitioners who provide similar long-term continuity of care could have the same impact.

A number of additional selective and universal programs for adults exist. The Michigan Prevention Research Center’s JOBS Project for the Unemployed demonstrated that a selective preventive intervention can help people cope with the stresses of job loss. The intervention increased the participants’ job-searching skills, increased their rate of reemployment in high-quality jobs, and reduced their depressive symptoms and episodes (Vinokur, van Ryn, Gramlich, & Price, 1991; Price, van Ryn, & Vinokur, 1992; Vinokur, 1998; Price, 2002).

Compared to control groups, JOBS Project participants have shown lower levels of depression at two and a half year follow-up (Price, van Ryn, & Vinokur, 1992) and attainment of higher-paying, higher-quality jobs (Vinokur, van Ryn, Gramlich, & Price, 1991; Price, van Ryn, & Vinokur, 1992; Vinokur, 1998; Price, 2002).
service agencies in California; and in China and Finland. A comprehensive implementation manual is available for the program (Curran, Wishart, & Gingrich, 1999, http://www.isr.umich.edu/src/seh/mprc/jobsupdt.html).

The Prevention and Relationship Enhancement Program (PREP), a universal prevention intervention, focuses on preventing distress and divorce in couples who are married or planning to marry. Long-term results show significant relationship satisfaction improvements, fewer divorces, and fewer instances of physical abuse (Markman, 1979; 1981; 1984; Markman, Renick, Floyd, Stanley, & Clements, 1993; Halford, Markman, Klein, & Stanley, 2003; Stanley, Markman, St. Peters, & Leber, 1995; Ragan et al., 2009).

Widow-to-Widow: A Mutual Help Program for the Widowed was developed by Silverman (1988; 2004) in response to research trials by Vachon and colleagues of a similar program (1979, 1980, 1982). This selective preventive intervention is most successful with women who experience high stress immediately after the death of their spouse. Women in this program experienced fewer depressive symptoms than women in a control group, and they recovered their activities and developed new relationships more quickly.

As with indicated preventive interventions, practitioners must be trained to deliver evidence-based selective and universal programs with fidelity.
Vignette D is a case description of a family that participated in the Preventive Intervention Project (PIP) designed by William Beardslee, a child psychiatrist. A selective intervention, the PIP focuses on children who have a parent with clinical depression. The children of parents with mental illnesses, including depression, are at increased risk for many types of emotional problems.

The PIP teaches family members about the illness of depression, the value of seeking help, and how to communicate effectively and solve problems together. A 4.5 year follow-up of the program found that significantly more children in the PIP “Family Talk” group (compared to children who attended two lectures followed by a group discussion with parents only) reported a better understanding of their parent’s depression as an illness, that they were not to blame for it, and that they felt free to go on with their lives—all factors hypothesized to decrease the risk for depression. Interestingly, both groups showed a reduction in symptoms of depression, an increase in family functioning, and better recognition of when the children were becoming depressed (Beardslee, Gladstone, Wright, & Cooper, 2003; Beardslee et al., 2007. This intervention received very high ratings in the National Registry of Effective Programs and Practices (NREPP).

The program has been adapted for use with inner-city single-parent African-American families (Podorefsky, McDonald-Dowdell, & Beardslee, 2001) and Hispanic families (D’Angelo et al., 2009). In addition, principles of the program have been used to help teachers develop skills to deal with depressed parents in Head Start and Early Head Start (Beardslee, Avery, Ayoub, & Watts, 2009) and in several nationwide efforts to develop programs for children of parents with mental illnesses (Solantaus & Toikka, 2006; Solantaus, Toikka, Alasuutari, Beardslee, & Paavonen, 2009).

The clinicians who provide the intervention must be trained thoroughly in its use. This training includes role playing, videotapes of mock sessions, and feedback to the clinicians regarding their ability to deliver the intervention with fidelity. When clinicians begin seeing families, it is useful to audiotape the sessions and review them afterward. Weekly peer supervision provides an opportunity to talk about any difficulties that may arise.

Practitioners interested in learning more about this protocol can access training manuals and videotapes, a brief assessment package, journal articles (Beardslee, 1998; Beardslee, Wright, Rothberg, Salt, & Versage, 1996), a book written for both families and professionals (Beardslee, 2002; 2003) and consultations with PIP staff (see Appendix B for contact information). A web-based training protocol is currently being developed.

“The O’Neil Family” described in Vignette D is a case description of a family who participated in the PIP. The O’Neils’ story illustrates the devastating impact that bipolar disorder, especially
its manic phase, has on a family. It also illustrates a family's capacity to rally in protecting its children and the ways in which a short-term preventive intervention can serve as a catalyst for major changes.

Step 5. Advise Systems and Become an Advocate

When a clinician becomes comfortable with protocol-based preventive intervention programs that demonstrate significant positive effects, she or he can take another step—perhaps a leap—and become involved in advising and advocating within mental health systems for the use of evidence-based preventive services. Mental health practitioners also can provide potential critical consultation to community organizations and systems beyond mental health, such as pediatrics and education. For example, in the Primary Project, a well-known prevention program delivered in the schools, mental health practitioners supervise the paraprofessionals who provide the intervention (Mijangos & Farie, 2001).

Published guidelines and frameworks may be helpful concerning this type of consultation, but the needs of different administrative systems require flexibility. Mental Health America (MHA), in collaboration with the Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, developed one such framework (see Appendix D, “Incorporating Preventive Services for Mental Health and Substance Abuse Problems Into Managed Health Care Settings”). This risk- and evidence-based framework presents a logical series of steps to implement, maintain, and measure prevention services in managed health care settings. Other settings may require other frameworks, but the end goal is similar—the provision of high-quality, effective prevention services to prevent or delay first onset of mental and behavioral disorders. Additional frameworks may be found at http://www.mentalhealthamerica.net/go/maternal-depression and at http://www.preventioninstitute.org/tool_spectrum.html.

Vignette E, “Mid-Valley Behavioral Care Network,” depicts an excellent example of how a mental health practitioner and her organization’s advisory council changed a local health care system.

MHA selected the MVBCN to receive its 2003 Lela Rowland Prevention Award. The annual award recognizes a researcher or community institution, or both, for wide dissemination and community implementation of effective prevention practices, particularly through researcher–practitioner partnerships, successfully bringing “research to practice.”

Community actions and system changes, such as MVBCN’s experience, do not happen by accident. The changes result from strategic planning and advocacy for promotion and prevention programming. Are programs such as these reaching members of your community? If not, what can you do about it? Advocacy by clinicians and

continues on page 47
The O’Neils were recruited into the Preventive Intervention Project from a local self-help organization for people suffering from depression. They are an intact family in which the mother, Glenda, has severe bipolar disorder.

Glenda was unable to see episodes of mania coming on. She was hospitalized for manic symptoms and psychosis on several occasions. Even though it was painful for her to discuss her illness, she was motivated to make sense of her symptoms for herself and to prevent further deleterious impact on the family. She was aware that her illness took a toll on her daughters, Beth, age 12, and Denise, age 10. She was particularly concerned that they might think that their “bad” behavior could precipitate a manic episode. She was also concerned that as the girls got older and recognized the genetic component of bipolar illness, they might worry about becoming bipolar themselves. Jerry, Glenda’s husband, also felt the illness had a major impact on the girls. “They are as affected as I am.”

The preventive intervention took place in six sessions over 3 months. The first two sessions took place with the parents only; each gave a historical account of the illness from his or her own perspective. The setting provided a forum for each parent to listen to the other. In the third session, the clinician met with each daughter separately, discussing school, friends, and hobbies as well as their worries about their mother. The clinician asked each girl to prepare for the family meeting by thinking about questions they had about the illness.

In the fourth session, both parents participated actively in planning for the family meeting. Jerry wanted to be sure that the genetic risks were addressed. Glenda wanted her family to become comfortable approaching her about mania, especially when they noticed a change in her behavior.

The fifth session was the family meeting. Each parent talked about individual experiences of the illness and encouraged the girls to do the same. The parents gave the children permission to approach either (or both) of them as soon as they noticed any change in their mother’s behavior. Glenda reassured the girls that in doing this they were not in any way betraying her, but were in fact helping her. They talked about wanting to avoid another hospitalization. The family also discussed genetic risk, and the parents mentioned several sources the girls could go to for further information or support if needed.
The final session was with the parents, who stated that their goals had been accomplished. Communication had been opened up, and they now had a plan to deal with future episodes of the illness.

The O’Neils were assessed at four different time periods over the next 3 1/2 years. At the 1-year follow-up, they reported that they had had to put their coping plan, worked out during the intervention, into effect. Jerry and the girls recognized Glenda’s early manic symptoms and talked with her about how to alleviate the situation. The family felt good about their proactive stance. They also had to deal with Beth (now 15) having a period of low mood. Beth went to her father saying that she had learned about symptoms of depression in the intervention and was concerned that she might be getting depressed. Her concern brought about a lengthy discussion between them about depression and ways in which she might cope with stress at school. They arranged for her to see the school guidance counselor, and they agreed that she should see a therapist if the symptoms continued, but this proved unnecessary. Glenda and Jerry had a refresher session with their clinical preventionist around this time. Some material from the intervention sessions was reviewed, particularly the analogies to physical illnesses, the need to “take it easy” when hypomanic symptoms developed, and the benefits of talking openly with their daughters about the illness.

What helped this family move forward? The fact that the preventive intervention was family based was essential in enabling family members to help one another. The therapeutic relationship with the clinician enabled all the family members to be heard and accepted.

This material was excerpted from a more detailed narrative written by Phyllis Rothberg, LCSW, for the PIP, William R. Beardslee, M.D., Principal Investigator, 1999.
family members is essential to speed the adoption of science-based preventive programs for children, adolescents, adults, and senior citizens by State and local service providers.

The U.S. Preventive Services Task Force has recognized that some health issues are likely to require more broad-based interventions than those that can be offered in the clinical setting alone. In fact, in its Guide to Clinical Preventive Services, 2nd ed., the group observes, “For some health problems, community-level interventions may be more effective than clinical preventive services” (U.S. Preventive Services Task Force, 1996, p. xxxii). The task force specifically identified issues of youth and family violence, initiation of tobacco use, unintended pregnancy in adolescents, and certain unintentional injuries as requiring more broad-based intervention.

Mental health practitioners can play an important role in helping communities initiate and implement community-wide promotion and universal prevention programs. They may even find themselves advocating alongside consumers for promotion and preventive services in policy venues, State health-funding decisions, managed care coverage, and agency decisions.

Common sense and respect for our fellow humans tells us that a focus on the positive aspects of mental health demands our immediate attention…Promoting mental health for all Americans will require scientific know-how but, even more importantly, a societal resolve that we will make the needed investment. (Surgeon General David Satcher, M.D., U.S. Department of Health and Human Services (1999), preface)

Step 6. Partner With Researchers

A sixth step in the journey toward becoming a preventionist is to partner with mental health researchers in helping to (1) identify gaps in knowledge in preventive clinical services, (2) set priorities for research initiatives, and (3) design specific interventions, based on years of clinical experience.

Gaps certainly exist in what is known in prevention science, and practitioners can help identify these gaps as matters of concern. For example, preventive intervention research on specific groups of adults and senior citizens at high risk or on children of parents with mental illnesses may be high priorities, particularly within certain communities or agencies. In 1982, clinicians noted that a very large number of children seen at a community mental health setting in Chicago had been exposed to violence. A review of scientific research confirmed their belief that such violence was a significant risk factor for mental and behavioral disorders. Several large-scale programs to prevent these children from developing psychological problems were then created (Jenkins & Bell, 1997; Bell, 2004; in NRC and IOM, 2009, p. 333).

Practitioners may help the community develop and express its voice in setting priorities for new research, as well as for translational research—that
is, the study of the process of moving a piece of research into practice. The community may need help to identify which promotion or preventive intervention research programs it would like to adopt, and the practitioner can serve as a bridge to the research community. Finally, the clinician’s expertise in working with specific population groups can provide leads to promotion and prevention researchers regarding which interventions might be the most acceptable and the most effective in a real-life setting. As discussed above, many indicated preventive interventions are based on effective treatment interventions and then fine-tuned for groups at high risk who do not yet have the illness. Some promotion and prevention researchers also are clinicians, but those who are not clinicians can benefit from collaboration with mental health practitioners.

Practitioners may help the community develop and express its voice in setting priorities for new research, as well as for translational research—that is, the study of the process of moving a piece of research into practice.
Mid-Valley Behavioral Care Network

The Mid-Valley Behavioral Care Network (MVBCN) serves the Oregon Health Plan/Medicaid population in a five-county area, covering approximately 75,000 lives. The network is governed by the MVBCN Regional Advisory Council. Provision of prevention services is required under the MVBCN’s contract with the state. In 1998, the council budgeted for preventive services to be delivered through the network (then 1 percent of the network’s overall budget), and it appointed a prevention work group (PWG) to develop policies defining how to proceed. A clinical social worker who served as a quality improvement coordinator for the MVBCN chaired the PWG. The PWG included a child psychiatrist, mental health and chemical dependency clinicians, consumer advocates, and representatives of other agencies that serve youth.

The PWG process was modeled largely on the MHA framework for maintaining and measuring preventive services in managed care (see Appendix D). Definitions of prevention were agreed upon. A needs assessment was conducted to determine which disorders or conditions were the most prevalent in the target geographical area as well as which disorders or conditions caused the most mortality and morbidity for individuals and families. Using these data, the PWG set priorities for 12 target conditions. In collaboration with a prevention consultant, the PWG reviewed the evidence base for preventive interventions targeting those conditions. Only when they learned that the evidence was significantly positive did the PWG proceed with the selection and implementation of specific preventive interventions.

The first major prevention initiative was the purchase of a video-based parent training curriculum, The Incredible Years (also refer to Step 3, “Provide Evidence-Based Indicated Preventive Interventions,” and see Appendix B). The MVBCN hired one of the original researchers to train group leaders, and he also provided consultation and data analysis support for the evaluation of outcomes. The MVBCN
offered classes at numerous community locations in partnership with other social service programs working with families at high risk, thus reaching parents not yet seeking mental health services. By the second year of the project, its implementers had addressed problems with group recruitment and attendance and consistent data collection. Sufficient data showed that by the end of the group sessions, the level of risk of these families and the degree of improvement in their status were equal to those from the original research sample when the parent training curriculum was first implemented and tested.

In the second year, two additional projects were funded. A postpartum depression intervention incorporated screening by medical and social service staff, referral to treatment where indicated, and provision of cognitive-behavioral support groups for women identified as at high risk for a full depressive episode. A manualized curriculum for the groups, The Mothers and Babies Course: A Reality Management Approach, was obtained from original researcher Ricardo F. Muñoz, Ph.D. (Muñoz et al., 2001), along with his screening tools to measure pre- and post-levels of risk and depressive symptoms (see Appendix B for contact information). The delivery configuration was developed by local partner agencies in each community. It also was enhanced by mentoring and support of local leadership, training of group leaders and therapists, and data analysis.

The third major initiative was early intervention with young people experiencing their first psychotic episode. A best-practice clinical model from Patrick McGorry, M.D., of Melbourne, Australia, was implemented (see Appendix B for contact information). The model focused on early identification and intensive support aimed at preventing disabling illness. MVBCN allocated prevention funds for extensive outreach that involved presentations to mental health, medical, emergency, and educational systems, as well as to advocates, about the importance of early recognition of young people experiencing their first psychotic episode and about how to refer them for specialized care. The State mental health division partnered to import the Australian researchers for a 2-day training session. The researchers provided extensive training materials and consultation to the clinical team for this first implementation of their treatment model in a U.S. mental health system.

The council was pleased with this strategic evidence-based approach, with the quality of the innovative approaches implemented, and with the positive community response to the projects. They approved an increase in MVBCN’s third-year budget from 1 to 1.85 percent. As of 2009, all of the programs described above continue, with the addition of a number of other evidence-based parenting curricula now being funded to serve parents of children at various ages. The PWG is now focused on nurturing the development of parenting supports for families with specific risks: parental substance abuse, parental mental illness, foster parenting of abused children. The needs assessment methodology now builds on the county-based needs assessment and resource mapping that brings together a variety of youth-serving agencies to create a legislatively mandated plan.

This information was provided by Kathleen Savicki, LCSW, chairperson of the Prevention Work Group, Mid-Valley Behavioral Care Network (see Appendix B for contact information).
As a clinician, you may encounter barriers to the delivery of prevention services within public and private mental health systems. These barriers typically arise in four areas:

» reluctant administrative systems that are burdened with requests for treatment,

» insufficient reimbursement from systems that are not set up to support prevention programs and services,

» uninterested or involved consumers who have not requested preventive services, and

» scant or nonexistent training opportunities that could prepare practitioners to provide effective preventive services.

In the sections that follow, we consider an appropriate and effective response to each of these kinds of barriers.

Use a Transdisciplinary Focus to Overcome Barriers

Each of the mental health professions—clinical/counseling psychology, clinical social work, general and child psychiatry, and psychiatric nursing—and consumers and their families have a unique contribution to make to the development of preventive practice. Despite their differences, they are coming together in search of a common understanding of how to promote mental health and prevent the onset of a wide range of mental and behavioral disorders. The desire to preserve firm academic disciplinary boundaries has receded far behind the shared quest to understand the etiology of mental health problems and effective interventions. There truly has been a consilience of knowledge, “literally a ‘jumping together’ of knowledge by the linking of facts and fact-based theory across disciplines to create a common ground work of explanation” (Wilson, 1998, p. 8).
If you meet someone today who is a promotion and prevention researcher or practitioner, he or she could be a community or school psychologist, social worker, pediatrician, public health worker, psychiatrist, psychiatric nurse, family practitioner, schoolteacher, or member of the clergy. Discipline labels often tell you little about what the practitioner actually does. Preventive interventions look remarkably similar, regardless of who delivers them. This similarity exists because researchers often create preventive interventions from theories and data produced by multiple disciplines working together. In the promotion and prevention field, it is not unusual to hear a social worker asking about the genetic history of a substance-abusing adolescent or a pediatrician intervening with domestic violence issues experienced by a family in his care. Promotion and prevention are fields for practitioners who enjoy collaborating with colleagues and want to push the creative boundaries of what may be possible in mental health care.

We have chosen to use the relatively new term *transdisciplinary* to describe what is happening in promotion and prevention today. The term *multidisciplinary* usually refers to a discipline-based approach with each separate discipline confined within the boundaries of its specialized training and role definition in a specific setting. The term *interdisciplinary* refers to a collaboration of two, three, or even more academic disciplines with concepts, theories, and methodologies of each discipline shared freely with the others. But the term transdisciplinary implies much more: The boundaries of the disciplines are secondary to the shared search for creative, explanatory, and useful concepts and practices. To achieve success, elements are pulled from wherever necessary and overlapped, reconfigured, and used to create new knowledge.

The transdisciplinary approach has potential for tremendous power in overcoming the barriers to promotion and prevention. Creativity, adeptness within the political realm, and the sheer number of potential advocates promise to lead to substantial system changes.

The psychiatric profession and our academic institutions have largely ceded promotion of health and prevention efforts to others in the pediatric, mental health, and social sciences fields. . . . In talking to legislators, to get their attention, we must underscore the cost-benefit of prevention and demonstrate the multiple costs of not investing in the health of families at risk. It is time we showed some leadership in these efforts. (Daniel Borenstein, M.D. (2001), past president, American Psychiatric Association)

**Persuade Reluctant Administrative Systems**

Community and administrative system readiness is crucial to the initiation of promotion and preventive services, but many systems are resistant to change. Mental health service systems often focus on particular components of care and the effectiveness of those components, rather than on services as a whole within a public health
model. Also, sometimes the service delivery system is mistaken for an intervention in its own right, rather than for what it really is—a vehicle to deliver effective interventions that may range from promotion to prevention to treatment to aftercare. For example, if the system is equated with a particular form of treatment, such as a hospital inpatient service, little room may exist for the consideration of new promotion and preventive interventions such as services to stressed caregivers and siblings at risk. Also, administrative systems tend to focus on restrictive age groups or have a single-problem focus, such as mental health or substance abuse. Preventive interventions often target risk factors that are common to multiple outcomes, and the interventions often take a developmental and “person-in-context” approach, with multiple intervention components focusing on individual, family, school, and community issues. This broad vision can be difficult for traditional administrative structures and administrators to handle.

The lack of integration between physical and mental health care is another serious barrier that continues to contribute to the notion that mental health problems are “different” and stigmatizing. Promotion and prevention in their purest form have the potential to forestall the development of both kinds of problems—physical and mental—and to do so either simultaneously or sequentially.

The link between type 1 diabetes and depression in children and adolescents illustrates the need for integrated health care. One study found that nearly one in seven youth (ages 10–18) with diabetes also met criteria for clinical depression, about double the estimate of depression in youth in general. These young people are more likely to have negative diabetes-related health outcomes such as poor control of glucose levels and recurrent hospital admissions for diabetic ketoacidosis (Hood et al., 2006).

Clinical depression is also common among patients recovering from a myocardial infarction or from coronary artery bypass graft surgery; depression is an independent risk factor for increased cardiac events and mortality (Carney et al., 2001; Connerney, Shapiro, McLaughlin, Bagiella, & Sloan, 2001; Ziegelstein, 2001). One prospective study of cardiac bypass patients found that 25 percent had substantial perioperative depressive symptoms. The physical functioning of those with moderate to severe symptoms was one-third less likely to improve after the operation, even after the researchers controlled for 20 clinical variables, including diabetes. The relationship was more pronounced in women than in men (Mallik et al., 2005).

Researchers have shown that even minimal symptoms of depression increase mortality risk after acute myocardial infarction (AMI) (Bush et al., 2001). Moreover, a 13-year prospective cohort study conducted by Pratt and colleagues (1996) showed that “the odds ratio for an AMI among those with a history of a major depressive episode was 4.5, and in those with only a history of dysphoria, it was 2.1 relative to subjects without such histories” (Severus, Littman, & Stoll, 2001, p. 340). Plausible mechanisms...
linking depression and myocardial infarction, such as decreased heart rate variability, have been suggested (Carney et al., 2001), but the specific mechanisms are not yet known for sure (Rumsfeld and Ho, 2005). It is likely that mental health practitioners will have a role to play in this new field that links mental and physical health. Indicated prevention that addresses subthreshold depressive symptoms could prevent the initial onset of heart attack and could decrease morbidity and mortality in persons who already have had an attack.

A specific preventive intervention may have both mental health and physical health outcomes. Mental health administrators may find it difficult to track services and outcomes if mental and physical health care records are not integrated. In nonintegrated systems, the data may not reflect some of the benefits that have occurred for a particular individual.

It often is helpful if the case for promotion and prevention is made to the administration by a practitioner who is well respected for his or her work in treatment, rather than by an “outsider,” especially a researcher. The practitioner should present evidence regarding the effectiveness of specific programs and the potential for cost savings and for patient and family satisfaction. He or she can use guidelines for integrating promotion and prevention into an existing system, specific intervention protocols, training manuals, and videotapes to make the case for promotion and prevention less abstract. Some of these materials currently are available, but many more need to be developed.

**Use New Strategies to Obtain Reimbursement**

Even though promotion and prevention interventions may be part of the answer to this country’s ever-increasing prevalence of behavioral problems and mental disorders, prevention is unlikely to be the answer to all the nation’s problems with health care costs. However, in recent years, cost–benefit analyses of some prevention programs have shown very promising results. For example:

» As noted in an earlier section of this document, a 2005 study reported that the per-child cost of the Nurse–Family Partnership program was about $7,000, or $2,000 less than earlier studies had shown. The study reported that the program produced total benefits of about $9,000 per child for lower-risk children, and $41,000 per child for higher-risk children (Karoly, Kilburn, & Cannon, 2005 in NRC and IOM, 2009, p. 254).

» A study published in 2006 reported that the Perry Preschool Project, a 1- to 2-year intensive preschool project that includes home visits and group meetings of parents, had estimated per-child costs of $15,000 and per-child benefits of $240,000. The primary benefits, some of which were observed well into adulthood, were reduced crime, positive
What kinds of costs can a clinical practice expect to incur if preventive programs are initiated?

- **Clinical care costs**, including direct costs of screening individuals and providing preventive care
- **Other costs** involving provision of treatment services for previously unidentified people with DSM diagnoses
- **System costs**, including the administrative time expended in needs’ assessment, program identification, staff training, and measurement of implementation and outcome

Who will provide reimbursement for clinical care preventive services in the mental health area? As Davis and colleagues observe in a supplement piece in the *Journal of General Internal Medicine*, “Preventive health care has historically been relegated to a secondary position in U.S. health insurance plans” (Davis, Bialek, Parkinson, Smith, & Vellozzi, 1990, p. S93). This is truer for mental and behavioral problems than for physical problems. As Davis and colleagues state, “One major barrier to the incorporation of preventive care services into public programs, such as Medicare and Medicaid, and private insurance [is] developing an appropriate payment method that will balance the desire to encourage patients and physicians to utilize preventive care services appropriately with the desire to avoid incentive for excessive utilization or abuse” (p. S93). Traditional health care systems vary greatly in the level of health promotion and illness prevention services that they provide, and most provide minimal academic outcomes, and reduced smoking (Belfield, Nores, Barnett, & Schweinhart, 2006 in NRC and IOM, 2009, p. 254).

A study published in 2006 found that the Abecedarian Early Childhood Intervention, an intensive, multiyear intervention for children from birth to age 5, found that per-child costs were $63,000 and per-child benefits were $158,000. The primary benefits were related to cognitive abilities and education, which were valued in terms of estimated impact on future earnings. The intervention was also associated with a reduction in smoking, which was valued in terms of estimated reduction in premature mortality (Barnett & Masse, 2006 in NRC and IOM, 2009, p. 254).

A study published in 2007 found that the Chicago Child-Parent Centers, a center-based preschool education program for disadvantaged children, had estimated costs per child of $7,400 and benefits per child of $75,000. The primary benefits were improved academic outcomes and reduced crime (Temple & Reynolds, 2007 in NRC and IOM, 2009, p. 254).

Despite these findings, the economic argument should not be the overriding premise. We do not provide treatment and maintenance services primarily to save money. The goal is to save lives and improve the quality of life. Likewise, we should promote health and prevent problems whenever we can demonstrate positive results at a reasonable price.
promotion and prevention services in mental and behavioral health.

Medicare provides some preventive services for physical health but none for mental health. By contrast, Medicaid provides some preventive services, especially for children and families. These services include prenatal services and an early and periodic screening, diagnosis, and treatment (EPSDT) mandate for persons less than 21 years of age. Reimbursement varies, however, from State to State. A few States have made significant efforts to enhance mental health screening in primary care settings. Health maintenance organizations (HMOs) typically provide a range of preventive services such as well-child care, prenatal services, patient education, preventive services integrated into primary care, and behavioral-change programs related to smoking, nutrition, and exercise. A few of these organizations also have provided mental health promotion and prevention services for groups at high risk, such as victims of child abuse and patients identified with life-threatening illnesses. In the last few years, some behavioral health care organizations have begun to make a commitment to providing promotion and prevention programs. However, few private health insurance plans offer any promotion and prevention carve-outs, which are direct contracts with managed behavioral health organizations, and mental health promotion and prevention services generally are not offered under these plans (Merrick et al., 2001).

As practitioners increasingly expand their clinical practices to include prevention-oriented treatment and then evidence-based indicated, selective, and universal preventive interventions, they will discover the need for funding sources that are secure, permanent, and diversified. How can such funding be created?

» Prevention-minded treatment can be provided without new funding sources. Such interventions for family members can occur in clinical practice because the major service provided is treatment for the primary client. The client’s name and diagnosis are used for billing purposes.

» In current practice, a client whose disorder is still sub-threshold—the client does not yet have symptoms, but is at high risk for developing them—is unlikely to qualify for reimbursement from Medicare, Medicaid, or health insurance companies. Therefore, clinicians and clients sometimes agree to use a diagnosis and to call the intervention “treatment,” even though “indicated or selective preventive intervention” are more accurate terms for the service that the clinician provides. In these circumstances, reimbursement is more likely to be made. But this practice raises serious ethical issues.

» A far better solution than mislabeling existing diagnostic and billing codes would be to create new codes to pay for preventive consultations and risk factor-reduction interventions that are linked to risk rather than disease status. A combined diagnostic and billing code might read “Conduct
disorders that are reviewed in the *Guide to Clinical Preventive Services: Report of the U.S. Preventive Services Task Force* (U.S. Preventive Services Task Force, 2008). The 2008 edition of this guide includes a review of the evidence and recommendations for clinical preventive services for physical diseases and disorders, but it also includes such topics as screening for depression, suicide risk, family violence, and problem drinking as well as counseling to prevent tobacco use, youth violence, and unintended pregnancy and to promote physical activity and a healthy diet. The problems addressed in the guide are common problems seen every day by primary care providers.

Preventive services can also be paid for by creating partnerships among agencies and organizations in public-private collaborations with government or foundation grants providing initial funding. Such partnering is beginning to take place in local and State initiatives, and it can be seen at the Federal level in the Safe Schools/Healthy Students School Violence Prevention Initiative, a collaborative effort by the U.S. Departments of Education, Justice, and HHS (CMHS) (see Appendix B for more details). Sometimes, these programs are combined with fee-for-service treatment programs within the same setting, such as in schools. Unfortunately, government and foundation grants often are limited to just a few years of funding, and the programs can become difficult to sustain—unless the community partnership plans for sustainability from the beginning.

Within health care coverage, practitioners should advocate for a periodic mental and behavioral health care assessment, based on an individual’s age, gender, and degree of physical, mental, and behavioral risk. This type of screening consultation could occur simultaneously with the physical health care visit and could be provided by a nurse or social worker with mental health training. A comprehensive billing code could include both the physical and mental health components of the visit.

Practitioners should advocate to employers and State governments for insurance coverage for a range of promotion and prevention services, delivered at a health care setting or elsewhere in the community, if evidence exists that the programs or interventions can have significant positive outcomes.

Many employers have created medical spending accounts for their employees. These accounts allow employees to use pretax dollars to pay for a range of medically related costs, such as dental and vision examinations and supplies such as eyeglasses and medicines that are not covered by health insurance. Mental illness prevention should be an option for reimbursement in these accounts.

Efforts need to be made to expand the number of mental and behavioral disorders that are reviewed in the *Guide to Clinical Preventive Services: Report of the U.S. Preventive Services Task Force* (U.S. Preventive Services Task Force, 2008). The 2008 edition of this guide includes a review of the evidence and recommendations for clinical preventive services for physical diseases and disorders, but it also includes such topics as screening for depression, suicide risk, family violence, and problem drinking as well as counseling to prevent tobacco use, youth violence, and unintended pregnancy and to promote physical activity and a healthy diet. The problems addressed in the guide are common problems seen every day by primary care providers.

Preventive services can also be paid for by creating partnerships among agencies and organizations in public-private collaborations with government or foundation grants providing initial funding. Such partnering is beginning to take place in local and State initiatives, and it can be seen at the Federal level in the Safe Schools/Healthy Students School Violence Prevention Initiative, a collaborative effort by the U.S. Departments of Education, Justice, and HHS (CMHS) (see Appendix B for more details). Sometimes, these programs are combined with fee-for-service treatment programs within the same setting, such as in schools. Unfortunately, government and foundation grants often are limited to just a few years of funding, and the programs can become difficult to sustain—unless the community partnership plans for sustainability from the beginning.
To secure and maintain funding for prevention, mental health practitioners must demonstrate that the prevention services they deliver have positive outcomes in both the short and long term. Program administrators are responsible to their employers, and policymakers must be attuned to their constituencies within the time span of elected office. They must document the value of funding for prevention. Practitioners can help them do so in the short term by providing evidence of change on targeted risk and protective factors. Evidence on reduction in onset of specific disorders will take longer to document.

Increase Transdisciplinary Training Opportunities

The mental health disciplines must mount a strategic effort to train more clinicians to provide promotion and prevention services. Federal and State Government agencies, professional organizations, and private nonprofit groups all can play a role. This continuing education course is the result of this type of collaboration.

Transdisciplinary training provides an opportunity for clinicians and consumers to learn side by side about promotion and prevention research, clinical interventions, and methods of measuring outcomes. The differences in training and professional values of various disciplines can become assets and extend the shared knowledge base. The teamwork issues that inevitably arise
can be anticipated and resolved more easily. Practitioners can work together to learn about specific program protocols, the cultural translation of a specific program from one population to another, methods to increase fidelity of implementation, and evaluation strategies. Transdisciplinary training provides an opportunity for clinicians and consumers to learn side by side about promotion and prevention research, clinical interventions, and methods of measuring outcomes.
In the next decade, we are likely to see a true integration of understanding regarding biological and psychosocial risk factors for the onset of illness. Increasingly, we recognize that genes by themselves do not determine our destiny. Biological and environmental interventions have the potential to alter the timing, course, and severity of even the most serious illnesses, including mental and behavioral disorders. Therefore, policy makers and the public will increasingly recognize the need for promotion and prevention. Such interventions will increasingly incorporate biopsychosocial approaches.

It is imperative for mental health practitioners to be open-minded and to stay abreast of the research and clinical literature. Keeping up to date will not be easy. The promotion and prevention literature is expanding and improving on a regular basis in all the mental health disciplines. Remaining current with the latest information and knowing how to evaluate its worthiness for clinical practice can be time-consuming and complicated. As a starting point, Appendix B lists reference materials, websites, and contact information for professional organizations.

As evidence regarding mental health promotion and prevention of first onset of mental, emotional, and behavioral disorders continues to accumulate, clinicians in all the mental health disciplines, including you, face significant challenges. It is time for clinicians to practice prevention-minded treatment and to go on to embrace more specific promotion and preventive interventions, including those with protocols learned through structured training sessions. There is a place for you on this new frontier.

“At first people refuse to believe that a strange new thing can be done, then they begin to hope it can be done, then they see it can be done—then it is done and all the world wonders why it was not done centuries before.” (Children’s author Frances Hodgson Burnett (1849–1924), quoted in McGorry & Jackson, 1999, p. 466)
This page intentionally left blank.
Appendix A: Details of Several Preventive Intervention Research Programs

Functional Family Therapy (FFT)
http://www.fftinc.com/

FFT is an example of a program developed as a treatment for older adolescents at risk for institutionalization but that can also be used as an indicated preventive intervention. Developed in 1969 by the University of Utah’s Psychology Department, FFT is a family intervention that focuses primarily on youth between the ages of 11 and 18 who are at risk for institutionalization and their families. FFT combines a systems perspective with behavioral techniques. The duration of FFT ranges from eight to thirty 1-hour sessions, depending on the severity of the situation, over a 3-month period. The impact of the intervention is derived from a “careful sequencing of [specific] techniques that build one upon another and unfold across time” (Alexander et al., 1998, p. 18). A 2004 assessment of the cost and benefit of FFT found that the cost per youth was $2,140. However, the benefit per youth was $28,356 (Aos, Lieb, Mayfield, Miller, & Pennucci, 2004). Although FFT originally was designed as a treatment for youth engaged in serious, chronic crimes (including violence and substance-related offenses), it also has been used as an indicated preventive intervention for youth with early indicators of delinquency (which the authors define as less severe diagnoses, such as conduct disorder, oppositional defiant disorder, or disruptive behavior disorder). It is conceivable that FFT also might be used for people with less severe diagnoses who are presenting with serious symptoms that are still sub-threshold for full-blown disorder.

FFT has also been used with younger siblings of adolescents who had been referred for treatment. In these cases, the intervention might be seen as a selective preventive intervention—that is, an intervention directed to a group at high risk. FFT has been used with many population groups, including both genders, one- and two-parent families, and diverse cultures including whites, African Americans, Hispanics/Latinos, and some American Indian and Asian American youth. Issues of ethnicity and culture continue to be a considerable focus to ensure that interventions are relevant for different population groups.

Alexander and colleagues (1998) authored the Blueprints publication of FFT, which was identified as one of ten programs that met a high standard of program effectiveness and that could be part of an initial nucleus for a national violence prevention initiative. The Blueprints project was initiated at the University of Colorado, and materials are disseminated with the help of the Office of Juvenile Justice and Delinquency Prevention of
the U.S. Department of Justice (see Appendix B for contact information).

Here are some online resources where you can learn more about FFT: and http://www.ncjrs.gov/pdffiles1/ojjdp/184743.pdf [PDF format-135 Kb].

**Nurse-Family Partnership**
http://www.nursefamilypartnership.org/

The Nurse-Family Partnership (formerly known as the Prenatal/Early Infancy Project) is a selective preventive intervention (Olds, 2002; Olds, Henderson, Tatelbaum, & Chamberlin, 1986a; Olds, Henderson, Chamberlin, & Tatelbaum, 1986b; Olds, Henderson, Tatelbaum, & Chamberlin, 1988; Olds, Henderson, Phelps, Kitzman, & Hanks, 1993; Olds, Henderson, & Tatelbaum, 1994a; Olds, Henderson, & Kitzman, 1994b; Olds, Henderson, Kitzman, & Cole, 1995; Olds et al., 1997; Olds et al., 1998; Olds & Kitzman, 1990; Kitzman et al., 1997) provided nurse home visitation to pregnant women living in a small semi-rural county in New York State. The intervention, which focused on the expectant mother’s health and personal life-course development, parent education, enhancement of the women’s informal support systems, and linkage of the parents with community services, began prenatally and continued until the children were 24 months of age.

The subjects in the study had had no previous live births and had any one of the following characteristics indicate predisposition to infant health and development problems: young age (less than 19 years), single-parent status, or low socioeconomic status. The design allowed enrollment of any woman who asked to participate and who was bearing a first child. Women more than 25 weeks pregnant were to be excluded, but 30 women between the 26th and 29th week of pregnancy were included because of the difficulty in estimating the length of gestation.

The subjects were randomly assigned to one of four intervention conditions:

1. Developmental screening of the child at ages 1 and 2;
2. Screening and free transportation to health care;
3. Screening, transportation, and nurse home-visitation once every 2 weeks during pregnancy; and
4. All the above, plus continued nurse home-visitation on a diminishing schedule until the infants were 24 months of age.

The nurses followed protocols, and researchers used record keeping and reviews to monitor implementation. Women who were visited by nurses experienced many positive behavioral and health outcomes. Although no overall main intervention effects were discerned for birth weight or length of gestation, the study found positive effects of the program on birth weight and length of gestation for the offspring of young adolescents and smokers. In contrast to their comparison-group counterparts, young adolescents who were visited by nurses gave birth to newborns who were an average of 395 grams heavier, and women who smoked and were
visited by nurses exhibited a 75 percent reduction in the incidence of preterm delivery.

During the first 2 years of the child’s life, nurse-visited children born to teens who were unmarried and of low income had 80 percent fewer verified cases of child abuse and neglect than did their counterparts in the control group. The young women who were visited by nurses were observed in their homes to restrict and punish their children less frequently, and the mothers provided more appropriate play materials. During the second year of life, the babies of all women visited by nurses, regardless of the families’ risk status, were seen in the emergency room fewer times, and they were seen by physicians less frequently for accidents and poisonings than comparison-group babies.

During the first 4 years after delivery of their first child, in contrast to the control group, nurse-visited women who were of low income and unmarried had fewer subsequent pregnancies, longer intervals between the birth of the first and second children, and greater participation in the workforce. As noted earlier in this document, at 15-year follow-up, these women and their children showed a number of enduring benefits.

The Nurse-Family Partnership has been replicated in Memphis, TN (Kitzman et al., 1997) and in Denver, CO (Olds et al., 2004).

At a 4-year follow-up, nurse-visited women in the Memphis study, when compared to control-group women:

- had fewer subsequent pregnancies and births and longer intervals between births of first and second children,
- used less welfare, and
- had more stable relationships with their partners.

Nurse-visited children:

- had higher IQs and language scores and
- had fewer mental health problems and other behaviors likely to compromise their adjustment to elementary school.

At 9-year follow-up, researchers found that nurse-visited women, compared to control-group women experienced:

- longer intervals between births of first and second children,
- fewer cumulative subsequent births per year,
- longer relationships with their current partners, and
- fewer months of use of welfare and food stamps.

Nurse-visited children born to mothers with low psychological resources, compared to control-group counterparts, had:

- better grade point averages and achievement test scores in math and reading in grades one through three and
lower likelihood of death from birth through age 9, an effect accounted for by deaths due to potentially preventable causes, such as preterm delivery, Sudden Infant Death Syndrome, and injuries (Olds et al., 2004; Olds et al., 2007).

Researchers recently followed up with families in the Denver trial (which compared the impact of the program when delivered by nurses versus paraprofessional visitors). At the time of their follow-up the children in the study were 4 years old. They found that nurse-visited women, compared to control-group women:

- had longer intervals between the births of the first and second children, and
- experienced less domestic violence.

Nurse-visited children born to mothers with low psychological resources, compared to control-group counterparts:

- had better language and executive function- ing scores, and
- had better behavioral regulation during testing.

Paraprofessional-visited women, when compared to control-group counterparts:

- were less likely to be married or live with the father of the child;
- had fewer subsequent low-birth-weight newborns;
- had better mastery and mental health scores;
- were employed more during the 2- to 4-year period following the birth of the child; and
- had more sensitive and responsive interactions with their children, and home environments that were more conducive to their children’s development (an effect concentrated among mothers with low psychological resources).

There were no statistically significant benefits for the paraprofessional-visited children (Olds et al., 2004).

A 2005 study reported that the per-child cost of the Nurse-Family Partnership program was about $7,000 and that the program produced total benefits of about $9,000 per child for lower-risk children and $41,000 per child for higher-risk children (Karoly, Kilburn, & Cannon, 2005 in NRC and IOM, 2009, p. 251).

An Indicated Program to Prevent Escalation of Behavioral Problems in Preschool Children

Cunningham and colleagues (1995) designed this program to achieve its goals through large-group, community-based parenting courses. The subjects were junior kindergarten children in a Canadian community identified by their parents in a home screening questionnaire for behavior problems. Teachers sent home screening questionnaires for behavior problems to the students’ parents. If the children rated at least 1.5 standard deviations above the mean on the screening tool, they were considered to be at high risk for later disruptive behavior disorders, and their parents were offered the intervention.
Parents were randomly assigned to one of three intervention groups: a clinic-based parenting course for individual families (11 to 12 sessions); a large-group, community-based parenting course; or a waiting-list control condition. Both active interventions used a problem-solving model. The large community-based groups devoted time to informal supportive interaction and personal network building. Monthly booster sessions were offered in both types of intervention.

The professional group leaders received extensive training and monitoring. Parents in both interventions were able to enroll their children in an activity-based social skills program conducted at the same time as the parenting sessions. Parents in the large community groups reported greater improvements in behavior problems at home and better maintenance of these gains at 6-month follow-up. Immigrant families who used English as a second language and parents of children with severe behavior problems were significantly more likely to enroll in the community groups than in the clinic-based individual parent training. With groups of 18 families, the community group intervention was more than six times more cost-effective than the clinic-based intervention for individual families.

Preventive Treatment Program

Tremblay and colleagues in Canada conducted this indicated intervention within the Montreal Longitudinal Experimental Study (Tremblay et al., 1991; Tremblay, Pagani-Kurtz, Masse, Vitaro, & Pihl, 1995; Tremblay & Schaal, 1996; Tremblay et al., 1992; Tremblay, Masse, Pagani, & Vitaro, 1996). Subjects were kindergarten boys considered to be disruptive by their teachers and their families.

The boys were from 53 schools in areas of a large metropolitan city characterized by low socioeconomic status. Criteria included:

- Both biological parents were born in Canada and their mother tongue was French.
- Neither parent had more than 14 years of schooling.
- The boys at risk had disruptive scores above the 70th percentile on screening questionnaires that were completed by teachers when the boys finished kindergarten (mean age 6).

Subjects knew they were involved in a study on children's development, but they did not know they had been identified as being at risk for antisocial behavior.

The experimental group received 2 school years of intervention (when the boys averaged 7 to 9 years of age). The intervention included parent training based on the Patterson model for family intervention (Patterson, Reid, Jones, & Conger, 1975), and social skills training with the boys. A multidisciplinary team consisting of two university-trained child-care workers (a psychologist and a social worker) implemented both components of the program.

On average, parents attended 17.4 sessions, with a maximum of 46. The boys’ program involved prosocial behavior skills training the first year (9 sessions) and a program aimed at self-control during the second year (12 sessions). The boys did
not receive all the planned intervention sessions, however, because of a lack of program funds. The experimental group of parents and their children was compared with observation and control groups. All three groups were free to seek additional interventions in the community.

Assessments were made at the end of the intervention and at 1- and 2-year follow-up. Initially, the program did not look very promising. At the end of the intervention, researchers found no differences between groups on the teacher ratings for disruptive behavior, anxiety, inattentiveness, or prosocial behavior. They also found that the experimental mothers were more likely than the other mothers to perceive their sons as disruptive.

At 1-year follow-up, all the boys were similar in the amount of misbehavior they reported.

At the 2-year follow-up, experimental mothers still gave reliably lower ratings to their sons for prosocial behavior. However, the experimental boys reported that, during the prior year, they were less likely to be fighting both outside the home and at home, and they were also less likely to be stealing at home. Moreover, teachers and peers were less likely to rate the experimental boys as highly disruptive, and the boys in the experimental group were doing better at school on several fronts:

- 29 percent of the treated boys were rated as well-adjusted in school, compared to 19 percent of the untreated boys.
- 22 percent of the treated boys, compared to 44 percent of the untreated boys, displayed less serious difficulties in school.
- 23.3 percent of the treated boys, compared to 43 percent of the untreated boys, were held back in school or placed in special education classes.

At long-term follow-up, when the boys were in mid-adolescence, the experimental group was significantly less delinquent on self-report, but court records did not reveal any significant differences between the groups. Schools increasingly placed disruptive boys from all groups in special classrooms or held them back to repeat a grade. A significantly greater percentage of experimental boys remained in age-appropriate regular classrooms up to the end of elementary school; however, this impact disappeared by age 15, when 59.3 percent were not in an age-appropriate regular classroom.

The Busselton Study
http://www.busseltonhealthstudy.com

This study by Cullen in Western Australia illustrates how preventive interventions can be delivered in the course of routine health care (Cullen, 1976; Cullen & Cullen, 1996). This universal preventive intervention is delivered by a general practitioner, but the study raises the possibility that other clinicians with the same long-term continuity of care could have similar impact.

From 1964 to 1967, families were recruited in the local hospital of Busselton, Australia. At the time of the child’s birth, each family was assigned alternately to an experimental or control group. For the experimental intervention group, four counseling sessions, each 20 to 30 minutes in length, were conducted with the mother by the family’s general practitioner
during the child’s first year of life. This process was followed by two interviews a year for the next 4 years. One general practitioner provided all the intervention counseling, which aimed to enhance the self-worth of the mother, foster gentle physical interaction with the child, and encourage the mother to adopt a positive attitude about modifying the child’s behavior.

The secretary of the study interviewed control parents annually, and pictures of the children were taken at 6-month intervals. At 6-year follow-up, the experimental children had significantly fewer fears, sleep disorders, eating problems, and loud modes of speech, and less aggression toward others, than did the controls. Generally, the results were more positive for experimental girls than boys. The experimental girls revealed significantly more positive feelings toward their mothers than did the controls, but the boys revealed significantly more negative feelings. Overall, the results were modest.

The initial benefits at 6 years of age appear to have lasted to ages 27 to 29. On self-report, the experimental group noted significantly fewer neurotic symptoms, and the women had significantly fewer depressive symptoms. More intervention subjects had received university degrees. Intervention women were less obese, and the entire intervention group smoked somewhat less than control subjects.

Parent-Child Interaction Training

This indicated preventive intervention designed by Strayhorn and Weidman (1989, 1991), illustrates how a mental health practitioner can supervise the intervention work of paraprofessionals with parents of preschoolers who have attention-deficit and internalizing symptoms.

The subjects were parents of low income who complained of at least one behavioral or emotional problem in their 2- to 5-year-old children. Families whose primary language was not English or whose children had low vocabulary test scores were excluded. The intervention group received group training involving instruction and role-playing practice. The group also received individual sessions involving modeling and written materials. The intervention was delivered to parents by research assistant paraprofessionals who had received an average of 12.5 hours of training. A psychiatrist supervised the parent training. The control group received a pamphlet on parenting and watched two videotapes on the use of time-out and positive reinforcement.

The results constituted a mix between post-test results and follow-up (33 to 139 days after the last contact). Parents who had received the intervention reported significantly more improvement in their children’s symptoms of attention-deficit and internalizing symptoms. Both groups improved with respect to parents’ ratings of children’s oppositional symptoms. A blind measure of videotaped interaction between parent and child demonstrated significantly more improvement in the intervention group.

At 1-year follow-up after completion of the intervention, parent ratings and child achievement test scores showed no difference between the experimental and control groups. Teacher ratings of child behavior, including attention-deficit and hyperactivity symptoms, however,
significantly favored the intervention group. Children’s improvements in classroom behavior correlated significantly with improvements parents had shown during the intervention in their behavior toward the children.

**Cognitive-Behavioral Depression Prevention Intervention**

In this intervention, Clarke and colleagues (1995; 2001; Clarke, 1998; Garber et al., 2007) demonstrated that indicated risk reduction is possible with high school adolescents and that prevention of unipolar depressive disorder can be documented. All 1,652 ninth and tenth graders in three large schools were screened for depressive symptoms using a standard screening instrument. Of the 471 students who received high scores, 222 agreed to participate in a diagnostic interview.

Forty-six of the 222 met criteria for current major depression or dysthymia (a mood disorder in which the person experiences chronic mild depression or irritability and often also displays behaviors associated with depression), or both, and were referred for treatment. Of the remaining 172 students with high depressive symptomatology, 150 agreed to participate in the prevention study and to be assigned randomly to a usual-care control condition or to a cognitive group intervention. The group intervention consisted of 15 after-school sessions led by specially trained school psychologists and counselors. The sessions focused on helping the students reduce negative cognitions and develop new and more effective coping mechanisms.

Follow-up interviews were conducted 12 months after the intervention. The intervention students had significantly fewer cases of major depression or dysthymia, or both, than did the students in the control group. Total incidence rates were 25.7 percent for the control group and 14.5 percent for the intervention group.

Clarke and his colleagues then broadened the definition of high-risk adolescents to include those with a parent with either current or past depression, as well as those with subsyndromal symptoms, and recruited 95 adolescents from an HMO (Clarke et al., 2001). At 15-month follow-up, participants in the experimental condition showed a much lower rate of major depressive episodes (9.3 percent) than those in the control group (28.8 percent). These results were recently replicated in a four-site randomized trial involving 316 at-risk youths.

Unfortunately, adolescents who had a parent with current depression did not experience a significant reduction in rates of depression (Garber et al., 2007; 2009). An analysis of costs and benefits suggests that this program not only prevents depression in a number of high-risk adolescents, but that it is cost-effective as well (Lynch et al., 2005).

Obviously, there is room for improvement in the potency of the intervention, because 14.5 percent of the intervention group in the first study and 9.3 percent in the second study developed a disorder. But the significant percentage difference between the intervention groups and the control groups suggests the program is effective in preventing depression for many at-risk adolescents.
The Good Behavior Game (GBG)

The GBG is a universal preventive intervention in the form of a behavioral classroom management strategy implemented in elementary school classrooms by teachers. It involves helping children learn how to work together, and it reinforces appropriate social and classroom behavior. It also facilitates a positive learning environment and has been shown to decrease disruptive behavior in the classroom and increase academic learning. The purpose of the GBG is to prevent aggressive and disruptive behavior among children in the short term and antisocial behavior, use of illicit drugs, tobacco use, and suicidal ideation in the longer term.

The GBG is played as follows: The teacher initially divides his/her class into three teams, each with an equal proportion of boys and girls and aggressive versus well-behaved children. The teacher then clearly describes (1) good student behaviors (e.g., working quietly on assigned tasks) and (2) disruptive behaviors (e.g., talking out of turn, fighting, etc.). Teams receive check marks on a posted chart when one of their members exhibits a disruptive behavior. Teams that receive few check marks are rewarded at the end of each game period, and consistent winners are again rewarded at the end of the week—at first with tangible rewards (e.g., classroom activities, stickers, erasers) and then later during the year with more abstract ones (e.g., gold stars). The game is played for 10 minutes three times a week early in the year, gradually extended in time, and eventually incorporated into the whole day and entire week.

The intervention has been tested in multiple scientific trials including some that measure long-term outcomes into late adolescence. Across elementary school classrooms, the intervention consistently reduces disruptive behavior and increases time engaged in academics.

The theory of the program is that by reducing early risk factors of aggressive and disruptive behavior, a child’s developmental trajectory leading to multiple mental health and substance problems will be altered. Studies of the long-term impact (Kellam et al., 2008; Petras et al., 2008) at ages 19–21 found—for males in particular—a reduced risk of alcohol or drug abuse or dependence, reduced diagnoses of antisocial personality disorder, and reduced suicidal ideation and suicide attempts (Kellam et al., 2008), as well as a reduction in the use of mental health and substance abuse services (Poduska et al., 2008).

The Penn Resiliency Program (PRP)

This program is a group intervention for late elementary and middle school students which teaches cognitive-behavioral and social problem-solving skills. It is one of the most widely researched depression prevention programs and is one of the few that has been evaluated with both targeted and universal approaches.

It is based in part on cognitive-behavioral theories of depression by Aaron Beck, Albert Ellis, and Martin Seligman which state that our beliefs about events mediate their impact on our emotions and behavior (Abramson, Seligman, and Teasdale, 1978; Beck, 1976; Beck and Alford; 2009, Ellis, 1962). Through this model,
students learn to detect inaccurate thoughts, to evaluate the accuracy of those thoughts, and to challenge negative beliefs by considering alternative interpretations. PRP also teaches a variety of strategies that can be used for problem solving. Although typically a school-based program, PRP has been evaluated in other settings, including primary care clinics and juvenile detention centers.

PRP is typically delivered in 12 90-minute lessons or 18–24 60-minute lessons. Some projects have used shorter versions of PRP. Within each lesson, resilience concepts and skills are presented and practiced in a variety of ways. Skills are introduced through skits, role playing activities, short stories, or cartoons that illustrate the core concepts. Once students have a firm understanding of these concepts, they practice with hypothetical examples that demonstrate how the skill is relevant to real-world situations that they might face. Students discuss situations in which they used, or could have used, the concepts they have just learned. They are then encouraged to use the new skills in their daily life as part of their weekly homework.

Findings indicate that PRP prevents depressive symptoms and improves pessimistic explanatory styles that are linked to depression (Gillham, Reivich, Jaycox, & Seligman, 1995; Jaycox, Reivich, Gillham, & Seligman, 1994; Yu & Seligman, 2002). In some of these studies, preventive effects have been substantial, with PRP participants only half as likely as controls to report moderate to severe levels of symptoms 1 and 2 years after the intervention (Gillham et al, 1995). A meta-analysis of 17 controlled evaluations (N=2498) was conducted by Brunwasser, Gillham, and Kim (Brunwasser, Gillham, & Kim, 2009). Although past evaluations have resulted in mixed findings, their overall assessment indicates that PRP participants reported fewer depressive symptoms at post-intervention and follow-up assessments compared with youth receiving no intervention.
Appendix B: Resources

Professional Organizations

American Academy of Child and Adolescent Psychiatry
http://www.aacap.org/

American Psychiatric Association
http://www.psych.org/

American Psychiatric Nurses Association
http://www.apna.org/

American Psychological Association
http://www.apa.org/

Clinical Social Work Federation (currently the Clinical Social Work Association)
http://www.clinicalsocialworkassociation.org

National Association of Social Workers
http://www.naswdc.org/

Advocacy Organizations

Mental Health America
http://www.nmha.org/

World Federation for Mental Health
http://www.wfmh.org/

Research Resources

The Adverse Childhood Experience Study: Bridging the gap between childhood trauma and negative consequences later in life
Co-Principal Investigators: Robert F. Anda, M.D., M.S. and Vincent J. Felitti, M.D.
http://www.acestudy.org/

Blueprints for Violence Prevention, a project of the Center for the Study and Prevention of Violence at the University of Colorado
http://www.colorado.edu/cspv/blueprints/

The Incredible Years (training program for parents, teachers, and children)
Principal Investigator: Carolyn Webster-Stratton, Ph.D.
http://www.incredibleyears.com/

International Early Psychosis Association
Treasurer: Patrick McGorry, M.D.
c/o EPPIC
Locked Bag 10
Parkville, Victoria, Australia 3052
http://www.iepa.org.au/

Mid-Valley Behavioral Care Network Early Assessment and Support Team
Clinical Director: Kathleen Savicki, LCSW
Email: kathys@mvbcn.org
http://www.mvbcn.org/
The Mothers and Babies Course
Principal Investigator: Ricardo F. Muñoz, Ph.D.
Email: munoz@itsa.ucsf.edu
http://www.medschool.ucsf.edu/latino/projects.aspx

Prevention Intervention Project
Principal Investigator: William R. Beardslee, M.D.
Email: william.beardslee@childrens.harvard.edu
http://www.jbcc.harvard.edu/research/intervention.htm

Society for Prevention Research
http://www.preventionresearch.org
Appendix C: Advisory Committee Roster*

Committee Co-Chairs
Patricia J. Mrazek, M.S.W., Ph.D.
Consultant,
Rochester, MN

Gail F. Ritchie, M.S.W.
Center for Mental Health Services,
SAMHSA,
Rockville, MD

Professional and Advocacy Organization Representatives

Academy of Child and Adolescent Psychiatry
Jean Thomas, M.D., M.S.W.
Children’s National Medical Center,
Washington, DC

American Psychiatric Association
Anthony F. Lehman, M.D., M.S.P.H.
University of Maryland School of Medicine,
Baltimore, MD

American Psychiatric Nurses Association
Jane H. White, M.S.N., RNCS, D.N.Sc.
American Psychiatric Nurses Association,
Washington, DC

American Psychological Association
(adult psychology)
John D. Robinson, Ed.D., M.P.H.,
American Board of Professional Psychology
Howard University Hospital,
Washington, DC

American Psychological Association
(child psychology)
Mark Weist, Ph.D.
University of Maryland School of Medicine,
Baltimore, MD

Clinical Social Work Federation
Golnar A. Simpson, D.S.W.
Private Practice,
McLean, VA

Families First of Alexandria, Inc.
Federation of Families for Children’s Mental Health/Family Representative
Nancy McCormick
Alexandria, VA

Family Representative
Susan Tager
Baltimore, MD
Mental Health Promotion and Prevention of Disorders

National Association of Social Workers
Lillian Ingram, M.S.W., LICSW
Public School District,
Washington, DC

Prevention Research/Service Consultants

William R. Beardslee, M.D.
Children’s Hospital,
Boston, MA

Lewayne Gilchrist, Ph.D.
University of Washington,
Seattle, WA

Ricardo F. Muñoz, Ph.D.
San Francisco General Hospital,
San Francisco, CA

Stakeholder Clinicians

Barbara Berger, Ph.D.
Chicago Institute for Clinical Social Work,
Chicago, IL

Jean Carter, Ph.D.
National Academy of Practice,
Washington, DC

Mary Ellen Copeland, M.A., M.S.
Mental health educator,
West Dummerston, VT

Robert W. Glover, Ph.D.
National Association of State Mental Health Program Directors,
Alexandria, VA

Penny Knapp, M.D.
California Department of Mental Health,
University of California, Davis
Sacramento, CA

Isaac Koilpillai, M.D.
New York State Office of Mental Health,
Albany, NY

Ellen Mahoney, D.N.Sc., RNCS
The Catholic University of America,
Washington, DC

Brian McConville, M.D.
University of Cincinnati Medical Center,
Cincinnati, OH

Kathleen Savicki, LCSW
MVBCN,
Salem, OR

Myranda Strickland, M.S.W., LCSW-C
Villa Maria,
Timonium, MD

Denise Wheatley Rowe, M.S.W., RN
Baltimore Mental Health Systems, Inc.,
Baltimore, MD

*These were the existing affiliations as of 2002.
Appendix D: Incorporating Preventive Services for Mental Health and Substance Abuse Problems Into Managed Health Care Settings*

Preventive services for mental health and substance abuse problems need to be incorporated into managed health care, just as preventive services for physical health problems already are an integral component of comprehensive care. Providers will deliver these services when public and private purchasers as well as consumers insist that they do so.

The NMHA (today MHA) developed a 12-step risk- and evidence-based framework for incorporating, maintaining, and measuring preventive services for mental health and substance abuse problems in managed health care (Mrazek, 1998; American College of Mental Health Administrators, 1997). The steps, presented in a logical sequence, can lead to achievement of the ultimate goal that a managed care company can deliver high-quality, effective prevention services to its customers.

A Risk- and Evidence-Based Framework for Maintaining and Measuring Preventive Services in Managed Care

1. The term “prevention” should be reserved only for those interventions that occur before the initial onset of disorder.

2. The target disorders or conditions to be prevented and the target populations for the preventive interventions should be identified and selected by the purchasers (i.e., the true payers of the health care plan) in collaboration with the behavioral health care organization.

3. Only disorders or conditions for which there are known malleable risk and protective factors should be targeted.

4. Only conditions for which there are known, evidence-based preventive interventions should be targeted.

5. Individuals and families should be screened for risk factors that are associated with the first onset of a disorder or condition.

6. All those identified through screening as being at high risk for developing a particular disorder or condition should be offered the recommended preventive intervention for that condition. If they accept the offer, the preventive service should be provided.

7. Screening for risk factors for onset of a disorder or condition is likely to uncover some individuals who already have the full disorder or condition, such as unipolar depression, substance abuse, or HIV infection. Referral for further assessment and treatment for these individuals is essential.
8. Prevention interveners must be thoroughly trained in the relevant risk assessment tools and in the implementation of each specific preventive intervention that is delivered.

9. Capacity and process measures (sometimes called intermediate goals or implementation measures) should be documented.

10. The intermediate performance measures, also known as proximal outcomes, should focus on risk status within the targeted population. Change or lack of change in the targeted risk factors should be documented for each individual and the risk population as a whole (the latter is the incidence of risk factors).

11. The key performance outcome measures, also known as distal outcomes, should focus on the primary disorder or condition to be prevented. These outcomes are the ultimate targets of the interventions.

12. Documentation of the costs of risk assessments and prevention programs should be collected, not only for the whole population served, but also on an individual basis.

*Reprinted with permission of MHA.
Glossary

**Prevalence.** Rate of established cases of a disorder or illness in the population.

**Preventionist.** A practitioner who delivers prevention interventions.

**Prevention-minded treatment.** Intervention for a whole family in which an individual with a mental disorder receives appropriate treatment and family members receive preventive interventions.

**Preventive interventions.** Interventions that are delivered before the initial onset of a disorder. The interventions are subdivided into three categories representing the population groups to whom the interventions are targeted: universal, selective, and indicated.

**Promotion.** A focus on well-being and healthy outcomes, rather than on the prevention of a problem or disorder. Promotion includes efforts to enhance a person’s ability to achieve developmentally appropriate tasks (especially those needed to cope with adversity); develop a positive sense of self that includes high self-esteem, self-efficacy, self-control, and social skills; and achieve desirable outcomes such as positive social involvement, advocacy for social justice, and spirituality.

**Biopsychosocial risks.** Risks that occur in multiple spheres of an individual’s life—biological (including genetic), psychological, and social—with an interplay among them.

**Cultural competence.** A set of knowledge, skills, and attitudes that allows individuals, organizations, and systems to work effectively with diverse racial, ethnic, religious, and social groups.

**Evidence-based interventions.** Interventions that are based on empirical research rather than on theory alone.

**Indicated preventive interventions.** Interventions that are targeted to high-risk individuals identified as having minimal but detectable signs or symptoms foreshadowing a mental disorder, or biological markers indicating predisposition for mental disorder, but who do not meet DSM diagnostic levels at the current time.

**Maintenance interventions.** Interventions that are supportive, educational, or pharmacological, or any combination of these, and are provided on a long-term basis to individuals who have met DSM diagnostic levels and whose illness continues.
**Protective factors.** Factors that modify, ameliorate, or alter a person’s response to some environmental hazard that predisposes him or her to a maladaptive outcome.

**Public health model.** An approach characterized by concern for the health of a population in its entirety and by awareness of the linkages among the physical, mental, and social health of the individual and the health of the environment. The approach includes etiology, epidemiology and surveillance, health promotion, prevention, diagnosis, access to services, treatment, and maintenance.

**Resilience.** A dynamic process encompassing positive adaptation within the context of significant adversity.

**Risk factors.** Characteristics, variables, or hazards that, if present for a given individual, make it more likely that this individual, rather than someone selected at random from the general population, will develop a disorder.

**Selective preventive interventions.** Interventions that are targeted to individuals or a subgroup of the population whose risk of developing mental disorders is significantly higher than average. The risk may be imminent or it may be lifelong.

**Transdisciplinary training.** Training in which clinicians in psychology, psychiatry, nursing, and social work, as well as educators and consumers, learn—side by side—about promotion and prevention research and clinical interventions, as well as methods of measuring outcomes.

**Treatment interventions.** Interventions that are therapeutic in nature and are provided to individuals who meet DSM diagnostic levels.

**Universal preventive interventions.** Preventive interventions that are targeted to the general public or a whole population group that has not been identified on the basis of individual risk. The intervention is desirable for everyone in that group.

**Well-being.** A good or satisfactory condition of existence; a state characterized by health, happiness, and prosperity.
References


Becoming a Preventionist


This continuing education course is a teaching tool for mental health practitioners of all disciplines who are new to the field of prevention science. Its purpose is to help you incorporate prevention into your own practice. This section of the course includes a written exam (post-test) and answers that you may use to assess how well you have learned the course material. This section of the course book may also be used by any professional organization to offer continuing education credits. The post-test appears on the seven pages that follow; the post-test answer form, on the next two pages; and the post-test answer sheet, on the page following the answer form. Study the material in this course, read the post-test questions carefully, and follow the instructions on the answer form. We hope that you have enjoyed this course and that your interest in prevention will continue to grow in future years.
Continuing Education Post-Test

Part I: The following questions pertain to material from the beginning of the course through the Historical Perspective section.

1. A public health framework places mental health promotion and preventive interventions on a continuum with treatment and maintenance.
   - A. True
   - B. False

2. Select the statement that is not true:
   - A. Child abuse can be reduced by 80 percent with nurse home visitations made prenatally and during the first 2 years of life.
   - B. Drug use can be reduced in 12th graders by 44 percent with life skills training begun in the 7th grade.
   - C. The number of adolescents engaging in unprotected sexual encounters can be reduced by 63 percent by providing behavior skills training.
   - D. The number of persons suffering from schizophrenia can be reduced by 40 percent with parenting classes in early adolescence.

3. In a study conducted in the early 2000s, about half of the adults who had a mental illness said their illness started by age 14.
   - A. True
   - B. False

4. Select the statement that is not true:
   - A. Preventive interventions can reduce risk factors.
   - B. Preventive interventions can enhance protective factors.
   - C. Preventive interventions can prevent or delay first onset of a disorder.
   - D. Preventive interventions can eliminate all mental illness and behavioral disorders.
5. The knowledge base regarding prevention is:
   A. Based on solid scientific evidence
   B. Expanding every year
   C. Not commonly utilized by clinicians
   D. All the above

6. An intervention delivered to an entire population regardless of the risk status
   of the individual is:
   A. Universal
   B. Selective
   C. Syndicated
   D. Tertiary
   E. Not needed

7. Which of the following is a nonmalleable risk factor?
   A. Gender
   B. Socioeconomic status
   C. Diagnosis
   D. Social competence

8. The public health approach should be used only for large-scale epidemics.
   A. True
   B. False

9. Protective factors include:
   A. Nurturing caregivers
   B. Living in poverty
   C. Above-average intelligence
   D. Marital dissatisfaction
   E. Nurturing caregivers and above-average intelligence
10. Preventive interventions:

A. Can prevent the first onset of a disorder
B. Can delay the first onset of a disorder
C. Can be subdivided into classifications based on the targeted population
D. May lessen the severity of a first onset of a disorder if the disorder occurs
E. All the above

11. The concept of risk factors in prevention is different from the concept of risk factors in treatment.

A. True
B. False

12. The term prevention means:

A. Treatment focus
B. Avoidance of relapse
C. Avoiding first onset
D. Maintenance

13. Even when all other risk factors are controlled, which of the following factors have been shown to be significant predictors of more than one problem outcome?

A. Parental mental illness
B. A mother-stepfather home
C. Maternal inattention
D. All of the above

14. Biological risk factors can include:

A. Genes
B. Birth weight
C. Neurochemicals
D. All the above
E. Genes and neurochemicals
15. Life experience can alter the expression of genes.
   A. True
   B. False

16. Resilience can be directly measured by a preventionist.
   A. True
   B. False

Part II: The following questions pertain to material covered in the section entitled “Incorporating Prevention Into Mental Health Practice,” Steps 1 through 6.

17. A clinician who has provided treatment services for 20 years wants to expand his or her practice into prevention. A first step would be to engage in:
   A. A universal preventive intervention
   B. A selective preventive intervention
   C. Prevention-minded treatment
   D. An indicated preventive intervention
   E. Advocacy

18. Fidelity means that:
   A. Ethical standards are a priority.
   B. Reimbursement for services is agreed upon.
   C. An intervention is implemented as it was originally designed.
   D. A program has an evidence base.

19. A preventionist could focus on:
   A. Prevention-minded treatment
   B. Prevention of first onset of a disorder
   C. Advocacy
   D. Partnering with researchers
   E. All the above
20. Which of the following types of interventions targeted people who have signs or symptoms of a mental disorder, or biological markers that indicate a predisposition for mental disorder, but do not yet meet DSM diagnostic levels?

A. Universal  
B. Selective  
C. Syndicated  
D. Tertiary  
E. Indicated

21. An evidence-based intervention is one that is:

A. Based on clinical wisdom  
B. Based on scientific evidence  
C. Based on expert opinion  
D. Based on forensic evidence  
E. All the above

22. A clinician is treating a woman with a depressive disorder. From a prevention perspective, the clinician might:

A. Involve the children and husband in some of the sessions  
B. Facilitate the woman’s social networking and offer parenting skills interventions  
C. Concentrate on the woman’s subjective experiences  
D. A and B
23. According to SAMHSA’s Health Information Network, cultural competence requires:

   A. The program developer to be from the same racial/ethnic group as the group for which the program is developed
   B. Caregivers to be able to respond appropriately to a person’s unique cultural differences
   C. Supervision by a member of the group for which the program was developed
   D. Sensitivity to issues such as race, ethnicity, national origin, religion, age, gender, sexual orientation, or physical disability
   E. E. B and D
   F. All of the above

Part III: The following questions pertain to material covered in the section entitled “Strategies for Overcoming Barriers to Clinical Preventive Practice” to the end of the course.

24. Common barriers to preventive services within mental health service delivery systems include all the following, except:

   A. Reluctant administrative systems
   B. Insufficient funding
   C. Lack of consumer interest
   D. Lack of an evidence base
   E. Stigma

25. Significant levels of depression have been found among young people who have Type 1 diabetes, as well as among adults who have undergone cardiac bypass surgery.

   A. True
   B. False
26. Organizations that advocate for prevention include:
   A. Research organizations
   B. National and international mental health organizations
   C. Consumer and family organizations
   D. All the above

27. Economic analyses of some prevention programs have found that, over time, benefits of the programs greatly outweigh the initial costs of the programs, especially for at-risk children.
   A. True
   B. False

28. How might clinicians who provide preventive services be paid?
   A. Medicaid
   B. Health insurance
   C. Out of pocket by the client
   D. Grants from public-private partnerships
   E. All the above

29. One possible strategy for financing prevention is to create billing codes to pay for preventive consultations and risk factor reduction interventions that are linked to risk rather than disease status.
   A. True
   B. False

30. In transdisciplinary training, people in different academic disciplines collaborate and share concepts, theories, and methodologies of each discipline freely with the others, as in the term “interdisciplinary,” but the boundaries among the disciplines are secondary to the shared search for creative, explanatory, and useful concepts and practices.
   A. True
   B. False
Read the post-test questions carefully. On the answer form, for each question, circle the correct answer. There is only one correct answer to each question.

### Part I
1. A B
2. A B C D
3. A B
4. A B C D
5. A B C D
6. A B C D E
7. A B C D
8. A B
9. A B C D E
10. A B C D E
11. A B
12. A B C D
13. A B C D
14. A B C D E
15. A B
16. A B

### Part II
17. A B C D E
18. A B C D
19. A B C D E
20. A B C D E
21. A B C D E
22. A B C D
23. A B C D E F

### Part III
24. A B C D E
25. A B
26. A B C D
27. A B
28. A B C D E
29. A B
30. A B
Post-Test Answer Sheet

1. A
2. D
3. A
4. D
5. D
6. A
7. A
8. B
9. E
10. E
11. A
12. C
13. D
14. D
15. A
16. B
17. C
18. C
19. E
20. E
21. B
22. D
23. E
24. D
25. A
26. D
27. A
28. E
29. A
30. A