Commentary:
Service System Perspectives on Early Intervention Research

by Crystal R. Blyler

As a representative of a Government agency that funds mental health services and that has a role in shaping and funding policy initiatives in the United States, few areas of schizophrenia research are as exciting to me as the prospects engendered by the studies on early intervention described in this special issue. In recent years, the concept of recovery from serious mental illnesses promoted by consumers of the public mental health system has gained increasing acceptance (Jacobson and Curtis 2000; President’s New Freedom Commission on Mental Health 2003). The notion that recovery is possible is providing hope to consumers, family members, and service providers with regard to outcomes for people with serious mental illnesses, including schizophrenia. Despite the new optimistic outlook and progress in the development of effective services for people with serious mental illnesses, however, severe and persistent mental illnesses remain debilitating for many people (Murray and Lopez 1996). The U.S. public mental health system primarily provides services to people with the most severe and persistent mental illnesses who are largely disabled by their illnesses (Federal Register 1993; Larson et al. 1998). Whether the research described in this special issue focuses on primary, secondary, tertiary, population, universal, selective, or indicated prevention, or the high-risk, vulnerability, pre-onset, premorbid, early- or late-prodromal, first episode, or early post-onset stages of the illness, the promise of this new line of inquiry for the U.S. service system lies in the possibility of reducing the number of people for whom mental illnesses will become persistent and disabling.

The final report of the President’s New Freedom Commission on Mental Health (2003) describes a growing frustration with the length of time required for new practices to be incorporated, on a widespread basis, into the U.S. service system after they have been proven effective. Many reasons for this lag have been identified (Institute of Medicine Committee on Quality of Health Care in America 2001), and the Federal Substance Abuse and Mental Health Services Administration (SAMHSA) is working, in partnership with the National Institute of Mental Health (NIMH), to reduce the gap through a number of initiatives (McDonel Herr et al. 2003; NIMH Request for Applications No. MH-03-007; SAMHSA Request for Applications SM 03-003; U.S. Department of Health and Human Services 2003). Some of the barriers to implementation of evidence-based practices, however, may be most effectively overcome by foreseeing and beginning to address them during the earliest stages of research in a new area of intervention. The relative youth of the science of early intervention for schizophrenia offers a golden opportunity for the research and service communities to work together to develop programs that will work “in the real world.” By engaging mental health service system stakeholders in the discussion early on, the research can be designed to reflect their concerns, and policy and system changes that will be necessary to support the practice can be set in motion to ready the field for implementation.

Considering the service implications of the research presented in this special issue at a relatively early stage of the science suggests steps that could be taken to improve the prospects of translating useful findings into the service system in a timely fashion. Although my perspective is based on my experience with the U.S. mental health system, the insights presented in the paper by McGorry et al. (this issue) suggest that the fundamental issues cross geographic and political boundaries, although their resolution may differ among countries. In the final section, I offer perspectives on Heinssen et al.’s proposal for a multisite approach to research on early serious mental illness (this issue), based on my experience in conducting multisite evaluations sponsored by the SAMHSA Center for Mental Health Services.

Critical Issues for Translating Science to Service

How much does it cost, and who is going to pay for it? Mundane though it may seem, the most frequent questions I hear from mental health policy makers and admin-
The attention of the research community is particularly important regarding determination of service costs. Through involvement with multisite cost studies on consumer-run (www.cstprogram.org; SAMHSA Guidance for Applicants No. SM 98-004) and employment (Cook et al. 2002) services, I have found that cost studies can be difficult, costly, and time-consuming to conduct and are often either of little interest or perceived as threatening to those conducting the studies and/or providing the services. In general, within the mental health field, nobody wants to conduct or fund the studies but everyone wants to know the answers. Cultural differences between the research and policy worlds may contribute to the tensions. Researchers tend to be particularly concerned with the validity, reliability, and generalizability of their data and will accept answers to cost, as well as other, questions only when they come from the highest quality studies, such as those that include rigorously defined calculations of cost-effectiveness, cost-benefit, cost savings, per person costs, and detailed budget breakdowns. The policy world, on the other hand, is much more concerned with practical utility and may be satisfied with much less rigorous data obtained from such sources as asking existing providers what their budget was for a particular program, what services they provided, how many people they served, and what kind of effect they obtained in general terms. In replicating a practice, of course, administrators will benefit from as much detail as research can provide. Regardless of the level of rigor with which research on service costs is conducted, information on program costs is essential for aiding in dissemination of the practice. Those conducting early intervention research could help to lay the groundwork for dissemination by including a cost component to their studies.

Determining who should pay for early intervention in the U.S. service system is trickier and may require substantial time and energy to resolve. Publicly funded mental health services in the United States are controlled primarily by the States (Rouse 1998). Although eligibility criteria differ among the States, limited resources generally reserve public services for those who are most needy both financially and in terms of the severity, persistence, and debilitating effects of the illness. Those not eligible for public services must rely on personal income or private insurance to pay for services. Private insurance coverage for mental illnesses is often limited and typically includes annual and lifetime limits on coverage, as well as requiring consumers to pay a substantial proportion of service costs. The general pattern for people who experience mental illnesses in the United States, therefore, is to first obtain private care to the extent that they can afford it, then turn to the public system once they have exhausted their personal resources and private insurance coverage (U.S. Department of Health and Human Services 1999).

This private/public bifurcation of the system creates a dilemma regarding who should ultimately fund early intervention services. People in the earliest stages of serious mental illness and those who are merely “at risk” without yet meeting DSM-IV (American Psychiatric Association 1994) diagnostic criteria are unlikely to be eligible for publicly funded services under existing policies, regulations, and statutes. The public mental health system may be hesitant to alter existing eligibility requirements as they strive to protect the limited resources available for the needy populations they currently serve. Because a substantial proportion of people in the early stages of serious mental illness are likely to purchase services through private insurance, private insurance providers are a sensible target for education regarding the latest research on effective early intervention strategies. Changes to private insurance policies, as well as to public policies, may be necessary to ensure coverage of services for people who do not yet fit diagnostic criteria, as well as to cover the full range of services indicated for maximizing outcomes for this population.

Chronic budget crunches within the public mental health system may lead stakeholders to reject coverage of early intervention services through public funds. The public system, however, has a great deal to gain if early intervention is proven to be effective at reducing the long-term effects of mental illness. Theoretically, every dollar spent on early intervention may lead to substantial reductions in future State and Federal outlays that would have otherwise been necessary for ongoing care over the lifetime of affected consumers. In addition, a significant proportion of people in the United States lack private insurance and resources altogether and are unlikely to receive care in the early stages of an illness if not provided through public funding.

The children’s mental health system currently serves youth up to age 18–21, some of whom may be at increased risk for schizophrenia and related illnesses. This system, therefore, should also be targeted for education about the most effective methods for identifying and treating those at risk for psychosis. For the children’s system, early intervention focused on help-seeking youth raises questions regarding how youth at risk for schizophrenia differ from others being treated by the system and how the services provided should differ from services provided to others not identified as at-risk. A further complication is the vast divide between the child and adult systems, neither of which is ideally suited for serving youth with emerging schizophrenia and related disorders. Although some initiatives have been undertaken to unify youth services within local communities in the United States (National
Association of State Mental Health Program Directors 2001; SAMHSA Guidance for Applicants No. SM-02-003), these are far from universal.

Given the multiplex nature of possible funding sources and the complications within each, future funding for early intervention is likely to come from a more or less organized public/private partnership. Failure to organize this partnership will impede widespread implementation of effective programs. Organizing the partnership, on the other hand, could take years of developmental efforts. Work on aligning financing policies for early intervention services, therefore, is best begun sooner rather than later.

Disability Prevention Approach. Thus far, the work on early intervention as presented in this issue has focused primarily on the prevention of psychotic and related symptoms. Kane et al. (this issue) recommend expanding measures used in clinical trials beyond psychopathology rating to include psychosocial, educational, vocational, and quality of life outcomes “as it is unclear what domain...is most likely to benefit from prevention treatment.” From a mental health system perspective, this point is vitally important. For people with long-term serious mental illness, disability factors begin to trump symptoms as issues of importance. The recovery movement provides examples of consumers who function quite well despite serious ongoing symptoms (Spaniol et al. 1997) and stresses that meaningful activities and improvements to quality of life are attainable even by those whose illnesses persist (Ralph 2000). Moreover, improving symptoms does not always lead automatically to improvements in functional outcomes; for example, the SAMHSA Employment Intervention Demonstration Program (EIDP; www.psych.uic.edu/eidp) has demonstrated that provision of vocational services in addition to clinical services is necessary to maximize work outcomes.

The costs of mental illness to the public accrue not only through the costs of basic treatment and illness management but also through costs associated with disability and functional impairment. For example, costs accrue with respect to provision of income supports, vocational services, and lost tax revenues for those unable to work; special educational services for youth who are disruptive or unresponsive to standard classroom instruction; housing and homeless services for those unable to maintain independent households; criminal justice interventions that may be necessary for those with difficulties in social functioning or with substance abuse; children’s services for those unable to care for their children; and general social welfare costs, such as transportation and food subsidies, for those unable to provide these for themselves. Because the public costs of mental illness stem more directly from these disability factors than from symptoms per se, public systems are just as interested in disability outcomes as they are in symptom reduction.

As McGorry et al. (this issue) state, “a very substantial amount of the disability that develops in schizophrenia accumulates prior to the appearance of the full positive psychotic syndrome...and may create a ceiling for eventual recovery.” If this is true, then programs such as the Needs Based Intervention studied in Melbourne may offer substantial benefits in terms of decreasing long-term disability and associated costs, even if they are found not to prevent or delay the onset of psychosis per se. The policy relevance of early intervention research, therefore, would be enhanced by including measures of disability and functioning (e.g., housing, educational, and employment status; earned and unearned income amounts and sources; criminal justice involvement; substance use; quality of life) in long-term outcome assessment batteries.

In addition to outcome measures, the disability prevention approach has further implications for the types of services provided through early intervention. An unspoken assumption commonly exists that functional problems will resolve themselves when symptoms diminish. In reality, however, such problems, sometimes present since childhood, may be unremitting without specific interventions to address them. Investigation of the effectiveness of services targeted directly toward disability prevention as opposed to those focusing on psychosis prevention alone would be useful. Such services might include vocational services, supported education, family therapy and psychoeducation, social skills training, practical approaches to handling crises and trauma, substance abuse services, and assistance in acquiring housing and developing community life skills. Preliminary analyses of data from SAMHSA’s Employment Intervention Demonstration Program (www.psych.uic.edu/eidp) suggest that vocational interventions may be more effective for helping young adults to enter the workforce than they are for helping older consumers return to work after long histories of illness. Research examining the prevention of psychosis offers an opportunity to simultaneously explore any advantages to providing these additional types of services early on in the course of the illness, rather than waiting until the illness has become chronically debilitating.

Involving Service System Stakeholders. A substantial culture gap exists between the communities of schizophrenia research and the public mental health system. Translation of science to service requires that this gap be bridged. Attending to questions and issues raised by service system stakeholders from the inception of the science will ultimately improve the utility and acceptability of resulting recommendations to the service field. Stimulating interest in the research among diverse stakeholders would additionally benefit researchers through
identification of referral sources, research funding, and other valuable resources, as well as through generation of novel hypotheses, practical explanations for discrepant findings, and effective participant engagement strategies.

Public mental health system stakeholder groups are many and varied. Primary consumers are considered to be the most important group to include in any considerations of changes to the system, and the consumer motto “Nothing about us without us” is widely accepted by other stakeholder groups (National Association of State Mental Health Program Directors 1989; International Association of Psychosocial Rehabilitation Services 1998; National Association of Mental Health Planning and Advisory Councils, www.namhpac.org). Family members of people with serious mental illness are also important stakeholders both in the adult (e.g., NAMI, www.nami.org) and children’s (e.g., Federation of Families for Children’s Mental Health, www.ffcmh.org) systems. Other important stakeholders include adult and children’s service providers; program administrators; Federal, State, and county administrators, law and policy makers; private and public insurance providers; and managed care organizations.

Looking outside of the direct mental health system, other organizations with a stake in the outcomes of early intervention include those responsible for disability, substance use, primary health care, criminal justice, low-income housing, and youth services. As a result of the Presidential Task Force on the Employment of Adults with Disability (1999), the Ticket to Work and Work Incentives Improvement Act of 1999 (Pub. L. No. 106-170, 113 Stat.1860), and President Bush’s New Freedom Initiative (announced February 1, 2001), Federal agencies have been increasingly interested in examining ways to prevent long-term disability and unemployment through early intervention. Interested agencies include the Centers for Medicare and Medicaid Services (see the Demonstration to Maintain Independence and Employment, www.cms.gov/twwiia), the Social Security Administration (www.ssa.gov/work), the Department of Labor (www.dol.gov/odep), the Department of Health and Human Services Office of Disability (personal communications), SAMHSA (see Partnerships for Youth Transition Guidance for Applicants No. SM-02-003, www.samhsa.gov), and the Department of Education Office of Special Education and Rehabilitative Services (www.ed.gov/offices/OSERS). The early intervention research presented in this special issue could benefit from collaborations with these wide-ranging stakeholder groups.

Engaging a variety of stakeholders from diverse cultures with divergent viewpoints is likely to create anxiety among researchers if they have not planned for the extra time, resources, mental energy, patience, poise, and diplomatic skill necessary to resolve the many issues that such stakeholders may raise. The consideration of stakeholder perspectives in the work of McGorry et al. (this issue) is apparent, and the PACE model, as presented, addresses many of the concerns typically voiced by consumers in the United States. Examples of consumer-friendly aspects of PACE include (1) fostering a realistically optimistic outlook based on the understanding that “progression to psychosis seems not to be predetermined,” and giving central importance to the goal of promoting recovery; (2) using terms that are more acceptable to consumers, such as replacing the nihilistic “prodrome” with “at-risk mental state” and calling those referred for services “young people” rather than patients or kids; and (3) providing services that address the specific needs of individuals in an atmosphere that appeals to young people. Some tension among diverse stakeholders can be relieved by being clear about the definitions of terms and concepts from the start. Given the range of definitions of prevention, stages of illness, and types of interventions presented in this special issue, researcher-stakeholder collaboratives should spend some of their initial time together developing consensus about which concepts are most relevant to the project in question and carefully recording the agreed-upon definitions for future reference. Funders must be willing to support collaborator consensus-building activities as a critical piece of the research process.

Some of the negative image of early intervention for prevention of psychosis among some stakeholders in the United States may be attributed to a fear that early intervention, like some portions of the mental health system, will rely virtually exclusively on psychiatric medications. Many stakeholders have come to associate psychiatric medication with coercion coupled with neglect of important individual needs. Early intervention, therefore, may be seen by some as extending coercion and neglect to youth who might otherwise be spared. As pointed out by several papers within this special issue, stigma, discrimination, and labeling effects and medication side effects introduced to youth for whom the untreated outcome is uncertain are common concerns. Although the PACE model has strived to prevent these negative effects, savvy service system stakeholders know that there is no guarantee that all aspects of a model intervention will be implemented as designed when disseminated to new communities (Fekete et al. 1998). The wealth and motivation of the pharmaceutical industry to develop and promote new uses of their products continually threatens to overwhelm the typically under-funded services, research and treatment systems in the United States. Without ongoing vigilance, there is a danger that early intervention research could be guided by the interests of the pharmaceutical industry and biological research communities to the exclusion of other critical stakeholders. In recent years, some pharmaceutical companies have expanded their support to concepts and interventions beyond medications. Perhaps partner-
ships could be established in which pharmaceutical companies funding biological aspects of the research join with public agencies and private foundations funding nontobio-
logical components of the interventions. One caveat to this recommendation is that, for some service system stakeholders, participation of the pharmaceutical industry in any capacity may cast suspicion on the research as a whole. Involving a range of stakeholders in designing and conducting the research may moderate this suspicion.

**Need for Practical Tools.** Regardless of how well the research is conducted or how much data exist demonstrating the effectiveness of early intervention, the science will have a limited impact on service systems unless practical tools are created to assist in quality program replication (Torrey et al. 2001; Evaluation Center at HSRI 2002). The most basic tool needed is a program manual that explains in considerable detail how to implement the program (Camacho-Gonsalves et al. 2001). Manuals on early intervention services should include information on how and from where to solicit and optimize referrals; who, how, and when to screen participants; which assessment instruments provide the best predictive validity for treatment response, with particular attention to how eligible participants differ from others receiving services; which combination of treatments and services is maximally effective; and decisions trees and clinical pathways to ensure that the intervention is systematically administered. In addition to information on direct provider-consumer interactions, program manuals should also include information on the costs of the program, ideas for how it can be funded, staff requirements, and training needs. Specific attention to resource needs for program start-up and information about the types of clinical records to keep for the program would also be useful. Beyond the program manual, specific training materials should be developed for providing in-depth training to those who will implement the program. These materials might include instructional videotapes, slide presentations, hand-outs, memory aids, hands-on exercises for practicing new skills, or other materials that improve the understanding and capabilities of those who will implement new programs (Torrey et al. 2001).

Although program manuals and training materials are essential for implementing programs properly, additional tools are needed to monitor their operations. Program fidelity measures (Bond et al. 2000) assess the degree to which a program's implementation is consistent with the model that research shows to be effective. Outcome measures, which should be considerably simpler than but consistent with research outcome measures, are necessary to ensure that a program is achieving the desired effect throughout its implementation. And simple performance indicators, measures, and benchmarks are needed to assess effectiveness at the systems level (Schizophrenia Patient Outcomes Research Team 2001).

To penetrate the public mental health system, specific informational materials will have to be developed. In an overworked system with many competing demands, little time can be set aside to read research articles. Moreover, systems are multidisciplinary in nature and any particular line of research is likely to reach only a subset of critical stakeholders. Special efforts must be made, therefore, to synthesize the research literature (Leff et al. 2003; McDonel Herr et al. 2003) and translate it into materials directed toward specific stakeholder groups (Torrey et al. 2001; Evaluation Center at HSRI 2002). As the racial, ethnic, and cultural minority populations in the United States continue to expand (U.S. Department of Health and Human Services 2001), research on the applicability of program models for diverse groups, cultural competence, and materials produced in languages other than English are increasingly vital for disseminating programs in the public system (Phillips et al. 1999; Center for Mental Health Services 2000). Demonstrating the effectiveness of early intervention models in a variety of settings will be crucial for identifying barriers to implementation or effectiveness that might be specific to certain geographical or political environments.

Writing program manuals and training and dissemination materials can be a large undertaking, and researchers may not have the time, inclination, or skill to effectively translate their work into lay language. Specialists can be contracted to assist with these endeavors, but some involvement of the original researchers is important to ensure that resulting materials are consistent with and accurately portray the research findings. The role of researchers is even more important for developing sensible fidelity, outcome, and performance measures, but evaluators specializing in these types of measures can be helpful. Finally, as the idea of early intervention gains recognition, the researchers who conducted the original studies will be called upon with increasing frequency to present their data in various forums and to assist in developing new programs through consultation and training. Although the role of researchers will be critical in dissemination of early intervention programs, they will clearly not be able to do it alone. Forming collaborations with public service agencies early on will help to establish a network of resources that can work together to produce and distribute materials and information.

**Issues to Consider in Developing a Multisite Approach to Early SMI Research**

Heinssen et al.'s proposal to develop a multisite approach to research in early serious mental illness (this issue) is
intriguing and is consistent with the approach that SAMHSA has taken in recent years to speed the development of useful knowledge regarding effective services (Rickards et al. 1999; Steadman et al. 1999; Herrell and Straw 2002; Blyer 2003; McDonell Herr et al. 2003). A multisite approach adds considerable complexity to the conduct of research but can convey significant advantages, not only in terms of the science but also in political terms. Multisite services research intended to maximize the practical utility of the results raises some important methodological issues that should be considered as the approach is developed.

First, Heinssen et al. recommend that the multisite approach include a range of disorders, including schizophrenia, bipolar disorder, and personality disorders, in order to examine “emerging concepts about the multi-determined nature of psychiatric symptoms... that cut across diagnostic boundaries such as anxiety, affect dysregulation, and psychosis.” Among consumers of the public mental health system, the disability factors that often predominate in considerations of patient care certainly cut across diagnostic categories. A cross-diagnostic approach to sample selection, therefore, resonates with the approach taken in SAMHSA’s multisite studies, which have been largely cross-diagnostic in their attempts to gather data that will be useful to the service system community.

In addition to including a range of diagnoses, the approach to sampling should also carefully consider any exclusion criteria to be imposed on the selection process. Basic schizophrenia research commonly excludes participants with past or current substance abuse, head injury, mental retardation, or low intelligence, and/or those with limited English proficiency. The mental health service system, on the other hand, cannot exclude such persons from care. In fact, the majority of consumers in the public system are likely to experience multiple factors that contribute to the persistence and severity of their illnesses, as well as to their disability. The risk of conducting research using strict exclusion criteria is that the results will not generalize when applied to “the real world.” Relaxing the typical schizophrenia research exclusion criteria would increase the external validity of findings generated from early intervention research.

A second consideration necessary in developing the multisite approach is weighing the advantages and disadvantages of consistency versus variation in interventions across sites. If the primary purpose of using a multisite approach is to increase sample size, as suggested by Heinssen et al., then some degree of consistency in interventions will be necessary to justify the pooling of data across sites. On the other hand, the field of early intervention research is young enough that favoring only one intervention model for multisite implementation could prematurely cut off the exploration of the most effective types and combinations of early intervention services. In a relatively new field, complete consistency across sites may not be the best option for advancing the science.

One approach that SAMHSA has taken to resolving the consistency versus variation dilemma is to allow variation across sites but to carefully measure the similarities and differences in service implementations. This involves developing a group consensus regarding the “common ingredients” of the interventions, as well as site variations that might be important for explaining differences in outcomes. Common ingredient and site variation elements are put together into a common program measure that is used to assess each of the programs periodically throughout the research period. Analyses using the common program measure may offer insights into the more or less important aspects of the interventions for producing positive outcomes. This compromise approach, however, is not without methodological controversy. First, multisite studies typically do not include enough sites to allow for meaningful statistical comparisons of program measure elements with outcomes. Therefore, any insights gained from the use of the measures remain hypothetical until further tested. Second, statistical approaches cannot always clarify the appropriateness of pooling the data from differing sites, and many stakeholders within SAMHSA’s multisite studies remain uncomfortable with pooling “apples and oranges” for analyses of main effects, on theoretical grounds. Finally, although power is increased to the extent that data can be pooled across sites, taking this approach does not completely solve the problem of inadequate sample sizes. If differences in outcomes are found among sites, and they almost always are, then individual site analyses become important. In order to conduct meaningful analyses at the site-specific level, however, each site must include enough participants to power their individual analyses. Despite the limitations of SAMHSA’s compromise approach to cross-site variation, it may remain the best option for a multisite early intervention research network. Efforts will have to be made, however, to maximize sample size within sites, as well as to fund as many sites as possible in order to strengthen the analysis of cross-site differences.

This special issue includes articles not only about early intervention research, but also about basic research on the processes leading to psychosis. In Heinssen et al.’s proposed approach, investigations into the processes and interventions would draw on the same research participants. This creates a potential conflict between the goals of the basic and intervention researchers; that is, while the basic researchers are trying to discern factors that lead to psychosis, the intervention researchers are trying to prevent the psychosis. If the intervention researchers were 100 percent successful, no first episodes would occur, and the basic researchers would have no way of knowing...
whether their hypotheses were true. Opportunities to study factors associated with first episodes would still arise from participants initially identified after the first episode had begun, as well as from intervention control groups. Nevertheless, a desire to study the naturalistic development of psychosis creates a motive to do less than everything one can to prevent the onset of psychosis. Internal review boards and others concerned with research ethics, including researchers themselves, will have to monitor programs to ensure that intervention goals are not unintentionally subverted by basic research goals.

In addition to conflicts between basic and intervention research goals, the potential for conflict also exists between the research and policy goals of the multisite approach. The research goal of a multisite study is to generate data using the best possible methods, which include use of adequate control groups and careful consideration of the meaning of statistical results before drawing conclusions. The policy goal, on the other hand, is to get the best possible services implemented as quickly as possible. These goals may come into conflict if, for example, the multisite approach is successful at generating enough interest from the services community that service systems begin to adopt early intervention models before the research is complete. This possibility was brought to my attention through the SAMHSA multisite evaluation of jail diversion programs (Steadman et al. 1999). Communities were so avid for humane and effective solutions to the expanding population of people with serious mental illness incarcerated in jails and prisons that a quick expansion of jail diversion and related programs occurred immediately following the award of the initial research grants. In the jail diversion study, as well as in the SAMHSA Consumer-Operated Services Program (www.cstprogram.org), widespread acceptance of the program models prior to completion of the research led to difficulties in some sites in creating control groups consisting of participants who had not been exposed to the services being studied. On the positive side, acceptance and dissemination of the early intervention model early on could help the research efforts by increasing the numbers of programs and participants available for study.

Service systems and mental health policy cannot wait for completion of the perfect science. If the collaborative multisite approach to early intervention research is successful at generating interest by service systems, significant pressure may be put on the research community to speed up analysis of results. To sustain interest in the research and help speed the application of results to nonresearch settings, a formative approach to both the research and services is indicated. As opposed to a clinical trials approach, a multisite approach with dual research and policy goals should look for opportunities to conduct and disseminate interim analyses of importance for policy formation or program dissemination on an ongoing basis. These analyses need not be of the highest standard of scientific rigor, but should represent the best information available for addressing system needs. Systems that decide to implement early intervention models early on should take a continuous quality improvement approach in which the implementation can be adapted as ongoing research generates new implications for treatment and service.

Conclusions

At least twice in the past several years, developers of model programs with solid evidence bases have asked me, as they near retirement, why their programs are not being picked up by the service system. Individual reasons may apply to particular service models, but the issues laid out above generally summarize the missing pieces that must be added to a solid research base in order to generate realistic prospects for model programs to be widely adopted. The proper introduction of early intervention research to America first occurred in 1996 with the publication of the first special issue of Schizophrenia Bulletin dedicated to discussion of early detection and intervention in schizophrenia. The point at which the clock starts ticking in calculating the time between the identification of an effective practice and its widespread implementation is ambiguous. But as the future financial solvency of the Medicaid and Social Security disability entitlement systems remains in question, the interest of the U.S. public health system in preventing disability and chronic illnesses becomes increasingly urgent. The combination of political exigency and a solid foundation of preliminary research have set the stage for advancing the integrated multisite approach to early intervention research described by Heinssen et al. By acting now and thinking ahead to the possibilities for widespread dissemination of intervention models, early intervention research can have a quick and lasting impact on the future of the mental health service system.

References


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