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Translating Family-Focused Prevention Science Into Effective Practice:

Toward a Translational Impact Paradigm

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Abstract

Family-focused preventive intervention research could serve as an exemplar for the translation of science into practice on a scale that achieves public health impact. This article outlines advances in the field and translational research that still is needed, presenting these within a heuristic framework. The framework is designed to guide a broad translational research agenda fostering a shift toward a paradigm of public health impact—called a translational impact paradigm. Current advances and needed research in the subfield are mapped onto a set of four translational impact factors: effectiveness of interventions; extensiveness of their population coverage; efficiency of interventions; and engagement of eligible populations or organizations, including widespread adoption and sustained, quality implementation (the “4 Es” of intervention impact). The article then highlights key tasks required to progress in this area: improving practitioner–scientist partnership networks embedded in systems for delivery of evidence-based interventions; application of research guidelines and standards that facilitate translational impact; and policy change that supports needed research.

Keywords

family-focused preventive interventions; translational science; public health impact

The subfield of family-focused preventive intervention science addresses a broad range of public health objectives, many of which are included in the Department of Health and Human Services’ strategic plan, *Healthy People 2010* (U.S. Department of Health and Human Services, 2000), articulating goals for a healthier U.S. population. Advances in the translation of family-focused preventive intervention science into widespread community-based practices with children, youth, and families would contribute substantially to accomplishing those public health objectives.

This article lays out a heuristic framework intended to guide definition of a research agenda that would foster the translation of family-focused intervention science into real-world public health practices. In this framework, key translational factors are linked to the primary means for addressing them—networks of partnerships between practitioners and scientists, the infrastructure supporting those partnerships, standards guiding their research, and necessary policy change.

ORIENTATION TOWARD THE TRANSLATION FUNCTION

Sussman, Valente, Rohrbach, Skara, and Pentz (2006) compare multiple models guiding prevention intervention research and frame them in terms of their “translational function,” defined as the translation of prevention research, across multiple phases, into real-world applications. This function includes both (a) translation of research on the etiology of public health problems into the design of interventions (e.g., using research on child-rearing factors predicting youth substance abuse to guide intervention design) and (b) translation of effective interventions into widespread practice. My focus in this article is on the latter type, frequently called Type 2 (see <http://obssr.od.nih.gov/>). Leaders in the field argue that Type 2 translation is the most difficult challenge in achieving public health impact, but that it has received much less funding and attention (Glasgow, Lichtenstein, & Marcus, 2003; Woolf, 2008). These leaders also suggest that Type 2 translation include consideration of factors at the intervention-development stage (e.g., consumer preferences) that might influence the extent of translation after the intervention is fully developed and tested.

Better serving translation for “real world applications” requires that family-focused intervention scientists value maximizing impact on all populations that ultimately could benefit and that they carefully consider the necessary research, and standards guiding it, across all phases of intervention development and testing. This type of orientation is a first step in a shift from a more narrow focus on intervention design and efficacy testing toward a translational impact paradigm. Figure 1 outlines this and three other important steps that serve as an organizational frame for the paper.

THE IMPORTANCE OF A TRANSLATIONAL SCIENCE ORIENTATION

The problems addressed by family-focused intervention, such as youth substance use and conduct problems—particularly among youth and families where multiple problems co-occur—have tremendous social, health, and economic consequences for U.S. populations (Biglan & Metzler, 1998). Presently, little of the potential impact of family-focused intervention science is being realized. If a pie chart represented the sum total of family-focused preventive intervention that is actually being implemented in the United States, it would show that, by far, the largest slice consists of interventions that have not been rigorously tested. Only a relatively small slice of the remaining pie would consist of interventions with demonstrated positive, long-term effects, and an even smaller slice would represent such evidence-based interventions that are being well implemented and sustained over the long term. Research addressing the translational function is aimed at expanding the high-quality, real-world implementation of evidence-based interventions over the long term so that they will have greater public health impact.

MAPPING ADVANCES ONTO A COMPREHENSIVE SET OF TRANSLATION-RELEVANT FACTORS

A second step in plotting the translational-related research course (see Fig. 1) is further attending to (a) effectiveness of interventions, that is, rigorously testing well-designed interventions for a range of outcomes; (b) extensiveness of their population coverage, that is, addressing all population segments that might benefit; (c) efficiency of intervention; and (d) engagement of diverse populations and organizations, including study of how to get interventions adopted and implemented with high quality, on a large scale, in a sustained way. Briefly, these are the “4 Es” for intervention impact; they are summarized in Table 1, along with areas of research related to each factor and illustrative advances that have been made.

Effectiveness of Interventions for Translation

The literature reveals a wide range of positive outcomes produced by evidence-based interventions, or EBIs (i.e., those tested in well-designed, methodologically sound studies demonstrating practically significant outcomes); a number of these EBIs have proven effective across multiple settings. Notably, studies of interventions implemented with families during the preschool years have shown significant positive effects on measures of caregiver–child bonding and child management, along with reduction of child aggressive behavior and enhancement of social, emotional, and cognitive competencies in children as they prepare to enter school (e.g., Webster-Stratton & Taylor, 2001). Positive outcomes from family-focused interventions for school-aged children (K–12) include improved life skills, grades, and health behaviors, as well as reduced substance use, delinquency, conduct problems, and depression or other mental health problems, along with improved caregiver–child bonding and more effective child management (Lochman & van den Steenhoven, 2002; Spoth & Redmond, 2002). Positive intervention effects on caregiver–child relationships are especially noteworthy because they serve as “scaffolds” for building adaptive self-regulation, emotion, and behavior in children. The number of family-focused interventions meeting criteria for evidence-based interventions (see [www.preventionresearch.org](http://modelprograms.samhsa.gov/)) has been increasing (see <http://modelprograms.samhsa.gov/>).

Needed Intervention Outcome-Related Research

Independent replication studies of specific interventions, currently rare, are needed to show that positive outcomes are reliably achieved. Also, few studies so far reviewed have included long-term follow-up evaluations showing positive outcomes. Such studies are needed because of the possible dissipation of effects over time or the possibility that some positive effects may have delayed emergence. Further, despite advances in the conduct of core-component analyses—to identify which intervention components are those that most contribute to positive outcomes—more mediational analyses are needed—particularly, study of variation in mediating factors by population or setting. For example, these analyses identify which among a range of parenting skills mediate intervention effects on specific youth outcomes (see www.bocycf.org/prevention_of_mental_health_disorders.html). Key mediating variables could be used to tailor interventions to the needs of participating individuals (e.g., see the adaptive intervention approach described by Collins, Murphy, & Bierman, 2004). In addition, in order to have an impact at the population level, interventions demonstrating effects across risk-related subgroups (Offord, Kraemer, Kazdin, Jensen, & Harrington, 1998) are required. Notably, existing evidence suggests that general-population interventions for young adolescents can either benefit risk-related subgroups equally or benefit higher-risk youth more than lower-risk youth, thus achieving “universality of effects” (see www.ppsi.iastate.edu/abstracts.htm#96).

Extensiveness of Coverage for All Population Segments

Across Developmental Stages—For broad population impact, EBIs will be required for families with children in all developmental stages—from the prenatal period to late adolescence—for a range of developmentally specific outcomes. There has been considerable progress in the development of family-focused EBIs that address the full range of developmental stages. The “tween” stage, or the transition period between elementary and middle school, is one for which more interventions need to be developed and tested, given that research highlights the early emergence during this stage of substantial problem behaviors that could be addressed with timely intervention. Also, despite evidence of the high prevalence of certain problem behaviors (e.g., binge drinking) among high-school juniors and seniors in the general population, there has been limited research directed toward family-focused interventions for them (Spoth, Greenberg, & Turrissi, 2008).

Across Sociodemographically Diverse Populations, With Necessary Cultural Adaptations—Also critically important for wider population impact is the application of EBIs to diverse populations in various settings. Research on interventions for families of adolescents with existing behavior problems or disorders has advanced to the point where interventions with multiple populations of youth and their families—ranging from school referrals to incarcerated youth—have been tested and found effective (Alexander, Robbins, & Sexton, 2000). It also is clear, however, that more research is needed concerning the development of culturally competent or appropriate interventions—or adaptation of existing interventions—to address diverse ethnic or sociodemographic characteristics of populations in the United States, ranging from inner-city to rural settings (e.g., Castro, Barrera, & Martinez, 2004).

Across Levels of Population Risk—To maximize population impact, researchers have suggested using a mix of types of interventions focusing on different levels of participant risk. This approach is increasingly feasible because several family-focused interventions with positive efficacy data in general populations have become available in the last decade, along with interventions for higher-risk subpopulations. There also is evidence for the benefit of combining all levels through an intervention process that starts with brief interventions for general populations and facilitates movement from them into more intensive interventions for higher-risk families (a “stepped” intervention process—see Table 1, Engagement of populations/organizations—Illustrative advances).

Efficiency of Implemented Interventions

Efficient General-Population Formats—Brief, lower-cost interventions, such as self-administered programs, have high potential for achieving broad impact by being disseminated in community practice (see Taylor & Biglan, 1998). One example is Family Matters (www.nrepp.samhsa.gov/programfulldetails.asp?PROGRAM_ID=89), an intervention for young adolescents and their parents that utilizes material mailed to their homes and follow-up phone calls from health educators. CD- or DVD-based and computer-assisted interventions, particularly those teaching parenting skills, are promising in this regard.

Crossover Effects—Additional Outcomes at No Additional Cost—Youth who engage in one type of problem behavior also frequently are at risk for engaging in other problem behaviors, and multiproblem youth and their families are disproportionately responsible for prevalent public health problems. Interventions are more efficient when they effectively address risk and protective factors common to multiple problems. Those aimed at the reduction of a specific problem behavior like substance use have the potential to also reduce youth conduct problems or, in addition, symptoms of anxiety and depression (see Summary Sheets, www.ppsi.iastate.edu). Efficiency is further enhanced when, for example, an intervention not only reduces substance use by a youth family member but, in doing so, also reduces sibling problem behavior and parental stress (see Alexander et al., 2000).

Economic Analyses—It is important to assess economic benefits of family-focused interventions (both cost effectiveness and benefit–cost analyses) because of the degree to which such information influences administrators when they select interventions (Karoely et al., 1998). Although rigorous economic analyses have been conducted with a number of family-focused interventions and have shown positive results (e.g., www.colorado.edu/cspv/blueprints/; www.wsipp.wa.gov/rptfiles/costbenefit.pdf; Spoth, Guyll, & Day, 2002), most interventions with positive outcomes have not been evaluated for economic benefits.

Engagement of Populations/Organizations

Even the most effective interventions cannot have widespread impact without adequately engaging possible eligible populations, so strategies to improve engagement in family-focused EBIs are critically important. Effective engagement includes recruitment (e.g., well-designed marketing, multipronged strategies for increasing awareness of appealing intervention features, flexible scheduling) and retention (e.g., relationship building and use of participation incentives like door prizes). Research clearly is needed on the effectiveness of recruitment strategies (Haggerty et al., 2002), and more study of community-based (vs. researcher-driven) recruitment is necessary (e.g., Spoth, Clair, Greenberg, Redmond, & Shin, 2007).

Because widespread implementation depends on the engagement of key decision-makers and stakeholders who influence adoption of evidence-based interventions at the organizational level, it is also necessary to study factors influencing the decision to implement an EBI (e.g., an organization's readiness for change) in a range of practice settings, along with effectiveness of education of policy and decision makers about the benefits of adopting EBIs (Glasgow et al., 2003). Following adoption, EBIs also must be implemented with quality (e.g., with adherence to manuals and protocols specifying core components and allowable adaptation), so that positive effects can be realized in real-world settings. Research on implementation quality has increased greatly over the last decade (see <http://nirn.fmhi.us-f.edu/resources/publications/Monograph>). A number of family-focused EBIs have demonstrated high-quality implementation, and the link between implementation quality and positive outcomes has been demonstrated (Forgatch, Patterson, & DeGarmo, 2005). There has been, however, very limited demonstration of engagement in the long-term sustainability of such interventions; much work remains to be done on key characteristics of interventions and implementers that influence both quality and sustainability.

The Society for Prevention Research has developed a framework for translational research requiring a broad perspective encompassing the 4 *Es* of intervention impact—that is, effectiveness, extensiveness, efficiency, and engagement, as well as intervention adoption, implementation, and sustainability, key areas of translational study in their own right (see www.preventionresearch.org, MAPS II).

PLOTTING THE FUTURE COURSE: KEY TASKS AND NEEDED POLICY CHANGE

Practitioner–Scientist Partnerships and Networks

One of the single most important means of future advances in accomplishing greater population impact through translational science—and a third step in a course toward an enhanced translational function (see Fig. 1)—would be the development of partnerships between practitioners and scientists. Especially important are networks of partnerships embedded in population-based delivery systems for EBIs. These partnerships would address specific public health outcome objectives for family-focused interventions, such as the reduction of substance use, conduct problems, mental health problems, or obesity, and achieving positive youth-development milestones.

Descriptions of practitioner–scientist partnerships and their potential for benefitting public health have been summarized elsewhere (e.g., Spoth & Greenberg, 2005). For present purposes, it is noteworthy that there are many existing infrastructures for the delivery of family-focused interventions that could serve as the basis for translational research. Examples include population-based networks of public health and human service agencies used by the Blueprints programs (e.g., Nurse Family Partnerships; also see Multisystemic

Therapy and Functional Family Therapy—www.colorado.edu/cspv/blueprints/). Another illustration is a network of practitioner–scientist partnerships that link the Cooperative Extension System with the Public School Systems (PROSPER—see www.prosper.ppsi.iastate.edu), which has the potential to reach every community in the country.

Guidelines and Standards for Impact-Oriented Intervention Research

A fourth step toward an enhanced translational impact paradigm concerns research guidelines and standards (Fig. 1).

Standards for Outcome Research

It is critically important to foster the current trend toward more rigorous standards for assessing intervention efficacy, including paying closer attention to possible threats to all types of validity (internal, external, construct, and statistical conclusion) in intervention research. Research could be improved through actions such as (a) increasing use of statistical techniques such as Hierarchical Linear Modeling, to address the common practice of “cluster sampling” (e.g., families recruited through schools or community organizations who are randomly assigned to study conditions); (b) application of methods for addressing missing data, especially in longitudinal designs where sample attrition is an issue; and (c) validation of constructs and use of multiple methods of measurement (e.g., observational and self-reported interview data) with multiple informants (e.g., parents and youth).

Guidelines for Assessing and Reporting Impact

It also is important to encourage broader application of comprehensive guidelines for impact-oriented intervention research (see standards summarized at www.preventionresearch.org) and to increase the number of intervention literature reviews that report impact measures for the populations eligible for the intervention (e.g., the product of the efficacy of the intervention and the proportion of the eligible population engaged—see Abrams, 1999). Most importantly, further adoption of study-reporting standards indicating the level and quality of the real-world validity of an intervention, across development and testing phases, would foster a translational impact paradigm. A specific system to measure and evaluate validity has been devised and is applicable to family-focused interventions (Glasgow et al., 2003).

In closing, there have been many calls for strategies to address the challenges faced by youth and families in this country and to strengthen translational science currently receiving limited funding (Woolf, 2008). Greater attention to the translational function of intervention research will be necessary. Further, bold new policymaking will be required to realize the potential of the emerging advances in family-focused preventive interventions. An example would be “braided” funding for intervention-outcome research conducted by practitioner–researcher partnerships, integrating both research and public health service funding streams (see www.preventionresearch.org). Networks of practitioner–scientist partnerships, operating under existing infrastructures and following standards for impact-oriented research, could accelerate population-level effects—propelled by broader community-based implementation of family-focused EBIs. Greater investment in this effort would be akin to the investment in the research and public health-oriented infrastructure for vaccines that had such profound public health impact earlier in this century.

Recommended Reading

Ashery, R.S., Robertson, E.B., & Kumpfer, K.L. (Eds.). (1998). *Drug abuse prevention through family interventions* [Electronic version] (NIDA Research Monograph 177, NIH

Publication No. 97–4135). Rockville, MD: National Institute on Drug Abuse. A thorough treatment of topical areas in family-focused intervention science, with chapters addressing the rationale for family-centered interventions targeting substance abuse, family-related etiological factors, varied types of interventions, advances in research methodology, and dissemination approaches, along with summary recommendations that remain timely today.

Bausell, R.B., & Sussman, S. (Eds.). (2006). *Evaluation and the Health Professions* (Special issues on translational research), 29(1–3). A series of three special issues addressing the full range of translational research topics, including the history of translational research, an overview of conceptual frameworks, exemplary studies across diverse substantive areas, methodological and research-reporting issues, as well as future directions in the field.

Evans, D.L., Foa, E.B., Guy, R.E., Hendin, H., O'Brien, C.P., Seligman, M.E.P., & Walsh, B.T. (Eds.). (2005). *Treating and preventing adolescent mental health disorders: What we know and what we don't know*. New York: Oxford University Press. A comprehensive review of the evidence base for both prevention and treatment of adolescent mental health disorders, along with advances in research on positive youth development and specification of the most important areas of future research.

Spoth, R., Dishion, T., & Kavanagh, K. (Eds.). (2002). *Prevention Science* (Special issue on family-focused preventive intervention research), 3(3). A special issue that reviews salient developments in family-focused prevention intervention research and identifies key tasks in meeting the challenges of scaling up interventions for greater public health impact, with illustrative findings from family-centered studies involving infants, children, and adolescents.

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References

- Abrams DB. Nicotine addictions: Paradigms for research in the 21st century. *Nicotine & Tobacco Research*. 1999; 1:S211–S215. [PubMed: 11768182]
- Alexander JF, Robbins MS, Sexton TL. Family-based interventions with older, at-risk youth: From promise to proof to practice. *The Journal of Primary Prevention*. 2000; 21:185–205.
- Biglan, A.; Metzler, CW. A public health perspective for research on family-focused interventions. In: Ashery, RS.; Robertson, EB.; Kumpfer, KL., editors. *Drug abuse prevention through family interventions NIDA Research Monograph 177*, NIH Publication No. 97–4135. Rockville, MD: National Institute on Drug Abuse; 1998. p. 430-458.
- Castro FG, Barrera M Jr, Martinez CR Jr. The cultural adaptation of prevention interventions: Resolving tensions between fidelity and fit. *Prevention Science*. 2004; 5:41–45. [PubMed: 15058911]
- Collins LM, Murphy SA, Bierman KA. A conceptual framework for adaptive preventive interventions. *Prevention Science*. 2004; 5:185–196. [PubMed: 15470938]
- Forgatch MS, Patterson GR, DeGarmo DS. Evaluating fidelity: Predictive validity for a measure of competent adherence to the Oregon Model of Parent Management Training (PMT). *Behavior Therapy*. 2005; 36:3–13. [PubMed: 16718302]
- Glasgow RE, Lichtenstein E, Marcus A. Why don't we see more translation of health promotion research to practice? Rethinking the efficacy to effectiveness transition. *American Journal of Public Health*. 2003; 93:1261–1267. [PubMed: 12893608]

- Haggerty KP, Fleming CB, Lonczak HS, Oxford M, Harachi TW, Catalano RF. Predictors of participation in parenting workshops. *Journal of Primary Prevention*. 2002; 22:375–387.
- Karoly, LA.; Greenwood, PW.; Everingham, SS.; Hoube, J.; Kilburn, MR.; Rydell, CP., et al. Investing in our children: What we know and don't know about the costs and benefits of early childhood interventions. Santa Monica, CA: RAND; 1998.
- Lochman JE, van den Steenhoven A. Family-based approaches to substance abuse prevention. *Journal of Primary Prevention*. 2002; 23:49–114.
- Offord DR, Kraemer HC, Kazdin AE, Jensen PS, Harrington R. Lowering the burden of suffering from child psychiatric disorder: Trade-offs among clinical, targeted, and universal interventions. *Journal of the American Academy of Child and Adolescent Psychiatry*. 1998; 37:686–694. [PubMed: 9666623]
- Spoth R, Clair S, Greenberg M, Redmond C, Shin C. Toward dissemination of evidence-based family interventions: Maintenance of community-based partnership recruitment results and associated factors. *Journal of Family Psychology*. 2007; 21:137–146. [PubMed: 17605536]
- Spoth R, Greenberg MT. Toward a comprehensive strategy for effective practitioner–scientist partnerships and larger-scale community benefits. *American Journal of Community Psychology*. 2005; 35:107–126. [PubMed: 15909789]
- Spoth R, Greenberg M, Turrissi R. Preventive interventions addressing underage drinking: State of the evidence and steps toward public health impact. *Pediatrics*. 2008; 121(Suppl 4):311–336.
- Spoth R, Guyll M, Day SX. Universal family-focused interventions in alcohol-use disorder prevention: Cost-effectiveness and cost-benefit analyses of two interventions. *Journal of Studies on Alcohol*. 2002; 63:219–228. [PubMed: 12033699]
- Spoth R, Redmond C. Project Family prevention trials based in community-university partnerships: Toward scaled-up preventive interventions. *Prevention Science*. 2002; 3:203–221. [PubMed: 12387555]
- Sussman S, Valente TW, Rohrbach LA, Skara S, Pentz MA. Translation in the health professions: Converting science into action. *Evaluation & the Health Professions*. 2006; 29:7–32.
- Taylor TK, Biglan A. Behavioral family interventions for improving child-rearing: A review of the literature for clinicians and policy makers. *Clinical Child and Family Psychology Review*. 1998; 1:41–60. [PubMed: 11324077]
- U.S. Department of Health and Human Services. Healthy People 2010: Understanding and improving health. 2. Washington, DC: U.S. Government Printing Office; 2000.
- Webster-Stratton C, Taylor T. Nipping early risk factors in the bud: Preventing substance abuse, delinquency, and violence in adolescence: Interventions targeted at young children (ages 0–8 years). *Prevention Science*. 2001; 2:165–192. [PubMed: 11678292]
- Woolf SH. The meaning of translational research and why it matters. *JAMA: The Journal of the American Medical Association*. 2008; 222:211–213. [PubMed: 18182604]

Fig. 1. Steps in plotting a course for a translational impact paradigm through family-focused preventive intervention science.

TABLE 1

Translation-Relevant Impact Factors, Areas of Relevant Research, and Illustrative Advances

Translational function-related factor	Areas of relevant research	Illustrative advances
Effectiveness of interventions (outcomes evidence base)	<ul style="list-style-type: none"> Establishing what works for a range of positive outcomes Replication of effects Long-term effects Core components/key mechanisms of effects Effects across risk-related subgroups 	An illustration of an intervention with replicated, long-term effects and quality implementation is the <i>Nurse–Family Partnership</i> ; it aims to improve the health and self-sufficiency of low-income, first-time parents and the positive development of their children. Multiple randomized, controlled trials have been conducted and show positive longitudinal mother and child outcomes, including reductions in child abuse or neglect and fewer arrests for both mothers and their children (at age 15)—associated with these outcomes, economic benefits also have been demonstrated. Importantly, the program has developed a dissemination system to support sustained, quality implementation through a network that currently serves families in 280 counties in 22 states (see www.nursefamilypartnership.org).
Extensiveness of intervention coverage across all population segments	<ul style="list-style-type: none"> Coverage across all developmental stages Coverage of sociodemographically diverse populations/cultural adaptations Coverage of levels of population risk 	Addressing the need for broader population coverage and cultural adaptations, the design of the universal <i>Strong African American Families Program</i> was guided by an empirically based model for the key processes associated with psychological adjustment, substance use, and high-risk behavior of African American youth. The intervention focuses on enhancing youth competencies through (a) parent–child relationship quality and parenting skills, including “no-nonsense discipline” and family activities; (b) youth self- and emotional regulation; and (c) reduction of youth willingness to drink or to engage in risky, destructive behavior. Positive results include more regular, communicative parenting and reduced initiation of alcohol use among youth (see http://www.cfr.uga.edu/html/saaf.html).
Efficiency of interventions	<ul style="list-style-type: none"> Formats that can enhance intervention efficiency <ul style="list-style-type: none"> Brief interventions Self-administered CD- or DVD-based/computer-assisted Crossover/nontargeted effects <ul style="list-style-type: none"> Generalization to nontargeted outcomes Generalization to nontargeted participants Economic analyses <ul style="list-style-type: none"> Cost effectiveness Benefit cost 	An excellent example of advances in <i>economic analyses</i> is provided by the Washington State Institute for Public Policy (WSIPP). WSIPP followed a directive from the Washington State Legislature to conduct a comprehensive cost-benefit analysis of preventive interventions, in order to provide guidance to decision makers in identification of interventions that would be a good investment of funds. The WSIPP conducted a thorough review of the scientific literature on preventive intervention outcomes, estimated the costs and benefits of those that met their positive outcome criteria, developed recommendations for quality implementation of the selected interventions, and also suggested funding mechanisms. Their economic analysis showed that a number of family-focused preventive interventions clearly have economic benefits (see http://www.wsipp.wa.gov/).
Engagement of populations/organizations	<ul style="list-style-type: none"> Recruitment of eligible populations Retention and family involvement Engagement of organizations adopting interventions for 	Illustrating effective strategies for engaging families in evidence-based interventions, the <i>Family Check Up</i> (FCU) and <i>Motivation-Enhancing Intervening</i> (MEI) are integrated components of the <i>Adolescent Transitions Program</i> . The FCU involves parent-centered services, including brief consultations with parents, feedback to parents about their child’s behavior at school and a range of videotapes and

Translational function-related factor	Areas of relevant research	Illustrative advances
	sustained, quality implementation	books. MEI entails a three-session program for higher-risk youth and families designed to educate parents in proven family management practices and to encourage them to avail themselves of related services. Analyses have shown that youth whose parents engaged in the FCU showed less growth in substance use during ages 11–17 and decreased risk for substance use diagnosis and police records of arrest (see http://www.strengtheningfamilies.org/html/programs_1999/08_ATP.html).