# Summit 1997

## Preserving Quality And Value In the Managed Care Equation

### SPECIAL FOCUS REPORTS: OUTCOME MEASUREMENT FOR CHILDREN AND ADOLESCENTS & PREVENTION

### SECTION III. A SPECIAL SECTION WHICH ADDRESSES OUTCOMES MEASUREMENT FOR CHILDREN AND ADOLESCENTS WITH SERIOUS EMOTIONAL DISORDERS

This special section was developed after the initial SANTA FE SUMMIT in recognition of the special methodological and other considerations necessary to address outcomes measurement in children, adolescents and families. This initial work focuses on the subpopulation of children most in need of mental health and substance abuse services.

This work grew out of the OUTCOMES study panel at SANTA FE, and is included as a virtual stand-alone document. This section models the SUMMIT process from beginning to end, starting with VALUES, identifying INDICATORS for this risk-adjusted subpopulation, and then reviewing the relevant MEASURES for this population.

In other sections of the report (PROCESS and ACCESS), the recommendations for children and adolescents are incorporated into the main text.

### AMERICAN COLLEGE OF MENTAL HEALTH ADMINISTRATION (ACMHA) PROPOSED CHILD OUTCOMES

**Introduction**
The American College of Mental Health Administration (hereafter referred to as ACMHA) has endeavored to adapt, for children, adolescents, and their families, the values-based methodology for identification of service outcomes developed at the Santa Fe Summit in March of 1997. ACMHA is aware that numerous organizations (e.g., the Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Alliance for the Mentally Ill, American Academy of Child and Adolescent Psychiatry, National Committee for Quality Assurance, American Managed Behavioral Healthcare Association, various foundation and corporate collaborators) are developing comprehensive access, performance and outcome standards for mental health and substance abuse services for adults and children. The ACMHA Child Outcomes Workgroup focused on outcomes but did not attempt to specify values, indicators and measures related to child service system access and performance during its short-lived tenure. For nearly two decades, federal, state, and foundation sponsored initiatives and policies have supported the development of a values-based and principle-driven model of service systems for children and their families known as a system of care (Stroul & Friedman, 1994). Efforts to measure access, structure, performance, and outcomes in systems of care continue as

this report is written, and efforts of ACMHA and other groups to develop core performance measures for mental health and substance abuse care for children and families should incorporate aspects of system structure and coordination shown to improve access to an appropriate range of least restrictive services in such systems of care.

ACMHA gratefully acknowledges the feedback provided by the individuals convened by the Substance Abuse and Mental Health Services Administration (SAMSHA) to review a working draft of this document. Many of these individuals are participants in one of the afore-mentioned group efforts to develop comprehensive performance and outcomes standards for child and family mental health and substance abuse services. Some of their recommendations were incorporated into the attached document; others were not. Rationale for non-inclusion generally revolved around the extent to which recommendations represented: (1) significant deviations from the values agreed upon at the Summit; (2) the concern of a single advocacy, administrative, or academic group (thus requiring deviation from the consensus process forged at the Summit); and/or (3) significant increases in data collection and response burden. The most vexing challenge faced by the Child Outcomes Work Group was that of reconciling measurement-related concerns with ACMHA's commitment to brevity, pragmatism "simplicity and relevance" -- attributes likely to be valued in the marketplace, where the burden and costs associated with the collection of outcome data will be borne by providers and consumers. Measurement in the field of child and adolescent mental health outcomes is still in an early stage. On the other hand, several symptom checklists, global rating scales, diagnostic interviews, and multidimensional functioning measures have been well validated. However, most are lengthy, require extensively trained interviewers, or rely exclusively on clinician judgment. Thus, the group has recommended subscales from instruments with demonstrated validity, despite the violation of psychometric rigor this strategy represents. Without support for further validation work, the ultimate value of outcomes standards will not be realized. In this vein, the "Methodological Standards for Outcome Measures" prepared by the CMHS Adult Outcome Measurement Standards Committee provides an excellent overview of the methodological issues to be addressed to develop outcomes standards that actually reflect treatment-related change (or maintenance of gains) in consumer populations.

In the material which follows, we have laid out; 1) working assumptions; 2) values; and, 3) indicators and suggested measures that index these values.

**Child Outcomes Work Group Assumptions**|

The four assumptions that guided the group's work are enumerated below.

1. **The target population is children and adolescents who exhibit symptoms and impairments sufficient to persistently and significantly interfere with functioning across multiple settings (e.g. school, home, and in community settings)**. These children might be described as having a serious emotional disturbance (SED) and also as a "risk adjusted" population. As such, they are distinguished from the general population of children and adolescents who, at various stages of development, exhibit problem behaviors and experience emotional distress that are transient in nature.
2. **Child outcomes will reflect change at the client (child and family) level**. This approach contrasts with a report card approach that reflects the status of a managed care

entity with respect to certain indicators of an enrolled population at a single point in time. Assessment over time is essential to examining whether treatment delivered under the auspices of any care entity (managed or not), has an impact, and is particularly critical when dealing with children, for whom changes in behavior, stress, and distress vary (often considerably) over the course of normative development even in the absence of treatment. Thus, it is recommended that data pertinent to the indicators be collected at the outset of treatment, during the course of treatment, upon treatment termination, and up to 18 months year following treatment termination. for youth receiving treatment during any calendar year.

3. **Data will be collected from multiple informants, including the child's caregiver and child, archival data from public agencies legally mandated to collect such data (e.g., schools, juvenile justice agencies, child protection agencies), and medical records.**
4. **Each indicator should be supported by some psychometric data, yet brief, thus requiring careful selection of subsets of items or scales rather than full measures.** Although some valid and reliable measures of child and adolescent behaviors, symptoms, and functioning exist, and were reviewed by the work group, many of them require significant administration time and training. Research regarding the sensitivity of these measures to the experiences of the target (risk-adjusted) population of youth, and to treatment-related changes within such a population, is also limited. Moreover, there are no valid measures to index some of the values articulated at the Summit as they relate to children. The group selected measures, subscales, and, single-items supported by psychometric data whenever possible, views further psychometric work as essential to the identification of meaningful but pragmatic outcomes measures, and recommends that such work be supported once final consensus about the indicators to be measured is reached.

**American College of Mental Health Administration Child Outcomes Work Group**

**Consensus Values, Indicators, and Data Sources**

**VALUE 1:**: ***Youth will reside in the homes of their families***

**Indicator: Children and adolescents should have a stable living situation in a home with a family**.

RECOMMENDED MEASURES:

1. Child's residence and the restrictiveness of the living environment rated in accordance with Robert Hawkins and colleagues' Restrictiveness of Living
2. Environment Scales (ROLES; Hawkins, Almeida, Fabry, & Reitz, 1992).
3. Number of placement changes experienced by the child during treatment and at 6 month intervals following treatment termination, up to 18 months following treatment.
4. Number of days in out-of-home placement during treatment and at 6 month intervals following treatment termination, up to 18 months following treatment.

*Data Sources*

- Caregiver reports elicited at the outset and termination of treatment and at 6 month intervals during treatment and up to 18 months following treatment, the reporting window being the month prior to data collection.
- Archival data kept by placing agencies for placements occurring during treatment and at 6 month intervals up to 18 months following treatment, the reporting window being the previous 6 months. The ROLES rating scale can be distributed to these agencies, or to the managed care entity collecting the placement data from these agencies, so that restrictiveness of placements can be scored in a standardized manner.

**VALUE 2:** ***Youth are engaged in productive activity.***

**Indicator: Youth attend and perform in school (including vocational).**

RECOMMENDED MEASURES:

Data regarding the following are collected from caregivers and school records.

1. Number of days absent

2. Incidents of truancy

3. Number of disciplinary incidents

4. Expulsions

5. Pass/Fail within the last year

Caregiver reports are solicited at the outset and termination of treatment, and at 6 month intervals following treatment, the previous month being the time frame for reporting. Archival data regarding these items are obtained for the month prior to treatment, and for 6-month intervals up to 18 months after termination.

**VALUE 3:** ***Youth have good physical and behavioral health.***

**Indicator: Youth maintain or improve health status and improve behavioral health status**

RECOMMENDED MEASURES:

Physical Health:

1. Youth and caregiver response (about youth) on Item #1 of the Children's Health Questionnaire (CHQ; Landgraf and Ware, 1991, 1996) at the outset, during, and upon termination of treatment, and at 6-month intervals up to 18 months following termination of treatment.
2. Youth pregnancy, as reported by youth and/or caregiver elicited at the outset and termination of treatment, and at 6-month intervals up to 18 months following termination of treatment..

Behavioral Health

1. Reports of suicide attempts made to caregiver, provider, or admitting hospital during treatment and at 6 month intervals up to 18 months following termination of treatment.
2. Symptoms related to mood (negative and positive) as described in CHQ Item 6.1.
3. Symptoms related to concentration, activity, eating, sleep, antisocial behaviors, as described in the Adolescent Outcomes Module (ATOM; University of Arkansas for Medical Sciences, 1995).

Substance abuse
Recommended: Drug Preference and Drug Involvement subscales of the Drug Use Screening Inventory adapted for adolescents (DUSI; Tarter & Hegedus, 1991).

Also proposed: Hair analysis to replace urine screens for youth involved in court-ordered substance abuse treatment, as hair analysis is less intrusive and offers more specific findings.

**VALUE 4*: Youth are safe from criminal victimization, abuse, and neglect.***

**Indicator: Youth will not experience victimization, abuse, or neglect.**

RECOMMENDED MEASURES:

1. Caregiver reports of criminal victimization of the youth prior to, during, and at 6 month intervals up to 18 months following termination of treatment.
2. Child Protective Service reports of abuse or neglect prior, during, and at 6 month intervals up to 18 months following termination of treatment.

**VALUE 5: *Youth are not in trouble with the law.***

**Indicator: Youth in treatment will not be arrested, detained, or incarcerated.**

RECOMMENDED MEASURES:|
Data regarding the following are collected from youth and/or their caregivers and from the archives of county or state juvenile justice authorities/courts.

1. Number of arrests

2. Severity of crime coded in accordance with FBI Uniform Crime Reports

3. Number and length of incarcerations

4. Number and length of probation terms

For youth/caregivers and archival sources the reporting interval is the month prior to treatment, months during treatment, and month prior to 6 month intervals up to 18 months following termination of treatment.

**VALUE 6:** ***Youth have social support.***

**Indicator: Youth have prosocial peers and access to support from adults.**

RECOMMENDED MEASURES:
Peers
Subscales from the Family, Friends, and Self (FFS) Assessment Scales (Simpson & McBride, 1992) that tap peer involvement, involvement with peers who get into trouble, and parent familiarity with peers. Responses follow a Likert type format ranging from "none" to "all." Youth responses are elicited at the outset, during, and at termination of treatment, and at 6 month intervals up to 18 months following treatment termination.

Adult (non parent) support
No valid measure of social support for youth from adults outside the family has been identified yet.

**VALUE 7*: Youth perform developmentally appropriate activities of daily living.***

**Indicator: Youth performs developmentally appropriate self-care and life skills.**

RECOMMENDED MEASURE:
No valid measure spanning childhood and adolescences was identified; the Structured Vineland Scale for youth ages 4-5 and 6-12 has good psychometric properties but requires trained administrators and significant administration time.

**VALUE 8:** ***Youth enjoy a positive quality of life.***

**Indicator: Youth report having a positive quality of life.**

RECOMMENDED MEASURE:
No valid measure of the construct was identified, and downward extensions of adult quality-of-life measures were deemed inappropriate for youth, for whom the nature of the construct is yet to be defined. Thus, a range of constructs potentially related to a child's sense of well-being (e.g., child's self-esteem or self-efficacy, positive family relations), and valid measures of them were considered. Most of these are quite lengthy. Section #7 of the CHQ (Landgraf & Ware, 1991, 1996) is relatively brief, and ,although entitled "Self Esteem," it appears to tap a child's assessment of quality of life at home, school, and with friends and includes omnibus questions about life in general, and is offered as a potential starting point for measurement of the quality of life construct.

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**SECTION IV. A Framework for Incorporating Prevention.**

ACMHA is deeply indebted to the National Mental Health Association for their contribution to the SUMMIT and this report. As noted above, the NMHA had already begun a consensus initiative focusing on prevention, and we are pleased to include in this document several sections prepared especially for the SUMMIT report; additional materials will be forthcoming in a larger, independent document published by NMHA on this topic. We thank Robert J. Gabriele, Senior Vice-President of NMHA for his leadership of this effort.

**I. The Need for Purchasers to Value Prevention and Incorporate Overarching Values in Preventive Health Care into Health Care Policies**

Purchasers of managed health care services, including all purchasers for commercial businesses and non-profit organizations and all Federal and state government payers, want to keep their employees/citizens healthy and productive. There is a logical continuum of health care for achieving this goal. Treatment and maintenance services are essential for individuals who have early-stage or chronic physical or mental illnesses, but the continuum is not complete without prevention of the initial onset of disorders and problems. Only when high quality services are provided for the entire continuum will there be a reduction in the incidence, prevalence, and overall costs of the disorders.

The purchasers of health care services have had the opportunity to affect a great change in the health status of this country. They are doing this by broadening the delivery system and incorporating prevention along side treatment and maintenance. To do this has required several paradigm shifts: from an illness model to a health orientation, from a discrete intervention model to a holistic orientation, and from a focus on individuals to a focus on families and how illness in one member puts others at risk. Until recently, interest in prevention has been focused on physical illnesses and injuries. Preventive interventions in physical health care have been based on scientific evidence, and much has been learned about immunizations to prevent childhood diseases and changes in diet and exercise to prevent cardiovascular problems. Now there is evidence that risks can also be significantly reduced in the mental health and in physical illnesses whose onset is primarily related to behavior. There are empirically validated studies which

demonstrate the efficacy, cost-offset, and improved outcomes for a variety of mental health and medical problems through psychosocial interventions. It is now possible—and prudent—to incorporate preventive services for behaviorally related problems into general health and behavioral health systems of care.

**OVERARCHING VALUES:** The over arching values related to prevention that underlie any system of care that will achieve the purchaser's goal of keeping employees/citizens health and productive include the following:

*The system of care, including outcomes, must be operationalized, defined and evidence-based.*

*There must be aggressive outreach in service delivery.*

*Access barriers to health care must be eliminated.*

*Consumers must be involved in a process of self-management and empowerment with an existing partnership between consumers and purchasers in determining policy and individual services.*

*Health care services should build on consumers' strengths and increase their potential.*

*Children and families should be the highest priority.*

*A risk and resilience model should be used in assessment and service delivery.*

*A prime goal of service should be to foster healthy life development.*

*Health care should be collaboratively linked to other community resources.*

*Risk profiling of important populations is necessary. The issue of what is important may vary among purchasers and consumers. Risk factors vary in different populations, but they should be identified at rates predicted by epidemiological data.*

*Risk populations should be identified as early as possible with screening at key access points in the health delivery system.*

*The interventions that are provided should be appropriate. The interventions should be associated with the risk profiles of the enrolled population and should focus on risks (resiliencies) amenable to change.*

*Wherever possible, the interventions should be based on identified programs which have a strong evidence base.*

*Enrollees with identified high risk factors should be engaged in the interventions, receive the full course of the program, and be encouraged to maintain their behavioral changes.*

*For those who receive the preventive intervention, there should be an enhanced performance outcome. There should be a reduction of risks and reduction of onset of illnesses in the areas targeted and meaningful to purchasers and customers.*

*Provision of these services will affect the management and finances of purchasers. There will be significant resource (dollars and staff) associated with risk profiling, risk reduction, and resiliency promotion. Appropriate staff will need to be hired to provide the services, and they are likely to need additional training.*

**How Should Purchasers Define Prevention?**

The classical public health definition of prevention includes primary prevention (focused on incidence), secondary prevention (focused on prevalence), and tertiary prevention (focused on disability). This definition originated at a time when the etiologies of illnesses were thought to be more straightforward than what is now known to be true.

Very few illnesses have a single causal agent that can be singularly targeted, such as vaccines to prevent polio. The complexity of risk and protective factors in the etiology of many behaviorally related diseases, both in mental health and physical health, led a committee of the Institute of Medicine of the National Academy of Sciences to seek a definition of prevention that would add clarity to this new knowledge. The committee also realized that by using the term prevention for all health interventions it is difficult to really know what the targets and content of the interventions are. The committee formulated a new classification system for interventions for all of mental health. The system is based on an earlier formulation by Gorden (1985) for physical health, and indeed the new system is equally applicable to interventions for physical problems. In the classification system, the word prevention is reserved for those interventions targeted to a population before the initial onset of a problem or disorder. Treatment involves screening for already existing disorders and appropriate standard care, including efforts to avoid relapse. Maintenance involves after-care service. Unlike the classical public health definition where the use of the word primary implies a type of hierarchy, this system values all three components equally and recognizes that all are necessary for a complete system of care.

Purchasers who use this classification system, which has gained wide acceptance in the mental health field, will more easily be able to track the targets and content of the full range of interventions it obtains for its employees/citizens. The risk/protective model is relevant for prevention, treatment, and maintenance, but the risk factors and protective factors are frequently for initial onset, relapse, and chronic morbidity.

**Why Should Purchasers Value Prevention ?**

<u>The Costs of Not Providing Prevention Are Huge.</u>

Of the ten major causes of disability worldwide, five are mental health and substance abuse problems, with major depression being the first one. Eleven percent of all disability world wide is due to major depression.

Of the ten major causes of mortality, seven are directly related to individual behavior (McGinnis and Fogey). The effect of mood on an individual's use of tobacco and alcohol is compelling. Those with high depressive symptom levels -- but not yet major depression -- are much less likely to quit smoking.

There Is the Potential that Prevention Will Be Cost Effective.

There is the possibility that outlays for health care could be reduced or slowed down. There is both cost effectiveness in the short-term and in the long-term. As more and more people are in managed health care settings, even long-term cost benefits might come back to save the purchaser money. The government particularly has a long-term interest in the public's health and is also significantly impacted by cost shifts from one system to the next. For example, with the child Medicaid population, children with substance abuse and mental health problems frequently end up in the child welfare and juvenile justice systems. The real long-term cost savings may be in these areas even more than in behavioral health care itself.

Prevention can have short-term cost benefits that show up department by department and sector by sector. It has the potential of reducing utilization rates and secondary consequences/costs. For example, the potential cost savings from behavioral prevention programs is not going to be just in the behavioral health care component but in other parts of the system where there are also enormous costs, such as visits to the primary care doctor for physical complaints and reassurance. The impact of providing behavioral prevention services must be assessed across general health and behavioral health areas. Most of the immediate outcome cost savings that have been documented are short-term in the physical health arena.

There is the possibility is that employee productivity for businesses in the commercial marketplace could be increased.

The data on depression alone are suggestive of potential significant savings if effective prevention and intervention strategies are used.

It may turn out to be the right thing to do for the people being served.

The only way that prevention will be incorporated into policies and purchasing contracts is if purchasers attribute to prevention a high value deserving immediacy and support. The only way that effective prevention will occur is if purchasers insist that the highest quality programs based on the best scientific evidence be used.

**II. A Risk and Evidence Based Framework for Maintaining and Measuring Prevention Services in Managed Care.**

Maintaining and measuring high quality, effective prevention services in managed care presupposes that a series of underlying decisions have been made with clarity, integrity, and scientific evidence. These decision points can ensure that the goals are clear, that the best

available science is used to select the prevention programs, that the programs are delivered to whom they are intended, and that the interveners are knowledgeable about what they are doing.

The following framework, presented in a logical series of steps, can lead to the end goal of a managed care company delivering high quality and effective prevention services to its customers.

***(1) The term "prevention" should be reserved for only those interventions that occur before the initial onset of disorder.***

Preventive interventions can be of three types: universal, selective, and indicated. Universal preventive interventions are targeted to the general public or a whole population group that has not been identified on the basis of individual risk. Selective preventive interventions are targeted to individuals or a subgroup of the population whose risk of developing a disorder is significantly higher than average. Indicated preventive interventions are targeted to high-risk individuals who are identified as having minimal but detectable signs or symptoms foreshadowing disorder, or biological markers indicating predisposition for disorder, but who do not meet diagnostic levels at the current time.

***(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. Thus, the decisions will ultimately reflect the values of both the purchasers and service providers. Through the imposition of contract requirements, purchasers will require service vendors to provide quality preventive intervention services for specific risk groups.***

Collaboration between the behavioral health care providers and the general (physical) health care providers is crucial so that a) the epidemiology of the covered population is known, and b) preventive intervention outcome measures are not limited to only one area of health.

Issues to be considered in the selection process for targeted disorders and conditions and targeted populations include: what disorders or conditions cause the highest cost for the purchaser; based on epidemiological data, what disorders or conditions are most prevalent in the health care population and can high risk groups be identified, and what disorders or conditions cause the most mortality and morbidity for the individual enrollee and his or her family. Morbidity can be reflected in productive work days lost, school days missed, quality of life reduced, and in associated costs, including physical as well as behavioral health care costs and costs borne by other service sectors such as social services, education, and justice. Potential cost-offsets of providing preventive services rather than later treatment and maintenance services should be estimated whenever possible.

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

The science regarding risk and protection is large, changes rapidly, and varies by disorder. Sometimes single risk factors can be identified and targeted, but more often it is the accumulation of risk factors, ideally with the weighting of the relative importance of each factor, that will yield the most potential for prevention of later onset of a single or multiple disorders. The use of a risk reduction orientation within managed care will increase the likelihood that the preventive intervention services will be effective. Science-based, authoritative resources, such as those provided by the National Academy of Sciences, the US Preventive Services Task Force, the Cochrane Collaboration, and many federal agencies and professional organizations, should be utilized to identify those disorders or conditions that have an evidence base sufficient to justify mounting preventive interventions.

***(4) Only conditions for which there are known, science based preventive interventions should be targeted.***

Authoritative sources should be utilized. In addition to those listed above, meta-analyses and registries of prevention trials should be reviewed. The preventive interventions that are chosen should have a realistic chance of being delivered at a reasonable cost within a health care setting and/or provide a significant cost offset.

***(5) Individuals and families should be screened for the occurrence of risk fctors that aare associated with the first onset of a disorder or condition***.

Screenings must be science based and should include biological factors (including genetic history), psychosocial factors, and early signs or symptoms that do not yet meet full criteria for diagnosis. Protective factors that could offset some degree of risk should also be assessed. The screening tools must be as reliable, valid, and efficient as current science permits.

The decision regarding whom to screen is critical. The goal is to be efficient but not miss those with high risk profiles. Members of high risk groups could be identified based on a single and apparent risk factor, such as those who have recently lost their jobs or been diagnosed with a serious illness or children whose parents are alcohol dependent (referred to here as Screen A) and then these identified individuals could be screened more extensively for other risk factors and for protective factors (referred to as Screen B). For example, persons recently diagnosed with a fatal illness could be screened for early symptoms of depression, marital conflict, job stability, and coping style. Adolescents who are known to have a substance abusing sibling could be screened for school attendance and performance, mood stability, coping style, and substance use.

Risk assessment tools are more readily available for some conditions than for others. For example, there are some current tools ready for use in screening for risks associated with first onset of depression and substance abuse. The availability of such tools should not act as a constraint because if the scientific evidence regarding risk factors is available, the screening tools can be developed.

Screening for risks associated with onset of substance abuse and mental health problems introduces critical issues regarding fairness, labeling, and privacy. The key is for an individual to not get penalized for an assessment of high risk but to get rewarded for behavioral changes that lead to positive health outcomes. Risk profiles should receive the same privacy protections that all health records are accorded.

The dual levels of screening that are described above will provide point prevalence data regarding risk factors for particular disorders and conditions for specific populations within the identified health care population. They will also provide point prevalence data on those with already existing disorders.

***(6) All those identified through screening (levels A and B) as being at high risk for developing a particular disorder or condition must be offered the preventive intervention to prevent that condition. If they accept the offer, the preventive service must be provided.***

The preventive interventions should be implemented fully, following available protocols.

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.

***(7) Prevention interveners must be thoroughly trained in the relevant risk assessment tools and in the implementation of each specific preventive intervention that is delivered***.

Training will help ensure that the programs are delivered to the appropriate high risk groups and that standardized full implementation with fidelity to the original program designs is achieved. Ongoing supervision of front-line interveners is desirable to maintain enthusiasm, ensure fidelity, and decrease personnel turn-over.

***(8) The following process and capacity measures (sometimes called intermediate goals) should be documented:***

Percentage of total personnel who have received training in risk assessment and preventive interventions; the total number of prevention interveners; and a description of the type and method of training received.

Percentage of total enrollees who are informed regarding risk identification and the provision of preventive services for mental health problems and substance abuse within the health care organization; a description of the type and method of communication, such as newsletters, pamphlets, or discussion with a service provider.

Percentage of the health care population screened (levels A and B) with assessment tools for risk factors associated with first onset of targeted disorders or conditions; a description of the tools, methods, and results (including gender, age, health care usage, and risk status).

Percentage of the health care population who self-refer for preventive services; a description regarding what services are most frequently requested.

Of those who are screened (levels A and B) and determined to be at high risk, the percentage who are offered and referred to preventive services within the health care organization.

Percentage of those who utilize the prevention services, including those who receive part of the program and those who receive the full intervention; a description of the preventive services.

***(9) The intermediate performance measures, also known as proximal outcomes, should focus on risk status within the targeted population. Change or lack of change on 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).***

For example, measures could include fewer depressive symptoms in a high risk but non-clinical population who received a behavioral/cognitive preventive intervention, fewer incidents of reported unprotected sex among adolescents who received life skills training, and higher birth weights in infants whose mothers had been home visited as part of prenatal care.)

These intermediate performance measures should be collected and recorded with systematic regularity, such as every six months for measures related to depression in the elderly. A consistent reduction in risk over time is likely to lead to a positive distal outcome, also known as a key performance outcome measure.

***(10) The key performance measures, also known as distal outcomes, should focus on the primary disorder or condition to be prevented. It is these outcomes that are the ultimate targets of the interventions.***

Such measures could include prevention of premature delivery and low birth weight; prevention of the onset of unipolar depression during an adolescent's high school years; prevention of HIV infection during an individual's college years; prevention of teenage pregnancy; prevention of substance use during a child's middle school years; and prevention of unipolar depression in the year following an individual's first heart attack.

All measures must be quantifiable, easily understandable, and valid. [**Meaningful, measureable and manageable** in the ACMHA taxonomy.] Because most outcomes of prevention services are not absolutely tied to a specific date for onset, an explicit time frame should be part of the outcome measure. For example, birth weight has a specific time for onset, but depression does not. Prevention of depression during an academic school year or during adolescence is a realistic goal whereas prevention of depression for a lifetime is not. For some individuals prevention may be a delay of onset, but this too can save years of suffering and cost. Also, there appear to be critical periods in life development when preventive interventions may be especially potent. For example, preventing major depression during a woman's pregnancy and the following year may have major effects on infant health and development.

Comparison should be made between the outcomes obtained in the health care setting and the original research. If possible, incidence and point prevalence data for the targeted disorders and conditions should be gathered on a periodic basis. Collection of additional data regarding distal effects, especially on general health and use of other medical services, is encouraged. These quantitative performance measures should be used to track progress over time toward each specific objective originally identified by the health care purchasers in collaboration with the behavioral health care organizations.

***(11) Documentation of the costs of risk assessments and prevention programs should be collected not only for the whole serviced population but also on an individual basis.***

Any future cost-savings analyses will require these figures.

The screening for risk factors will yield some positive cases of already existing disorder, and these individuals will be referred to treatment. Therefore, somewhat ironically, screening for prevention can result in higher treatment costs for the health care organization, and these extra costs need to be considered.

**Summary**

The use of the above step-by-step framework provides a reasonable assurance that the prevention services that are delivered will be of high quality and will be effective. The framework does presuppose that the health care organization has the capacity to carry out these tasks.

A social marketing approach will be needed to convince providers that preventive services and this framework for ensuring quality and effectiveness should be part of their contracts with health care organizations. Purchasers will need to be convinced that prevention programs: have face validity; have an attractiveness that will appeal to customers; have performance measures that can be quantified; have the potential to pay-off as investments; and have a sufficient universality that they will appeal across public and private sectors.