MMHAG Evidence-Based Model Benefit Set

Treatments and Necessary Supports for Mental and Co-Existing Chemical Health Disorders

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Final Version

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Guide to Proposed Minnesota Model Benefit Set

The proposed Model Benefit Set for mental health treatment was developed as a part of a broader effort to transform the system of care for children and adults in Minnesota into one that is consumer-centered and that provides quality care in the right place and at the right time. In addition to clinical services, the Model Benefit Set includes supportive services that are sometimes necessary to effective treatment. Both clinical and supportive services were selected based on documented and evidence-based mental health best practices. A broad base of Minnesota stakeholders (health plans, county, state, providers, parents, consumers, etc.) were involved in this effort.

The benefit set includes services that provide earlier help as well as services that offer alternatives that are just as effective as more costly acute care for some individuals. By offering a full continuum of care, it facilitates a system that has latitude and flexibility to meet consumer needs, which should lead to better outcomes and increased satisfaction. The intent is that **service provision should be based on medical necessity and in accordance with an individualized treatment plan approved by a physician or licensed practitioner**, excluding crisis services, for which a plan is not required.

The flexibility of the Model Benefit Set moves firmly in the direction of state-of-the-art research and understanding about how to facilitate quality care. As described in more detail below, benefits are intentionally not described as site- or provider-specific in order to allow the flexibility to provide the right care in the right place.

In addition, the Model Benefit Set provides a firm basis for a partnership between the public and private sectors to better meet consumers' needs. While it is silent as to who pays, it offers a framework for determining each sector's responsibility in providing the continuum of clinical services and community supports needed by those persons for whom it is responsible. Thus, the Model offers guidance for allocating limited resources to gain the best value for recipients, their families and society.

Finally, any Model Benefit Set is inevitably a work in progress. This is particularly true in the area of mental health where our knowledge of both mental health and effective treatments continues to evolve rapidly. It is important that this document be updated on an ongoing basis. In addition, a critical next step is to include chemical health treatments and necessary supports. Already Medicare, a key payor, makes no distinction between a chemical health diagnosis and any other mental health diagnosis. Creating two separate systems for funding billing and documentation further adds to the complexity of the system and is too often detrimental to consumers.

Grid

The complete Model Benefit Set is set forth in a grid on page 5. It is composed of:

- Standard Benefits—benefits that are currently covered now by most public and private payors;
- Recommended Benefits—to be added now;
- Recommended Benefits—to be added at the next implementation phase.

The following criteria guided decisions for selecting benefits recommended to be added now:

- Fills a critical service need or gap
- Promotes or enhances earlier intervention
- Was identified as priority by consumers or parents
- Promotes more efficient use of resources
- Supports or expands appropriate community-based care

It is important to note that some of these recommended benefits are already covered by many public and private sector payers, but they are less universally covered than the "Standard Benefits."

In the "evidence" column of the grid, each benefit is labeled either "standard," "logical," or "evidence."

- As noted above, standard benefits are those that are already widely accepted. The committee decided not to present evidence for these.
- Benefits which are less widely covered, but which the committee determined met the criteria for inclusion as part of an evidence-based model benefit set, are marked "evidence." Evidence for the effectiveness of all but three of these benefits can be found in this document.
- The remaining benefits are marked "logical" because they were deemed obviously important components of quality care. The logical benefits include community health maintenance services such as transportation to treatment for selected consumers (If a person is unable to physically get to the provider, providing transportation is logical because without it the individual cannot get better), and outreach to targeted populations (e.g. homeless).

Evidence Packet

The "Evidence Packet" provides information on each of the Recommended Benefits, including: a description of the benefit, the target population, intensity, provider qualifications, evidence of effectiveness and in some cases, information on cost savings.

In reviewing the Grid and Evidence Packet, please keep the following points in mind:

- With the exception of targeted prevention, all benefits and supportive services in the Model Benefit Set are intended to be provided <u>only</u> when they are deemed necessary to an individual's treatment plan. Not every consumer will get every service. Several benefits and supports are only appropriate for consumers with the most severe conditions.
- Benefits are intentionally <u>not</u> described as site-specific in order to allow the flexibility to provide the right care in the right place. Thus, the "right place" may be a home, school or community settings, depending on the consumer.
- Similarly, benefits are intentionally <u>not</u> described as provider-specific. For example, even though public health nurse home visiting is not specifically listed as a benefit, (because it is site- and provider-specific), it may be the very best

way to provide outreach to a severely depressed new mother. The Model Benefit Set provides for coverage of services provided by a public health nurse in the home or elsewhere when they are part of a plan of care or designed to promote earlier identification and intervention for at-risk populations.

- Benefits are not described in terms of how they are currently paid (e.g. Rule 79 Case management is not specifically listed because it defines a payment mechanism)
- Some benefits are recommended in the 'add later' group because the evidence about target population, key service components, etc. is still being gathered.
- Different systems have developed different ways of providing care coordination. This term is used to describe a wide range of care planning, service and payment coordination, and more. Some types of care coordination of more effective for specific target populations. To enhance clarity for the reader, care coordination evidence was separated into three categories – case management, wraparound, disease management.
- Chemical dependency benefits were only addressed when they involved co-occurring (co-morbid chemical dependency and mental disorder) disorders.
- The proposed Model Benefit Set is aligned with the President's New Freedom Commission report and with the key recommendations of the Minnesota Mental Health Action Group, co-chaired by the Commissioner of Human Services, Kevin Goodno, and Gary Cunningham of the Citizen's League.

Benefit	Covered Now		Add Now		Add Later		Evidence*
	Children	Adults	Children	Adults	Children	Adults	
ASSESSMENT							
Diagnostic and/or functional assessment, explanation of findings	X	X					Standard Practice
Psychological testing	X	X					Standard Practice
PSYCHOTHERAPY (individual, family and group)	X	X					Standard Practice
CLINICAL CASE CONSULTATION - psychiatrist			X	X			Evidence
CLINICAL CASE CONSULTATION - other mental health professionals					X	X	Evidence
CARE COORDINATION							
Case management			X	X			Evidence
Wraparound					X	X	Evidence
Disease management & client education			X	X			Evidence
INTEGRATED TREATMENT MODEL - Assertive Community Treatment			X	X			Evidence
COMMUNITY OUTPATIENT/TREATMENT SERVICES AND SUPPORTS							
Family psychoeducation			X	X			Evidence
Respite			X	X			Evidence
Child and adolescent rehabilitative services			X	n/a			Evidence
Adult rehabilitative services (employment supports, ind. living skills/remediation training, etc.)			n/a	X			Evidence
Day treatment	X	X					Standard Practice
Partial hospitalization	X	X					Standard Practice
Community health maintenance (support. housing (for adults); transportation to treatment)			X	X			Logical/Evidence
Community health maintenance (supportive employment; partial hosp lodging)					n/a	X	Logical/Evidence
Therapeutic foster care					X	n/a	Evidence
INTEGRATED TREATMENT FOR CO-OCCURRING MH/SA DISORDERS				X	X		Evidence
MEDICAL SERVICES							
Medication management	X	X					Standard Practice
Services provided by or under supervision of physician	X	X					Standard Practice
PSYCHOTROPIC MEDICATION	X	X					Standard Practice
EMERGENCY/CRISIS CARE							
24 hr. crisis phone consultation	X	X					Standard Practice
Crisis response (mobile outreach, crisis intervention counseling, crisis stabilizatn (incl. residential))			X	X			Evidence
Urgent care	X	X					Standard Practice
PSYCHIATRIC HOSPITALIZATION	X	X					Standard Practice
RESIDENTIAL MH TREATMENT	X						Standard Practice
PRE-DIAGNOSTIC SCREENING							
Prediagnostic MH screening (via multiple portals: primary care, public health, county ss, schools)			X	X			Evidence
SECONDARY PREVENTION							
Outreach					X	X	Logical
Targeted prevention (eg: primary care, public health, county soc. services, schools, incl. outreach)			X	X			Logical/Evidence

n/a = not applicable

Comments: The benefits a client receives will vary based on diagnosis, age, income (e.g. transportation), site, provider, length of service, etc. This benefit set is intended to result in a system where a client receives the most effective intervention in an appropriate setting, from an appropriate provider, at the right time, and for the appropriate length of time.

Clinical Case Consultation

DEFINITION/SERVICES
Consultation between a primary care provider and a mental health professional in which the mental health professional provides information or advice to the treating provider within the framework of an ongoing relationship between the specialist and primary care provider. Common topics of consultations are diagnosis, follow-up, treatment planning, and prognosis.[1] As distinct from a brief "hallway" conversation, this is a substantive, goal-oriented event that is documented. This is also not to be confused with case management, care coordination, and Wraparound, discussed elsewhere. Clinical case consultation is called liaison psychiatry in Britain, Australia and New Zealand, and is referred to as collaborative or shared care in Canada.

Consultation helps increase access to psychiatry for patients in the primary care setting, reduce stigma, and increase compliance with referral. It also leads to the transfer of knowledge and skill to the family physician, increases detection rates, facilitates earlier intervention, improves treatment outcomes, and makes better use of limited psychiatric resources.[2] This model may also have the stated goal of reducing referrals in cases of less severe illness and selectively encouraging referral of more serious disorders to psychiatry.[3]

Consultation may occur face to face, by telephone, through high quality real-time interactive telehealth, or by other electronic means.

Though the preference is for the consumer to be involved, in some cases he or she might not be able to or would prefer not to participate. If the consumer is not present, he or she should consent to the consultation and communication between professionals, and the results of the consultation should be explained to him/her.

CONSUMERS
Clinical case consultation is appropriate for consumers with less complex cases who are receiving mental health services from a primary care provider. For clients with serious, complex diagnoses, clear boundaries must be established to support primary care doctors who are providing routine medical services to clients who are under the care of a psychiatrist.

INTENSITY/DURATION OF SERVICE
An individual consultation may take less than 15 minutes and seldom would require more than 30 minutes, unless complex medical and psychiatric issues are involved. The duration of the consulting relationship varies with the complexity of the case and medical necessity. It may range from a single contact to periodic consultations over the lifetime of a consumer for the most severe cases.

TRAINING/CREDENTIALS REQUIRED TO PROVIDE
At a minimum, this benefit should include consultation between a primary care physician and a psychiatrist and those authorized to by Medicare to provide consultation services. Next, the benefit should be extended to include consultation between a primary care physician and other

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1 Davies JW, Ward WK, Groom GL, Wild AJ, Wild S. The case-conferencing project: a first step towards shared care between general practitioners and a mental health service. Aust N Z J Psychiatry 1997;31(5):751-5.

2 http://www.cpa-apc.org/Publications/CJP/supplements/april2002_sharedCare/chapter1References.asp

[3] Davies JW, Ward WK, Groom GL, Wild AJ, Wild S. The case-conferencing project: a first step towards shared care between general practitioners and a mental health service. Aust N Z J Psychiatry 1997;31(5):751-5.

mental health professionals as identified by the state and health plans, such as psychiatric nurse practitioners and PhD psychologists, based on evidence and need.

EVIDENCE OF EFFECTIVENESS/NEED

- Outcomes were satisfactory in 88% of cases using the liaison-attachment model.[4]
- An overwhelming number of consumers receive care from only their primary care physician, rather than from a psychiatrist. 60% of persons with mental health disorders receive their care from a primary care physician. Primary care physicians prescribe 80% of anti-depressants. 70-80% of children receive their anti-depressants from their primary care physician.
- A survey of 350 family practice physicians nationwide showed that 22.6% of their patients had *significant* psychiatric disorders.[5]
- In a US survey by Valenstein and others (1999), Michigan primary care physicians reported that they managed 30% of their depression patients in collaboration with other mental health care professionals, primarily psychologists.
- A study found that a substantial majority of general practitioners surveyed would welcome regular visits to their practice from a psychiatrist and that they desired consultation about assessment and treatment.6
- Family physicians spend up to 40% of their time dealing with emotional and psychiatric problems and may be the only caretaker for 60% of all episodes of psychiatric illness.7
- Barber and Williams (1996), Brown and Tower(1990), and Strathdee (1987) surveyed GPs in Australia and England to determine which components of collaborative care GPs and family physicians valued most. They found that 3 collaborative arrangements were consistently preferred: psychiatric assessment and short-term management by the psychiatrist, psychiatric assessment followed by GP management, and advice from the psychiatrist on nonreferred patients. The GPs in the Barber and Williams study (1996) perceived the benefits to be greater access to psychiatric care, improved communication, better coordination, continuity of care and follow-up, improved early detection, improved management of difficult and complicated patients, less stigma, a greater acceptance of psychiatric referral, improved competence and knowledge for GPs, and better availability of advice on nonreferred patients. Potential disadvantages cited included reduced choice of consulting psychiatrist, organization and administration problems in the primary care setting, concerns about cost-effectiveness, and inefficient use of GP or psychiatrist time. [8]
- A study in Canada found psychiatric consultations to be cost-effective. 9
- A study found that telephone advice from a psychiatrist enabled family physicians to handle cases more effectively, often reducing utilization of other mental health services and providing support that was not otherwise available.10

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4 Carr VJ, Donovan P. Psychiatry in general practice. A pilot scheme using the liaison-attachment model. Med J Aust 1992;156(6):379-82.

5 Orleans CT, George LK, Houpt JL, Brodie HK. How primary care physicians treat psychiatric disorders: a national survey of family practitioners. Am J Psychiatry 1985;142(1):52-7.

6 Brown LM, Tower JE. Psychiatrists in primary care: would general practitioners welcome them? Br J Gen Pract 1990;40(338):369-71.

[7] Kates N. Psychiatric consultation in the family physician's office. Advantages and hidden benefits. Gen Hosp Psychiatry 1988;10(6):431-7.

8 Davies JW, Ward WK, Groom GL, Wild AJ, Wild S. The case-conferencing project: a first step towards shared care between general practitioners and a mental health service. Aust N Z J Psychiatry 1997;31(5):751-5.

[9] Kates N. Psychiatric consultation in the family physician's office. Advantages and hidden benefits. Gen Hosp Psychiatry 1988;10(6):431-7.

10 Kates N, Crustolo AM, Nikolaou L, Craven MA, Farrar S. Providing psychiatric backup to family physicians by telephone. Can J Psychiatry 1997;42(9):955-9.

- U.S. physicians 34% cited lack of coordination and lack of collaboration with mental health specialists as an obstacle to providing care for patients with psychiatric illnesses. Other studies support these surveys, citing a need for better communication (Bindman and others 1997; Nazareth and others 1995; Watters and others 1994; Lipkin 1997; Lang and others 1997; Toews and others 1996), difficulties with access to psychiatric consultation (Watters and others 1994; Lipkin 1997), discontinuity of care and problems in role definition (Lang and others 1997; Lipkin 1997; Bindman and others 1997), and concerns about patient stigma (Craven and others 1996; Barber and others 1996; Strathdee 1987).[11]
- The referral and communication problems identified by numerous studies provide a compelling argument for more personal contact between family physicians and psychiatrists in the referral and discharge processes, particularly for more complex or urgent cases. They also suggest a need for more dialogue between hospital and academic departments and highlight opportunities to improve communication about patients through the development of locally designed, standardized guidelines for consultation letters.12
- Three options that appear to be particularly attractive to GPs and family physicians are assessment by the psychiatrist with treatment by the GP, assessment and short term treatment by the psychiatrist, and advice on nonreferred patients (Strathdee 1988; Brown and Tower 1990; Barber and Williams 1996; Watters and others 1994).
- Most primary care physicians have extremely minimal training in psychology and psychiatry, considerably less than they do in other specialties, such as endocrinology (such as for diabetes), where they are able to treat most cases and only need to refer the most severe cases.
- A University of North Carolina survey of primary care MDs, found that while about 70% said they prescribed anti-depressants to children and adolescents, only 18% said that they felt comfortable doing so, and only 6% felt that they had adequate training to do so.[13]
- Case consultation strategies can more effectively use the expertise of psychiatrists to improve primary care MD's ability to more effectively manage the care of patients with mental disorders, and helps prevent ineffective and/or inappropriate treatment.
- Payment for consultation will improve the ability of primary care physicians to provide care for those with mental disorders.
- This benefit is particularly important in areas where there is a shortage of psychiatry and other mental health professionals.
- The President's New Freedom Commission on Mental Health's final report suggests that collaborative care models should be widely implemented in primary health care settings and reimbursed by public and private insurers.

COST/COST SAVINGS

Costs will vary depending on the frequency and duration and complexity of service and the licensure of the mental health professional. The cost for a consultation with a psychiatrist, for example, might be similar to the cost of a medication management visit or diagnostic assessment.

Consultations will produce cost savings, will prevent use of ineffective treatments including use of medication at sub-optimal dosage or insufficient duration, improve compliance/adherence to

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11 Davies JW, Ward WK, Groom GL, Wild AJ, Wild S. The case-conferencing project: a first step towards shared care between general practitioners and a mental health service. Aust N Z J Psychiatry 1997;31(5):751-5.

12 Davies JW, Ward WK, Groom GL, Wild AJ, Wild S. The case-conferencing project: a first step towards shared care between general practitioners and a mental health service. Aust N Z J Psychiatry 1997;31(5):751-5.

[13] "Perils of Pills" *US News and World Report* (cover story) March 6, 2000

the treatment plan, and lead to better consumer outcomes. Improved treatment may even reduce the cost of treating physical symptoms of mental disorders.

This type of arrangement is cost effective as psychiatrists can advise on the care of far more patients than they could see in formal referrals, fewer patients are taken on for a course of psychiatric treatment that could be provided by general practitioners, and the skills of general practitioners and their trainees are enhanced.[14,15]

- A program that integrated psychiatric specialist service into primary care achieved an 18% decrease in hospital admissions over a two-year period.[16]
- The use of psychiatric consultation led to doubling of the prevalence of treated psychiatric disorder.[17]
- Following the introduction of a model of informal liaison among psychiatrists and general practitioners in Nottingham, England, the proportion of new and referred patients seen in primary care settings rose from 1% to 18% in Nottingham over an 8-year period, leading to a reduction in psychiatric outpatient clinics and a significant reduction in hospital admissions.[18]

RESOURCES/FOR ADDITIONAL INFO

Other collaborative/shared care models currently in use in Minnesota

- St. Cloud Hospital-Pediatric clinics – Contact: Dr. Read Sulik
- St. Mary's (Duluth) is implementing a case consultation model.
- A group called The Integrated Behavioral Health Care Collaboration has been meeting for over a year. The group is composed of family practice MD's, psychiatrists, Health Plan reps, MN. Health Department, DHS and U of MN. School of Medicine family practice division. Contact: John Scanlan, MD at Blue Cross Blue Shield of MN.

Resources

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The President's New Freedom Commission on Mental Health, Final Report, July '03, section 4.4
http://www.mentalhealthcommission.gov/

www.cpa-apc.org/publications/position_papers/shared.asp
http://www.cpa-apc.org/Publications/CJP/supplements/april2002_sharedCare/chapter1References.asp

Examples of programs that offer family physicians regular opportunities for case discussion can be found in Kates and others (1992) and Midgley and others (1996). Each report describes a simple method of increasing collaboration between family physicians and other mental health providers, often without the psychiatrist providing direct care.[19]

Collaborative care models have been designed specifically for pediatric (Subotsky and Brown 1990) and geriatric (Joseph and others 1995; Oxman 1996) populations, as well as for rural settings (Kaufmann 1993), but these appear to be rare.[20]

Only a few articles describe programs developed specifically to deal with those having serious mental illness (SMI). In addition to the initiatives of Warners and others (2000) and Essex and others (1990) described above, these include an innovative multidisciplinary program in Britain (Wilkinson and others 1995) that, like the Meadows (1998) Australian program, was able to transfer stable SMI patients to the primary care setting, with the GP as the main care provider, based on a model of frequent systematic assessments.[21]

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19 Davies JW, Ward WK, Groom GL, Wild AJ, Wild S. The case-conferencing project: a first step towards shared care between general practitioners and a mental health service. Aust N Z J Psychiatry 1997;31(5):751-5.
20 Davies JW, Ward WK, Groom GL, Wild AJ, Wild S. The case-conferencing project: a first step towards shared care between general practitioners and a mental health service. Aust N Z J Psychiatry 1997;31(5):751-5.
21 Davies JW, Ward WK, Groom GL, Wild AJ, Wild S. The case-conferencing project: a first step towards shared care between general practitioners and a mental health service. Aust N Z J Psychiatry 1997;31(5):751-5.

A note about the Care Coordination Sections

The following three sections (case management, wraparound, and disease management) fall under the umbrella of care coordination. Care coordination may include active engagement of consumer and family, care planning, assistance in accessing needed community resources and supports, monitoring progress, and coordinating payments and services. These services are provided to connect the consumer to appropriate services, increase consumer/family involvement in treatment planning, assist in transitions and support their functioning in the community.

Some types of care coordination are an expectation of good practice and are not reimbursed separately (i.e. written letter notifying other providers of service; exchange of consumer medical records; referral information given to consumer for other services.) Providers also often complete applications or make calls on behalf of consumers without separate reimbursement.

The following types of care coordination go beyond what a provider is expected to provide as part of treatment and warrant separate reimbursement:

- Case management
- Wraparound
- Disease management

These types of care coordination are discussed separately in the following three sections.

Case Management

DEFINITION/SERVICES
Case management is a collaborative process involving assessment, planning, brokering, coordinating and monitoring a multi-service plan to improve the overall level of functioning of the consumer and their family. It helps people arrange for appropriate services and supports. A case manager coordinates mental health, social work, educational, health, vocational, transportation, advocacy, respite care, and recreational services, as needed. The case manager makes sure that the changing needs of the consumer and family are met. The case manager may interact with teachers, day care providers, and others involved with the child. Case managers take on roles ranging from brokers of services to providers of clinical services. There is a considerable amount of variation in models of case management. Case Management should usually be adjunctive to other service/placement interventions.

Assisting young people with emotional and/or behavioral disturbances (EBD) in making a successful transition to adulthood and achieving their goals in the transition domains of education, employment, living situation, and community life is another important function of case management.

The President's New Freedom Commission on Mental Health recommends that Medicare, Medicaid, the Department of Veterans Affairs, and other Federal and State-sponsored health insurance programs and private insurers identify and consider payment for core components of evidence-based collaborative care, including case management and supervision of case managers.

CONSUMERS
- Consumers with complex cases and their families/caregivers who require intervention and advocacy to facilitate access to care

INTENSITY/DURATION OF SERVICE
- Varies depending on the needs of the consumer.

TRAINING/CREDENTIALS REQUIRED TO PROVIDE
- Varies

EVIDENCE OF EFFECTIVENESS
<u>Case management</u>
- A study of the Partner's Project in Oregon (Gratton et al., 1995) found at 1-year follow-up that children who received case management scored significantly higher on measures of social competence and had received more individualized, comprehensive services, and a greater degree of service coordination.
- A study evaluated a random sample of 199 children enrolled in CYICM (Evans et al., 1996b).
    - Findings at 3-year follow-up indicated significant behavioral improvements and decreases in unmet medical, recreational, and educational needs compared with findings at enrollment.
    - Children who had been in CYICM for 2 years spent fewer days in psychiatric hospitals and more days in community settings during the intervals between hospitalizations.
    - Although CYICM consumers spent more days in psychiatric hospitals before enrollment, they used significantly fewer inpatient services after enrollment than

did non-enrollees. CYICM consumers' hospital admissions declined fivefold after enrollment whereas among non-enrollees the decline in admission rates was less than half that value.

- Case management can be as effective for youth presenting with substance abuse problems as for youth presenting with other psychiatric disorders. (Evans et al., 1992).

Transition services

- Project RENEW, a demonstration project to improve transition outcomes for students with emotional disturbance or young adults with mental illness, provided comprehensive case coordination for the participants' ongoing education, employment, social/emotional development, and community adjustment. Youth and young adults participating improved in high school completion, re-enrollment in postsecondary education programs, hours worked per week, and in their hourly wages.[22]

COST/COST SAVINGS

- A study evaluated a random sample of 199 children enrolled in CYICM (Evans et al., 1996b). Children who had been in CYICM for 2 years spent fewer days in psychiatric hospitals and more days in community settings during the intervals between hospitalizations. CYICM consumers' hospital admissions declined fivefold after enrollment whereas among non-enrollees the decline in admission rates was less than half that value. This difference translated into a savings of almost $8,000,000 for New York State, where the project took place.

RESOURCES/FOR ADDITIONAL INFO

Case management

Armstrong, M.I., Gomez, A., Taub, J. (2001). The utilization of children's behavioral health treatment protocols in managed care. Florida Health Care Journal 2(2), 8-17.

Davis, M. (2002). Arrest Patterns into Adulthood of Adolescents with Serious Emotional Disability. In C. Liberton, K., Kutash, & R. Friedman (Eds.)., The 14th Annual Research Conference Proceedings, A System of Care for Children's Mental Health: Expanding the Research Base (March, 2001). Tampa, FL: Research and Training Center for Children's Mental Health. pp. 149-153.

Gomez, A. & Taub, J. (2000). Use of treatment protocols in managed care environments: A report to the State of Florida Agency for Health Care Administration. Tampa, FL: University of South Florida.

Hinden, B., Biebel, K., Nicholson, J., Mehnert, E., & Katz-Leavy, J. (2004). Building the evidence base: evaluation of the Invisible Children's Project. Annual Proceedings, A System of Care for Children's Mental Health: Expanding the Research Base, 16th Annual Research Conference

Nicholson, J. & Biebel, K. (2002). The tragedy of missed opportunities: What providers can do. Community Mental Health Journal, 38(2), 167-172.

Rapp, C.A. (1998). The Active Ingredients of Effective Case Management: A Research Synthesis. Community Mental Health Journal, 34(4). http://www.socwel.ku.edu/mentalhealth/Resource%20Guide/resource%20guide.htm

Rapp, C. A. (1998). The Strengths Model: Case Management with People Suffering from Severe and Persistent Mental Illness. New York: Oxford University Press. http://www.socwel.ku.edu/mentalhealth/Resource%20Guide/resource%20guide.htm

Rapp, C.A. (1998). The Active Ingredients of Effective Case Management: A Research Synthesis. Community Mental Health Journal 34(4). http://www.socwel.ku.edu/mentalhealth/Resource%20Guide/resource%20guide.htm

Rapp, C. A., & Kisthardt, W. E. (1996). Case management with persons with severe and persistent mental illness. In Carol Austin (Ed.), Perspective on Case Management Practice. Families International Inc., Chapter 2, 17-45. http://www.socwel.ku.edu/mentalhealth/Resource%20Guide/resource%20guide.htm

Ridgway, P., & Moore, J. (1996). Case Management with Severe Psychiatric Disabilities: An Annotated Bibliography. (30 pages). http://www.socwel.ku.edu/mentalhealth/Resource%20Guide/resource%20guide.htm

[22] "Interagency Collaboration and the Transition to Adulthood for Students with Emotional or Behavioral disabilities" pages 303-320, JoAnne M Malloy, Keene State College.

Taub, J., Tighe, T. & Burchard, J. D. (2001). The relationship between parent empowerment and child mental health outcomes for children receiving comprehensive mental health services. Children's Services: Social Policy, Research and Practice, 4(3), 103-122.

Taub, J., Gomez, A. & Armstrong, M. I. (2002). Use of clinical practice guidelines in managed care environments: Policy, practice and clinical utility. Fourteenth Annual Research Conference Proceedings: A System of Care for Children's Mental Health: Expanding the Research Base. Tampa, FL: University of South Florida. http://www.air.org/tapartnership/resources/WhatWorks.asp

Vander Stoep, A., Evens, C., & Taub, J. (1997). Risk of Juvenile Justice System referral among children in a public mental health system. Journal of Mental Health Administration, 24(4), 428-442.

Transition services

Bridgeo, D., Davis, M. & Florida, Y. (2000). Transition coordination; Helping youth and young adults pull it all together. In H. B. Clark and M. Davis, (Eds.).

Clark, H. & Davis, M., Eds. (2000). Transition to Adulthood: A Resource for Assisting Young People with Emotional or Behavioral Difficulties. Baltimore: Paul H. Brookes, Co.

Davis, M. (2001). Transition Supports To Help Adolescents in Mental Health Services. Alexandria, Virginia: National Association of State Mental Health Program Directors.

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Davis, M. (2003). Addressing the needs of youth in transition to adulthood. Administration and Policy in Mental Health, 30, 495-509.

Davis, M. & Vander Stoep, A. (1997). The transition to adulthood among children and adolescents who have serious emotional disturbance Part 1: Developmental transitions. Journal of Mental Health Administration, 24(4), 400-427.

Interventions for Children With or At-Risk for Emotional and Behavioral Disorders Funding Transition Services: A Survey of Funding Mechanisms Being Used to Address the Needs of Youth and Young Adults with EBD

National Technical Assistance Center for State Mental Health Planning (NTAC)

Ryan, A.K. (2001). Strengthening the safety net: How schools can help youth with emotional and behavioral needs complete their high school education and prepare for life after school. Burlington, VT: School Research Office, University of Vermont.

Service Systems Supports During the Transition from Adolescence to Adulthood: Parent Perspectives (NTAC, June 2002 - Adobe PDF)

State Efforts to Expand Transition Supports for Adolescents Receiving Public Mental Health Services (NTAC, December 2001 - Adobe PDF)

SAMHSA's National Mental Health Information Center
http://ntacyt.fmhi.usf.edu/index2.cfm

Zebley, L., Boezio, C., Carlson, L., & Chamberlain, R. (1996). A study of mental health services to young adults in transition. Lawrence, KS: The University of Kansas School of Social Welfare. http://www.socwel.ku.edu/mentalhealth/Resource%20Guide/resource%20guide.htm

Wraparound

DEFINITION
Wraparound is a type of care coordination which utilizes a team-based approach to implementing individualized, comprehensive services within a system of care for youth with complicated multi-dimensional problems and their families. Providers and families work together in teams based on a partnership with equity, mutual problem-solving and consensus decision-making. It places the child and family at the center of an array of coordinated health and mental health, educational, and other social welfare services and resources, which a case manager wraps around the consumer and family. [23] The family is actively involved in treatment planning.

CONSUMERS
Children with intense, complex needs and their families

INTENSITY/DURATION OF SERVICE
Wraparound is intended to be an individualized approach so the length of service and frequency of meetings would be dictated by the child and families needs and could vary widely. The length of time a child receives services could range from a few months to years in the most serious cases. The team will generally need to meet more frequently at first and also during times of crisis. Any regular schedule of meeting – quarterly or biennially – would be a local choice and not inherent in the model.

TRAINING/CREDENTIALS REQUIRED TO PROVIDE
The team consists of the child, family, those who are close to the family such as friends, neighbors and extended family members, as well as the necessary providers (i.e. case manager, psychiatrist, psychologist, other therapists, teachers, etc.)[24]

EVIDENCE OF EFFECTIVENESS
Wraparound has been proven particularly useful for children and adolescents with severe emotional and behavioral problems. This practice was highlighted as one of the most promising in the U.S. Surgeon General's and the President's New Freedom Commission on Mental Health's reports.

The following results are from the Wraparound Milwaukee 2002 Annual Report.

- Youth enrolled for one year or more in Wraparound Milwaukee functioned better in school, at home and in the community upon dis-enrollment.
- The average number of youth in costly RTC placement dropped from 80 at the beginning of 2002 to 42 at the end of 2002.
- There was a significant reduction in percentage of consumers referred for felonies and misdemeanors. 3 years prior to dis-enrollment 56% of consumers committed felonies with only 33% 3 years following dis-enrollment. 79% of consumers 3 years prior to dis-enrollment committed misdemeanors down to 43% 3 years following dis-enrollment.

Findings from other wraparound models

- The Fostering Individualized Assistance Program (FIAP) was compared with standard foster care in a randomized trial involving 131 children and their families (Clark et al., 1998). Children in the FIAP group were: less likely to change placements; less likely to run away; absent from school less often; spent

[23] Burns & Goldman, 1999
[24] Burns & Goldman, 1999

fewer days suspended; and showed more overall improvement than did youth in standard foster care. Boys in the group reported better social adjustment and fewer delinquencies.

- Studies, although using uncontrolled methods, offer emerging evidence of the potential effectiveness of case management using a wraparound process.[25]
- In a randomized trial in New York, children were assigned to either a wraparound approach (FCICM) or Family-Based Treatment, which included training, support, and respite care for foster families but did not include case managers. The findings at 18 months (or at discharge) indicated that children in (FCICM) had significantly fewer behavioral symptoms and significantly greater improvements in overall functioning than those in Family-Based Treatment.[26]

COST/COST SAVINGS

- The average cost of wraparound = $4350/month as opposed to over $7300/month for RTC or $6000/month if placed in a juvenile facility.
- In a randomized trial in New York, children were assigned to either a wraparound approach (FCICM) or Family-Based Treatment, which included training, support, and respite care for foster families but did not include case managers. The average annual cost of FCICM was less than half that of Family-Based Treatment.[27]

RESOURCES/FOR ADDITIONAL INFO

http://www.mentalhealth.samhsa.gov/cmhs/ChildrensCampaign/1998execsum4.asp

http://childparenting.about.com/cs/supportparents/

http://bipolar.about.com/library/blmisc/bl-sgchildpan3.htm?terms=mental+health+wraparound+services

From the Surgeon General's Report:
http://mentalhealth.about.com/library/sg/chapter3/blsec7.htm#newer

http://cecp.air.org/promisingpractices/Default.htm Then choose volume 1, 2001 (need acrobat reader)

http://cecp.air.org/AIR_Monograph.pdf

http://www.phsi.harvard.edu/health_reform/imhc/Wraparound_milwaukee.pdf

Wraparound Milwaukee: http://www.reclaimingfutures.org/solution_ws.asp

[25] Burns & Goldman, 1999
[26] Family Centered Intensive Case Management, Evans et al., 1996a
[27] Family Centered Intensive Case Management, Evans et al., 1996a

Disease Management & Client Education

DEFINITION
A system of coordinated health care interventions and communications for populations in which consumer self-care efforts are significant to maintaining their health. Also called illness management or recovery management.

The goals of disease management and client education programs are to help people:

- Learn about their mental illness and strategies for treatment
- Decrease symptoms
- Reduce relapses and hospitalizations
- Make progress towards goals and towards recovery

Disease management interventions should be aimed at addressing one or more of the following goals:

- Improving consumer self-care through such means as education, monitoring, and communication
- Improving physician performance through feedback and/or reports on the consumer's progress in compliance with protocols
- Improving communication and coordination of services between consumer, physician, disease management organization, and other providers
- Improving access to services, including prevention services and prescription drugs

SERVICES

- Identification of consumers
- Use of evidence-based practice guidelines
- Supporting adherence to evidence-based medical practice guidelines by providing medical treatment guidelines to physicians and other providers, reporting on the consumer's progress in compliance with protocols, and providing support services to assist the physician in monitoring the consumer.
- Routine reporting/feedback loop
- Collection and analysis of process and outcomes measures
- Services/education designed to enhance consumer self-management and adherence to his or her treatment plan
    - Recovery strategies
    - Practical facts about mental illness
    - Building social support
    - Using medication effectively
    - Reducing relapses
    - Coping with stress
    - Coping with problems and symptoms
    - Getting your needs met in the mental health system

The President's New Freedom Commission on Mental Health recommends that Medicare, Medicaid, the Department of Veterans Affairs, and other Federal and State-sponsored health insurance programs and private insurers identify and consider payment for core components of evidence-based collaborative care, including disease management.

CONSUMERS
Consumers with severe, chronic conditions who can reduce risk of acute episodes with proper disease management. Disease management also often involves families. Family is defined as anyone committed to the care and support of the person with mental illness, regardless of whether they are related or live in the same household. Consumers with severe mental illnesses or behavioral disorders such as schizophrenia, schizoaffective disorder, bipolar illness, or major depression benefit the most.

INTENSITY/DURATION OF SERVICE
The intensity of the service mirrors the complexity of the case. For example, a consumer with minor depression may receive basic guidance and/or some printed materials, while consumers with more severe conditions may receive one or more brief (one-hour) sessions or weekly sessions lasting between two to six months. Consumers with the most severe cases may receive ongoing disease management services.

TRAINING/CREDENTIALS REQUIRED TO PROVIDE
Varies depending on intensity of service. Some client education is delivered based on a pre-determined curriculum. Therefore, some less intense disease management can be provided by a peer trained in the use of the materials. More severe cases may require a public health nurse, or a mental health professional or practitioner competent in disease management.

EVIDENCE OF EFFECTIVENESS

- It is now recognized that people with mental illness can participate actively in their own treatment and can become the most important agents of change for themselves. Illness management skills, ranging from greater knowledge of psychiatric illness and its treatment to coping skills and relapse preventions strategies, play a critical role in people's recovery from mental illness.
- Research on illness management for persons with severe mental illness, including 40 randomized controlled studies, indicates that psychoeducation improves people's knowledge of mental illness; that behavioral tailoring helps people take medication as prescribed; that relapse prevention programs reduce symptom relapses and re-hospitalizations; and that coping skills training using cognitive-behavioral techniques reduces the severity and distress of persistent symptoms.
- In controlled studies of relapse prevention – "…two of the five …included groups to train relatives to help in the identification of early warning signs of relapse…This benefit of involving relatives in relapse prevention programs is consistent with research that shows that family intervention is effective in preventing relapses.
- Kids were reported to be more concerned about staying on their meds and not going off than their parents were, suggesting the child involvement in all this is more important than may have been assumed.
- Adult depression consumers receiving nurse telehealth care in addition to starting anti-depressant treatment showed better outcomes on two depression measures and reported higher satisfaction than consumers starting anti-depressant medication alone.[28]
- Multi-faceted intervention consisting of collaborative management by the primary care physician and a consulting psychiatrist, intensive consumer education, and surveillance of continued refills of anti-depressant medication improved adherence to anti-depressant regimens in consumers with major and minor depression. Consumers with major, but not

[28] Hunkeler, EM et al. Efficacy of nurse telehealth care and peer support in augmenting treatment of depression in primary care. Arch Fam Med 2000; 9(8): 700-708

minor, depression in the intervention group showed more favorable outcomes and reported increased satisfaction with care.[29]

- Intervention consumers received a structured depression treatment program in the primary care setting that included both behavioral treatment to increase use of adaptive coping strategies and counseling to improve medication adherence. Control consumers received "usual" care by their primary care physicians. At 4-month follow-up, significantly more intervention consumers with major and minor depression than usual care consumers adhered to anti-depressant medication and rated the quality of care they received for depression as good to excellent. Intervention consumers with major depression demonstrated a significantly greater decrease in depression severity over time compared with usual care consumers on all 4 outcome analyses.[30]
- A group of 228 consumers recognized as depressed by their primary care physicians and given antidepressant medication were randomized to a collaborative care intervention (n = 114) or usual care (n = 114) by the primary care physician. Consumers in the intervention group received enhanced education and increased frequency of visits by a psychiatrist working with the primary care physician to improve pharmacologic treatment. Those in the intervention group had significantly greater adherence to adequate dosage of medication for 90 days or more and were more likely to rate the quality of care they received for depression as good to excellent compared with usual care controls. Intervention consumers showed a significantly greater decrease in severity of depressive symptoms over time and were more likely to have fully recovered at 3 and 6 months.[31]
- Three hundred eighty-six consumers with recurrent major depression or dysthymia who had largely recovered after 8 weeks of antidepressant treatment by their primary care physicians were randomized to a relapse prevention program (n = 194) or usual primary care (n = 192). Consumers in the intervention group received 2 primary care visits with a depression specialist and 3 telephone visits over a 1-year period aimed at enhancing adherence to antidepressant medication, recognition of prodromal symptoms, monitoring of symptoms, and development of a written relapse prevention plan. Those in the intervention group had significantly greater adherence to adequate dosage of anti-depressant medication for 90 days or more within the first and second 6-month periods and were significantly more likely to refill medication prescriptions during the 12-month follow-up compared with usual care controls. Intervention consumers had significantly fewer depressive symptoms, but not fewer episodes of relapse/recurrence over the 12-month follow-up period.[32]
- In depressed high utilizers *not* in active treatment, a systematic primary care-based treatment program can substantially increase adequate anti-depressant treatment, decrease depression severity, and improve general health status compared with usual care.[33]
- In two studies of more intensive depression treatment in primary care, consumers initiating anti-depressant treatment were randomly assigned to either usual care or to a collaborative management program including consumer education, on-site mental health treatment, adjustment of antidepressant medication, behavioral activation and monitoring

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[29] Katon W et al. Collaborative management to achieve treatment guidelines. Impact on depression in primary care. JAMA 1995; 273: 1026-1031.

[30] Katon W, Robinson P, Von Korff M, Lin E, Bush T, Ludman E et al. A multifaceted intervention to improve treatment of depression in primary care. Arch Gen Psychiatry 1996; 53(10): 924-932.

[31] Katon W, Von Korff M, Lin E, Simon GE, Walker E, Unutzer J, et al. Stepped collaborative care for primary care patients with persistent symptoms of depression: A randomized trial. Arch Gen Psychiatry 1999; 56: 1109-1115.

[32] Katon W, Rutter C, Ludman EJ, VonKorff M, Lin E, Simon , et al. A randomized trial of relapse prevention of depression in primary care. Arch Gen Psychiatry 2001; 58: 241-247.

[33] Washington, DC: The Institute on Health Care Costs and Solutions; July/August 2002;1(2):1.
Katzelnick DJ, Simon GE, Pearson SD, Manning WG, Welstad CP, Henk JL et al. Randomized trial of a depression management program in high utilizers of medical care. Arch Fam Med 2000; 9(4): 345-341.

of medication adherence. More effective acute-phase depression treatment reduced somatic distress and improved self-rated overall health.[34]

- In a study of adult consumers with Generalized Anxiety Disorder (GAD) and clinically significant anxiety secondary to Major Depressive Disorder (MDD) treated in an integrated model, the intervention cohort experienced significantly improved reduction in symptoms of anxiety at 6 months. The intervention cohort also was significantly more satisfied with care.[35]

COSTS/COST SAVINGS

Disease management yields the greatest cost savings with consumers with severe, chronic conditions which can worsen into acute episodes requiring emergency services or hospitalization, such as schizophrenia, bipolar disorder, and major depression. Proper management of these conditions can help reduce need/use of costly services.

RESOURCES/FOR ADDITIONAL INFO

Ascher-Svanum H, Rochford S, Cisco D, Claveaux A. Patient education about schizophrenia: initial expectations and later satisfaction. *Issues Ment Health Nurs.* 2001; 22: 325–333.

Boost outcomes and slash hospitalization with aggressive approach to schizophrenia. *Healthc Demand Dis Manag.* 1998;4(5):72–75.

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Lehman AF, Steinwachs DM. Translating research into practice: the Schizophrenia Patient Outcomes Research Team (PORT) treatment recommendations. *SchizophrBull.* 1998;24:1–10.

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National Pharmaceutical Council. Medicaid disease management & health outcomes. Available at: http://www.dmnow.org/. Accessed November 17, 2003. Nash DB, Clarke JL. *Issue Brief: Disease Management.*

Telephone support service helps keep schizophrenics on track. *Healthc Demand Dis Mang.* 1997;3(6):91–93.

[34] Simon GE, Katon W, Rutter C, VonKorf M, Lin P, Robinson P et al. Impact of improved depression treatment in primary care on daily functioning and disability. Psychol Med 1998; 28(3): 693-701.

[35] Price D, Beck A, Nimmer C, Bensen S. The treatment of anxiety disorders in a primary care HMO setting. Psychiatr Q 2000; 71(1): 31-45.

Integrated Treatment Model – Assertive Community Treatment

DEFINITION

Assertive Community Treatment (ACT) is a service delivery model that provides comprehensive, highly individualized, locally-based treatment to people with serious and persistent mental illnesses who are high utilizers of care. Unlike other community-based programs, ACT is not a linkage or brokerage case-management program that connects individuals to mental health, housing, or rehabilitation agencies or services. Rather, ACT recipients receive the multidisciplinary, round-the-clock staffing of a psychiatric unit within the comfort of their own home and community. The hallmark of assertive community treatment is an interdisciplinary team of usually 10 to 12 professionals who share a caseload of approximately 100 consumers, including case managers, a psychiatrist, several nurses and social workers, vocational specialists, substance abuse treatment specialists, and peer specialists. Consumers do not access providers outside of the team unless specialty care is needed. Team members collaborate on assessments, treatment planning, and day-to-day interventions.[36]

Integrated treatment teams provide case management, treatment, rehabilitation, and support services.[37] ACT strives to lessen or eliminate the debilitating symptoms of mental illness each individual consumer experiences and to minimize or prevent recurrent acute episodes of the illness, to meet basic needs and enhance quality of life, to improve functioning in social and school/employment roles, to enhance an individual's ability to live in his or her own community, meet their basic needs, stay out of the hospital, and lessen the family's burden of providing care.

SERVICES MAY INCLUDE

Treatment:

- Psychopharmacologic treatment
- Individual supportive therapy
- Initial and ongoing assessments
- Mobile crisis intervention
- Hospitalization
- Substance abuse treatment, including group therapy (for consumers with a dual diagnosis of substance abuse and mental illness)
- Assistance with managing symptoms
- Attention to health care needs

Rehabilitation:

- Behaviorally-oriented skill teaching (supportive and cognitive-behavioral therapy), including structuring time and handling activities of daily living
- Supported employment, both paid and volunteer work
- Support for resuming education

Support services:

- Support, education, and skill-teaching to family members
- Collaboration with families and assistance to consumers with children
- Community integration (encouraging participation in community activities)

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[36] Scott & Dixon, 1995b

[37] http://www.nami.org/Template.cfm?Section=ACT-TA_Center&template=/ContentManagement/ContentDisplay.cfm&ContentID=8075

- Direct support to help consumers obtain legal and advocacy services, financial support, supported housing, money-management services, and transportation

CONSUMERS
Older adolescents and adults who have a serious mental illness and significant functional impairments who are not helped by traditional outpatient models or targeted case management, or who have limited understanding of their need for help. Persons served by ACT often have co-existing problems such as homelessness, substance abuse, or involvement with the judicial system and have high utilization patterns of inpatient and emergency room services.

INTENSITY/DURATION OF SERVICE
24/7 availability whenever and wherever needed. No arbitrary time limits on the length of time an individual receives services. May be gradually reduced or dropped if clear improvement.

TRAINING/CREDENTIALS REQUIRED TO PROVIDE
A team of professionals including case managers, a psychiatrist, several nurses and social workers, vocational specialists, substance abuse treatment specialists, and peer specialists. To ensure that services are highly integrated, team members are cross-trained in each other's areas of expertise to the maximum extent possible. ACT must comply with a set for nationally recognized fidelity standards to assure adherence to the model.

EVIDENCE OF EFFECTIVENESS

- Researchers have found that compared to traditional approaches to care (usually brokered or clinical case management programs), ACT results in: lower use of inpatient services; better quality of life; more independent living; increased residence stability; better substance abuse outcomes (when a substance abuse component is included); higher rates of competitive employment (when a supported employment component is included); more positive social relationships; greater consumer and family member satisfaction; and fewer symptoms.[38],[39]
- In one study, only 18 percent of ACT consumers were hospitalized the first year compared to 89 percent of the non-ACT treatment group. For those ACT consumers that were re-hospitalized, stays were significantly shorter than stays of the non-ACT group. ACT consumers also spend more time in the community, resulting in less burden on family.[40]
- Preliminary results suggest that employing peer (i.e., consumer) or family outreach workers on the multidisciplinary assertive community treatment teams increases positive outcomes[41] and creates more positive attitudes among team members toward people with mental illnesses.
- Program of Assertive Community Treatment consumers are reported to be employed at a significantly higher rate and higher level than the national average, with 40% to 50% of PACT consumers employed at any given time and 80% engaged in vocational interventions. It is believed that services offered maximize the chance that each consumer will find employment that meets his or her own abilities and preferences.[42]
- Assertive community treatment models are generally popular with consumers (Stein & Test, 1980) and family members (Flynn, 1998).

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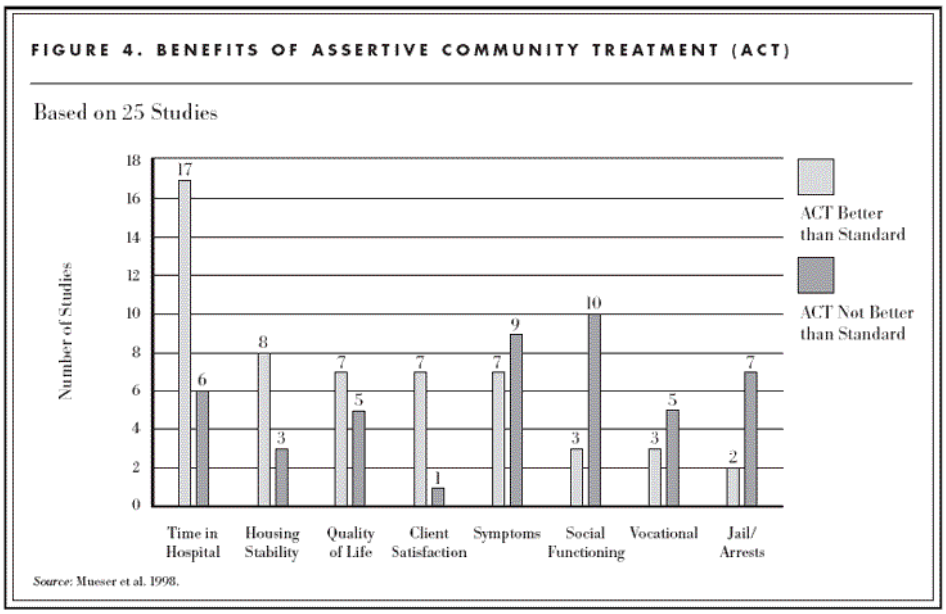
[38] http://www.mentalhealthpractices.org/pdf_files/act_pmha.pdf
[39] Stein & Test, 1980; Bond et al., 1995; Lehman, 1998; Mueser et al., 1998a
[40] Mueser et al., 1998b
[41] Dixon et al., 1997, 1998
[42] Test, Knoedler, Allness, and Senn-Burke, 1985 Madison, WI



Source: http://www.milbank.org/reports/2004lehman/2004lehman.html

COST/COST SAVINGS

Cost Summary[43]

- One ACT team serves one specific group of consumer/participants. The cost formula would run $800,000.00 to $1,000,000.00 = 100 consumers = 10 - 12 staff for one year.
- Beyond the one-time start-up expenses (consultation on design, training of team, training of supervisory mental health authority) of $25,000 to $50,000, the program's ongoing funding mechanisms are the same as those currently being utilized: Medicaid, Medicare, mental health block grant funds, state and county mental health funds, and in some states tobacco settlement funds.

Cost savings

- Some of the specific, concrete realized savings from ACT are in the tremendous reduction of time that ACT consumers spend in institutional settings (psychiatric hospitals, or psychiatric wards in med/surg hospitals). In higher fidelity (to the model) programs, hospital days are reduced by 23% over those plans that attempt to do "ACT-like" models or traditional office-based care.[44]
- Extensive studies in public and non-profit agencies have shown ACT to be the most cost-effective option for treating populations with serious illnesses and disabilities now being enrolled in Medicaid managed behavioral health plans.[45]
- Santos et al. concluded that the cost per consumer per year for hospital care in 1993 was $18,800 (plus) the cost of traditional outpatient care. That overall cost in hospital care

[43] The NAMI ACT Technical Assistance Center http://www.nami.org/Template.cfm?Section=ACT-TA_Center&template=/ContentManagement/ContentDisplay.cfm&ContentID=4315

[44] Economic Impacts of Assertive Community Treatment: A Review of the Literature by Eric Latimer, Ph.D. in The Canadian Journal of Psychiatry, Vol. 44, June 1999.

[45] Hughes, William *Health & Social Work*, May, 1999

dercreased to $11,300 once ACT teams were in place in the community shows a reduction of 40% in dollars spent on hospital care.

- In the published findings on the cost-effectiveness of ACT as compared with standard case management as conducted by Susan Essock, et al. there was no difference in cost to the public mental health system, the state or society between ACT and case management. In particular, the evidence showed that ACT teams increased consumers days in the community as opposed to days in the hospital and those savings on hospital bed days offset the additional costs associated with ACT.
- In 1999, a study of capitated ACT services was published by Daniel Chandler, et al. The conclusion was that with a capitated ACT system, the per person gross costs were 25% lower and the net costs were 67% lower than the comparison group receiving traditional services through Alameda County (CA). Again, the largest savings came from the reduction in consumers recycling through and lengths of stay in hospitals.[46]
- Summaries say that this work promotes better clinical outcomes, satisfaction and higher rates of recovery, reduces hospitalization and thus reduces costs. One study said that for every $1 in costs for this group service, there was a $34 savings in hospital costs and in Maine there was an average net savings of $4300 per consumer per year over two years. Rates of hospitalization are reduced in the range of 50-75% depending on the study.
- In detailed studies of high fidelity ACT models vs. Intensive Case Management models of service delivery, the evidence has been that to break even, or experience savings, PACT should be the program of choice for consumers who have been high users of hospital services.[47]
- These costs are offset by the fact that the ACT model replaces several existing, fractured services and programs currently used by the consumers.
- The ACT model has shown a small economic advantage over institutional care (Mueser et al., 1998b).
- The PACT Progress and Evaluation Report by the Oklahoma Department of Mental Health and Substance Abuse Services reduced consumer hospitalization 93% over its first six months of operation, resulting in savings of over $683,000. PACT also transitioned 228 of these 32 consumers to more independent housing situations in that short time. [48]
- In well-implemented ACT programs serving high at-risk populations, ACT has been found in rigorous economic studies to be cost-effective, because the costs of ACT services are offset by hospitalization costs.[49]
- Because of the intensity of services, ACT is most cost-effective when targeted to individuals with the greatest service need, particularly those with a history of multiple hospitalizations.[50]

OTHER

Many governmental agencies and professional organizations have issued practice guidelines strongly recommending ACT as a fundamental element in the service system.

- In 1999, President Clinton directed the Health Care Financing Administration to authorize ACT as a Medicaid-reimbursable treatment.
- In 2000 the Surgeon General's Report endorsed ACT as an essential treatment for severe mental illness.

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[46] Psychiatric Rehabilitation Journal, spring 1999,Vol. 22 no. 4

[47] Lattimer, June 1999

[48] NAMI 2002 press release "PACT Program in Oklahoma Has Exceeded Expectations in Cost Saving and Quality of Care for the Severely Mentally Ill"

[49] NAMI advocate 2003 www.nami.org

[50] Scott & Dixon, 1995b; Lehman & Steinwachs et al., 1998a

- NAMI has made the dissemination of ACT throughout the United States a top priority.
- ACT has been instituted as the primary system of care for persons with severe mental illness in 13 states.
- The U.S. Substance Abuse and Mental Health Services Administration uses ACT services accessibility as one of three best-practice measures of a state's mental health system.[51]
- Experts convened by the Robert Wood Johnson Foundation identified ACT as one of six evidence-based treatments for severe and persistent mental illness.[52]

RESOURCES/FOR ADDITIONAL INFO

ACT with teenagers http://psych.iupui.edu/ACTCenter/ACTEvid.htm#_What_Does_ACT

ACT in a Rural Setting? *Winter 2003 NAMI ADVOCATE www.nami.org*

Salkever D, Domino ME, Burns BJ, et al. Assertive community treatment for people with severe mental illness: the effect on hospital use and costs. *Health Serv Res.* 1999;34:577–601.

www.mentalhealthpractices.org/act_about.html

http://www.mentalhealthpractices.org/act_articles.html

http://www.nami.org/Template.cfm?Section=ACT-TA_Center

http://www.actassociation.org/resources/

[51] Nami.org
[52] http://www.nami.org/Template.cfm?Section=ACT-TA_Center&template=/ContentManagement/ContentDisplay.cfm&ContentID=8075

Family Psychoeducation

DEFINITION
Family psychoeducation is a method of working in partnership with consumers, families, and supporters to help them develop improved coping skills for handling problems posed by mental illness or behavioral disorders in their family and also skills for supporting the recovery of their loved one. It respects and incorporates individual, family, and cultural realities and perspectives. It is a flexible approach designed to adapt to the needs of the family. It focuses on presenting behaviors and discussion/recommendations, not specific treatment plan goals based on a formal evaluation. The main outcomes are to address presenting behavioral issues or immediate functional needs through a problem solving and resource identification approach. Families help create an optimal home and social environment for the individual with mental illness, as a key aspect of recovery.

SERVICES MAY INCLUDE
Through relationship-building and alliance, education, collaboration, problem-solving, and an atmosphere of hope and partnership, family psychoeducation helps consumers and their families and supporters with: [53]

- Learning about the illness, warning signs, types of interventions, and possible outcomes
- Learning about family reactions, and feelings of loss and/or grief
- Learning useful coping skills and strategies to manage stress and ensure safety
- Identifying strategies for handling difficulties by making use of effective behavioral, cognitive, and communication techniques
- Creating an optimal environment for recovery
- Creating social and support groups and identifying resources available to the family
- Providing encouragement and focusing on the future
- Problem-solving sessions for coping with difficult presenting situations

CONSUMERS
Families of individuals (adults and children) with mental illness/emotional or behavioral disorders. Family is defined as those persons committed to the care and support of the person with mental illness, regardless of whether they are related or live in the same household. With the consumer's consent, families participate in the treatment team's decision-making processes about the individual's case, living situation, and recovery while being guided by the individual consumer's wishes and perspective. Consumers and families of consumers with severe mental illnesses such as schizophrenia or schizoaffective disorder bipolar illness, major depression, or borderline personality disorder benefit the most from family psychoeducation.[54] [55] However, brief care consultations with family caregivers upon discharge or at other critical times in an episode of care are also effective.

INTENSITY/DURATION OF SERVICE
Time limited. Varies between one or more brief (one-hour) sessions to weekly sessions lasting between two to six months, or monthly sessions for up to two years for the most severe cases.

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[53] http://www.dartmouth.edu/~westinst/fpe.htm
[54] http://www.mentalhealthpractices.org/pdf_files/fpe_pmha.pdf
[55] http://www.dartmouth.edu/~westinst/fpe.htm

TRAINING/CREDENTIALS REQUIRED TO PROVIDE

Varies depending on intensity of service. Family psychoeducation is provided by professionals and is often curriculum-based. More severe cases might require a mental health professional, practitioner, or public health nurse competent in family psychoeducation. Treatment may be carried out in multi-family groups.

EVIDENCE OF EFFECTIVENESS

- Consumers have markedly fewer symptoms, higher success with employment, and improved family relationships, while families experience markedly lower stress and medical illness. Recent studies have shown employment rate gains of two to four times baseline levels, especially when combined with supported employment, another EBP. [56]
- Family psychoeducation programs have provided the psychosocial supports consumers need to extend recovery, re-enter the work force, and develop social skills.
- Families report a decrease in feeling confused, stressed, and isolated.
- The involvement of families in a child's care can lead to a reduction in problem behaviors, teach new skills, and increase the intensity of treatment. Family involvement is critical for kids' ability to maintain and generalize new skills they've learned. [57] Most importantly, families are best positioned to provide the most opportunities for moments of natural learning.[58]
- Research on the process and outcome of parent education or training programs over the past 20 years suggests that compared to other kinds of psychotherapeutic interventions, the former produces more consistently positive outcomes and is more economical of professional time and consumer cost.[59]
- Caregiver strain is more potent than other family variables (e.g., caregiver psychological distress, family functioning, demographic characteristics) for predicting children's service use and utilization patterns. Child symptomatology and functional impairment are the strongest predictors of caregiver strain at a given point in time.[60] [61]
- Policy initiatives to promote family-focused care in children's mental health services recognize that shifts in mental health service delivery (e.g., reduced use of residential services settings) have placed increasing responsibility on families. It is widely recognized that the success of community-based service delivery depends, in large part, on the system's ability to support families.
- Parent education and parent training differ in a number of respects from parent therapy. Family involvement is critical for children's ability to maintain and generalize new skills that they have learned. Furthermore, intervention programs can be enhanced by training students' parents to provide the children increased opportunities for natural learning.[62]
- A lack of family involvement can put kids at risk of poor outcomes.[63] Families of children with emotional and behavioral disorders experience difficulties and strains as a result of caring for a child with emotional or behavioral problems. These include increased financial strain, disruptions of family relationships and social life, interruptions at work, limits on personal freedom and time, fatigue, sadness, guilt and other negative effects.[64]

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[56] http://www.dartmouth.edu/~westinst/fpe.htm
[57] Diggle, 2003
[58] Symon, 2001
[59] Wright, Stroud, & Keenan, 1993
[60] Angold et al., 1998
[61] Brannan, 2003
[62] Diggle, 2003
[63] Seifer et al., 1992
[64] Brannan, 2003

- Significant associations have been found between exposure to injury prevention education and action taken to limit access to the following lethal means: prescription medications, over the counter medications, firearms, and alcohol. [65]
- Interventions that educate families about schizophrenia, provide support, and offer training in effective problem solving and communication help reduce symptom relapse, and there is some evidence that they contribute to improved consumer functioning and family well-being. One-year relapse rates for consumers receiving family psychoeducation in combination with medication are more than 50% lower than for consumers receiving medication alone. The reduction in relapse rates has persisted for at least two years in the a clinical trial that followed consumers for that long. [66] [67]
- A recent study found psychoeducational programs using multiple family groups to be more effective and less expensive than individual family psychoeducational interventions for Caucasians, though not for African Americans. [68]
- Relapse rates can be reduced by 20% if relatives of schizophrenia consumers are included in treatment. The effect is particularly marked if family interventions continued for longer than three months. Different types of family interventions had similar results.[69]
- Research on parent education and training suggests that compared to other therapeutic interventions, the former produces more consistently positive outcomes and is more economical with professional time and consumer cost.[70]
- Family psychoeducation involving illness education, crisis intervention, emotional support, and training in how to cope with illness symptoms and related problems resulted in reduced rates of hospital admission, reduced family burden, and improved consumer-family relationships. Key elements should have a duration of at least nine months.
- A lack of family involvement puts a child at higher risk for negative outcomes.[71]

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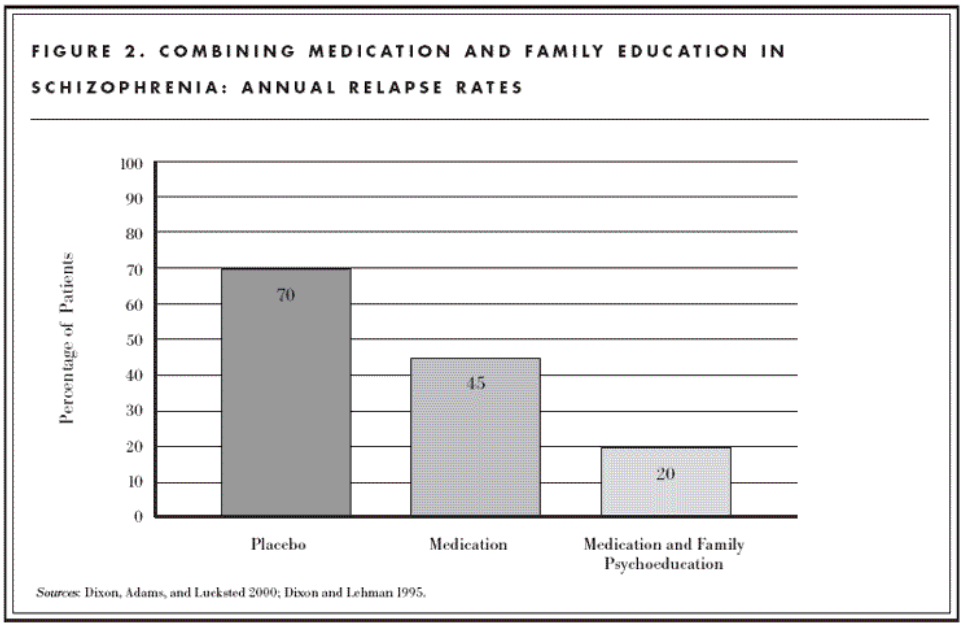
[65] Kruesi, Markus J.P.; Grossman, Janet; Pennington, James M.; et al; Suicide and Violence Prevention: Parent Education in the Emergency Department. Journal of the American Academy of Child and Adolescent Psychiatry. Vol 38, Mar 1999. 250-255.
[66] Dixon, Adams, and Lucksted 2000; Dixon and Lehman 1995
[67]Hogarty et al. 1991
[68] McFarlane et al. 1995.
[69] Walz et al., 2001
[70] Wright, Stroud, and Keenan, 1993
[71] Seifer, et al. 1992



Source: http://www.milbank.org/reports/2004lehman/2004lehman.html

COST/COST SAVINGS

Cost of Family psychoeducation

Implementing a family psychoeducation program has initial costs related to training and organizational operations and procedures. In experimental studies the cost-benefit ratios of family psychoeducation are impressive. In a statewide study in New York, for every $1 in costs for FPE in multi-family groups, there was a $34 savings in hospital costs during the second year of treatment. In a typical hospital in Maine, there was an average net savings of $4,300 per consumer per year over two years.

Funding mechanisms may vary from agency to agency and state to state. For the most part, funds are used from the state Division of Mental Health and Medicaid. State leaders from the agencies work out a mechanism on how to pool monies that can be used to reimburse the services of family psychoeducation programs. In some cases Medicaid rules and codes have been rewritten to allow reimbursement for family psychoeducation. One state has adopted a case-rate approach, which fits well with implementation and promotes use of the modality. In this instance, the provider agency is reimbursed on a monthly basis for each consumer to cover bundled direct and indirect costs.[72]

Cost Savings

- Family psychoeducation has proven to be markedly effective in reducing the cost of caring for people with severe mental illness. While the implementation of family psychoeducation may involve some up-front costs, studies consistently indicate a very good return on investment, especially in savings from reduced hospital admissions, reduction in hospital days, and in crisis intervention contacts.[73]
- The minimum reduction in hospitalizations has been about 50%, with some studies achieving up to 75% reductions over time. [74] [75] One study found that 50% of consumers achieved five years without a relapse. [76]

[72] http://www.mentalhealthpractices.org/pdf_files/fpe_pmha.pdf
[73] http://www.mentalhealthpractices.org/pdf_files/fpe_pmha.pdf

- Medical care costs for family members are reduced.[77]

RESOURCES/FOR ADDITIONAL INFO

Angold, A., Messer, S.C., Stangl, D., Farmer, E.M.Z., Costello, E.J., & Burns, B.J. (1998). Perceived parental burden and service use for child and adolescent psychiatric disorders. *American Journal of Public Health*, 88, 75–80.

Barnard, K.E. (1997). Influencing parent-child interactions for children at risk. In M.J. Guralnick (Ed.). The Effectiveness of Early Intervention, (pp. 249-268). Baltimore, MD: Paul Brookes.

Becker-Cottrill, B., McFarland, J., & Anderson, V. (2003). A Model of Positive Behavioral Support for Individuals with Autism and Their Families: The Family Focus Process. *Focus on Autism and Other Developmental Disabilities*, 18, 113-124.

Brannan, A. (2003). Ensuring effective mental health treatment in real-world settings and the critical role of families. *Journal of Child and Family Studies*, 12, 1-10.

Evidence-Based Mental Health Treatments and Services: Examples to Inform Public Policy Anthony F. Lehman, Howard H. Goldman, Lisa B. Dixon, Rachel Churchill Milbank Memorial Fund–June 04

Seifer, R., Sameroff, A. J., Baldwin, C. P., & Baldwin, A. L. (1992). Child and family factors that ameliorate risk between 4-13 years of age. *Journal of the American Academy of Child and Adolescent Psychiatry,* 31, 893-903.

Symon, J. B., (2001). Parent education for autism: Issues in providing services at a distance. Journal of Positive Behavior Interventions, 3, 160-174.

Wolfe, R., & Hirsch, B. (2003). Outcomes of parent education programs based on reevaluation counseling. *Journal of Child and Family Studies*, 12, 61-70.

Wright, L., Stroud, R., & Keenan, M. (1993). Indirect treatment of children via parent training: A burgeoning form of secondary prevention. *Applied & Preventive Psychology, 2,* 191–200.

www.mentalhealthpractices.org

www.mentalhealthpractices.org/pdf_files/fpe_pmha.pdf

[74] http://www.dartmouth.edu/~westinst/fpe.htm
[75] http://www.mentalhealthpractices.org/pdf_files/fpe_pmha.pdf
[76] http://www.dartmouth.edu/~westinst/fpe.htm
[77] http://www.dartmouth.edu/~westinst/fpe.htm

Respite Care

DEFINITION/SERVICES
Respite care is a structured program available 24 hours a day that provides temporary placement/housing on an intermittent basis within or outside of the consumer's home, either planned or on an emergency basis, with trained respite caregivers. Consumers are provided with an opportunity to stabilize while caretakers are relieved of their care responsibilities for time-limited, specified periods of time. Respite program provides a safe, controlled environment with a high degree of supervision and structure in which consumers receive therapeutic intervention and specialized programming to address their needs, including educational for children. Such short-term care is intended to enable the family to stay together and keep the consumer in the community.

In-Home Models
Many families prefer respite that is provided in the home because the consumer is most comfortable in the home setting and does not have to adjust to a different environment, the caregivers are often more comfortable if the consumer does not have to leave the home; the home is already equipped for special needs, and the cost is relatively economical.

- Model 1: Home-Based Services: Home-based respite services may be provided through a public health nursing agency, a social service department, a volunteer association, a private nonprofit agency and/or a private homemaker service. A trained and perhaps licensed employee of the agency is available to come into the home and offer respite.
- Model 2: Sitter-Companion Services: Sitter services may be provided by individuals who are trained in caring for children with special needs. Often this type of service can be a project of a service organization or specialized agency which is willing to sponsor training and/or maintain a register of trained providers to link to families in need.
- Model 3: Parent-Trainer Services: This model is similar to having a friend or relative volunteer to care for a person with special needs. The primary difference is that the person providing care is identified or selected by the family and trained by a respite program.

Out-of-Home Models
Out-of-home respite provides an opportunity for the consumer to be outside the home and socialize with other people. This may be a particularly attractive option for adolescents who are preparing to leave the family home for a more independent living arrangement. However, transportation may be required and supplies may need to be moved, and the consumer receiving care may not like the unfamiliar environment or may have difficulty adjusting to the changes.

- Model 4: Family Care Homes or Host Family Model: In this model, respite is offered in the provider's home. This could be the home of a staff person from a respite program, a family day care home, a trained volunteer's family home, or a licensed foster home used only for respite stays.
- Model 5: Respite Family Day Care or Center-based Model: Some respite programs contract with existing day care centers to provide respite to children with special needs. This is an effective model in rural areas, because it allows children to be in a supervised environment in a facility that may be relatively close to home. Children may be placed in these settings on a short term "drop in" basis, as well. Day care centers may be housed in churches, community centers, and after school programs.
- Model 6: Respite in Corporate Foster Home Settings: In some states, foster care regulations and licensing accommodate the development and operation of foster care "homes" which are managed by a non-profit or for-profit corporation. These corporation

operated foster homes may provide respite care, either as vacancies occur in the homes, or as the sole purpose for which the "home" exists. Some adolescents adapt especially well to this situation, enjoying a setting which is like semi-independent living.

- Model 7: Residential Facilities: Some long-term residential care facilities, particularly those serving persons with developmental disabilities, have a specified number of beds set aside for short-term respite.
- Model 9: Hospital-Based: Facility-based respite occurs primarily in hospitals. It provides a safe setting for children with high care needs. It can be a good alternative for a small community that has a hospital with a typically low census or a hospital with low weekend occupancy.
- Model 10: Camps: Camp has been a form of respite for many families for many years. Camp can be a positive experience for any child as well as a break for parents/caregivers.

CONSUMERS

Respite care services are predominantly provided for children. Consumers with more serious conditions and in need of 24-hour supervision in a structured program separate from his/her current living situation in order to stabilize his/her behavior and/or to provide caretakers with a reprieve from their caretaking responsibility.

INTENSITY/DURATION OF SERVICE

Varies depending on diagnosis and plan of care. Could range from a couple of hours to days or weeks.

TRAINING/CREDENTIALS REQUIRED TO PROVIDE

Both respite and crisis respite care services can be provided by trained family members, friends, neighbors, community recreation programs, child/dependent care providers or centers, home health aides, family resource centers, community human service providers and respite/crisis care agencies.

Basic training for respite providers should, at a minimum, cover:

- Overview of respite for persons with mental disorders
- First Aid, CPR, and defensive driving (if children will be transported)
- Overview of psychotropic medications and administration procedures
- Emergency medical procedures and emergency protocols
- Behavior management and strategies
- Non-violent physical crisis intervention (restraint-certification recommended)
- Planning and providing quality activities
- Working with families
- Occupational Safety and Health Administration (OSHA) standards and liability issues
- Burnout prevention
- Confidentiality and boundary issues

EVIDENCE OF EFFECTIVENESS

- In a family support survey, 82% of families who use respite and crisis care services responding to the survey identified respite as a critical component of family support.
- Respite has been shown to improve family functioning and life satisfaction, enhance capacity to cope with stress, and improve attitudes toward the family member with a disability (Cohen and Warren, 1985).

COST/COST SAVINGS

- Respite services are not costly. The original source of federal start-up funds for respite, "The Temporary Child Care for Children with Disabilities and Crisis Nurseries Act" (TCCA), with minimal funding, established hundreds of programs in 47 states and one U.S. territory since 1988.
- Preliminary data from an ongoing research project of the Oklahoma State University on the effects of respite care, found that the number of hospitalizations and medical care claims decreased as the number of respite care days increased.[78]
- A study of Vermont's respite care program for families of children or adolescents with serious emotional disturbance found that participating families experience fewer out-of-home placements than nonusers and were more optimistic about their future ability to care for their children.[79]
- A University of Delaware Center for Disabilities Studies task force study released Nov., 2003 found that families receiving respite care are less likely to admit a family member to a residential placement at public expense. Respite care also reduces the risk of abuse or neglect of vulnerable children or adults with disabilities. Without respite care, families and caregivers suffer from extreme stress and may develop their own health issues."
- See also information for similar benefit in evidence packet "Family Psychoeducation."

RESOURCES/FOR ADDITIONAL INFO

ARCH National Respite Network (800) 473-1727

All Systems Failure: An Examination of the Results of Neglecting the Needs of Children with Serious Emotional Disturbance (1993). Prepared by Chris Koyanagi and Sam Gaines for The National Mental Health Association and The Federation of Families for Children's Mental Health.

Diagnostic and Statistical Manual of Mental Disorders, 3rd revised ed. Washington, DC: American Psychiatric Association, 1987.

Family Resource Coalition of America Guidelines for Family Support Practice.
General Information About Emotional Disturbance. NICHCY (National Information Center for Children and Youth with Disabilities), (312) 338-0900 http://www.frca.org

FRIENDS National Resource Center for CBFRS Programs (800) 888-7970 http://www.frca.org/friends.htm

Knitzer, Jane (1982). Unclaimed Children: The Failure of Public Responsibility to Children and Adolescents in Need of Mental Health Services. Children's Defense Fund, Washington, D.C.

National Respite Guidelines, ARCH National Resource Center for Respite and Crisis Care Services, 1994.

Wikler, L.M., Hanusa, D., Stoycheff, J. (1986). "Home-based respite care, the child with developmental disabilities, and family stress: Some theoretical and practical aspects of process evaluation." In Salisbury, C., and Intagliata, J. (Eds.), Respite Care: Support for persons with developmental disabilities and their families, (pp. 243-261). Baltimore: Paul H. Brookes.

[78] FY 1998 Oklahoma Maternal and Child Health Block Grant Annual Report
[79] Bruns, Eric, November, 15, 1999

Child and Adolescent Rehabilitative Services

DEFINITION

In Minnesota, the emerging term for child and adolescent rehabilitative services is Children's Therapeutic Services and Supports (CTSS). The state defines CTSS as a flexible, multi-component benefit set, with service combinations and intensity determined by child needs and family preferences, delivered in home and community settings. It includes the array of mental health services for children who require different therapeutic and rehabilitative levels of intervention as identified in the consumer's individual treatment plan through a child-centered, family-driven planning process that identifies individualized, planned, and culturally appropriate interventions. Children's therapeutic services and supports are time-limited interventions that are delivered using various treatment modalities and combinations of service to reach treatment outcomes identified in the individual treatment plan. Services such as psychotherapy, skills training, crisis assistance, and mental health behavioral aide services may be provided to a child in the child's home or a community setting. Community settings may include the child's preschool or school, the home of a relative of the child, a recreational or leisure setting, or a site where the child receives day care.

Research from Hawaii has demonstrated that most complex evidence-based practices (EBPs) can be deconstructed into core elements, with variability in the skill levels needed to deliver these elements. CTSS makes the most efficient delivery of EBP core elements possible by reimbursing mental health professionals, practitioners and paraprofessionals for their respective roles. CTSS further assures integration of these component elements in that all issue from a common individual treatment plan, and all are supervised and/or directed by a single mental health professional.

The "skills" component should be used for independent living services content when adolescents hit that point (starting at age 14, and progressively more intensely). This is a matter of 1) provider training, and 2) coordination through the child's IIIP (or whatever plan the school uses) with special education services.

SERVICES MAY INCLUDE

- Psychotherapy (individual, group and family)
- Skills training (individual, group and family)[80]
- Mental Health Behavioral Aides (MHBA)
- Direction of Mental Health Behavioral Aides or staff
- Crisis assistance
- Therapeutic preschool
- Therapeutic foster care
- Individual planning includes annual diagnostic assessments, cultural competency, family involvement, Individual Behavior Plans (if MHBAs are utilized), and crisis assistance planning.

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[80] "**Skills training**" means individual, family, or group skills training designed to improve the basic functioning of the child with severe emotional disturbance and the child's family in the activities of daily living and community living, and to improve the social functioning of the child and the child's family in areas important to the child's maintaining or reestablishing residency in the community. The individual, family, and group skills training must: (1) consist of activities designed to promote skill development of the child and the child's family in the use of age-appropriate daily living skills, interpersonal and family relationships, and leisure and recreational services; (2) consist of activities which will assist the family in improving the family's understanding of normal child development and to use parenting skills that will help the child with emotional disturbance or severe emotional disturbance achieve the goals outlined in the child's individual treatment plan; and (3) promote family preservation and unification, promote the family's integration with the community, and reduce the use of unnecessary out-of-home placement or institutionalization of children with emotional disturbance or severe emotional disturbance.

CONSUMERS
Children and adolescents birth-21 who meet Emotional Disturbance (ED) criteria. Service needs must be greater than can be met by outpatient services (tentatively to be based on the Child and Adolescent Level of Care Utilization Scales (CALOCUS)).

INTENSITY/DURATION OF SERVICE
Individually determined. There are authorization thresholds, but service termination depends only on discharge plan/medical necessity.

TRAINING/CREDENTIALS REQUIRED TO PROVIDE
- Administrative staff must provide technical assistance to providers/families in planning service component combinations.
- Clinical staff must be trained in the core elements of Hawaii's EBP model, be culturally competent, and involve families.

EVIDENCE OF EFFECTIVENESS
Outcome measures are required for service authorization, with the CAFAS most often used. The state is working with providers to move to a common instrument with greater clinical sensitivity, such as the Child Behavior Checklist.

COST/COST SAVINGS
Initial modest cost increases related to expanded population. Incorporation of Hawaii EBP model anticipates cost savings; Hawaii reduced costs by nearly one-third over four year period.

RESOURCES/FOR ADDITIONAL INFO
CTSS: Dr. Glenace Edwall or Karry Udvig, MN Department of Human Services

Hawaii EBP: Dr. Glenace Edwall, MN Department of Human Services; Bruce Chorpita, Ph.D., University of Hawaii or Child and Adolescent Mental Health Division (CAMHD), Hawaii Department of Health

Adult Rehabilitative Services

DEFINITION
Federal regulations define rehabilitation services as "any medical or remedial services recommended by a physician or other licensed practitioner of the healing arts, within the scope of his practice under state law, for maximum reduction of physical or mental disability or restoration of a recipient to his best possible functional level."

Rehabilitative services are provided in the least restrictive setting appropriate for reduction of psychiatric impairment, restoration of functioning, community integration, and self-sufficiency.

Adult mental health rehabilitation services are also known as psychosocial rehabilitation.

SERVICES MAY INCLUDE
There are a range of multi-component programs called psychosocial rehabilitation services that are distinct from single component skills training interventions (WHO, 1997). These programs can include:

- Individual mental health services
- Group mental health services
- Independent living and social skills training
- Psychological support to consumers and families
- Social support, network enhancement and access to leisure activities
- Medication management
- Day treatment and rehabilitation
- Supportive housing
- Vocational rehabilitation
- Short-term crisis residential treatment
- Residential treatment

CONSUMERS
Consumers with serious mental illness, such as major depression, bipolar disorder, or schizophrenia, who exhibit impairment in three or more areas of functioning.

INTENSITY/DURATION OF SERVICE
Varies by consumer need from two hours a month to over six hours a week. Length of service can be short-term or can continue throughout the consumer's lifetime in the most severe cases.

TRAINING/CREDENTIALS REQUIRED TO PROVIDE
Provided by or under supervision of physicians, mental health professionals and practitioners

EVIDENCE OF EFFECTIVENESS

- Fewer and shorter hospitalizations than comparison groups in traditional outpatient treatment.[81] In addition, recipients are more likely to be employed
- Randomized clinical trials have shown that psychosocial rehabilitation recipients experience fewer and shorter hospitalizations than comparison groups in traditional outpatient treatment[82].

[81] Dincin & Witheridge, 1982; Bell & Ryan, 1984 & Bond & Dincin, 1986
[82] Dincin & Witheridge, 1982; Bell & Ryan, 1984

- Cook & Jonikas (1996) review the outcomes of a wide range of psychosocial rehabilitation programs, including Fairweather lodges (Fairweather et al., 1969) and psychosocial clubhouses (Dincin, 1975), some of which were demonstrated as effective 20 and 30 years ago but have not been widely implemented.[83]

COST/COST SAVINGS

- A review by Noble and Conley (1978) indicates that despite weaknesses in data, there is sufficient evidence to argue that all forms of employment, supported, transitional, and sheltered are more productive and less costly than adult day care. Much of this cost methodology should be applicable to evaluating vocational rehabilitation programs for persons with severe and persistent mental illness consumers.[84]

RESOURCES/FOR ADDITIONAL INFO

Substance Abuse and Mental Health Services Administration www.samsha.gov

[83] U.S. Department of Health and Human Services. Mental Health: A Report of the Surgeon General-Executive Summary. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health, 1999.

[84] AN OVERVIEW OF THE EFFECTIVENESS OF TRADITIONAL VOCATIONAL REHABILITATION SERVICES IN THE TREATMENT OF LONG TERM MENTAL ILLNESS , By: Martin C., McGurrin, Psychosocial Rehabilitation Journal, 0147-5622, January 1, 1994, Vol. 17, Issue 3

Community Health Maintenance—Supportive Housing

DEFINITION
Supportive housing combines one or more components of shelter (rent, meals, laundry, homemaking, etc.) with add-on services. It comes in a variety of forms, all of which provide assorted combinations of housing and services, and are called many things: adult foster care, residential care services, assisted living, etc.

SERVICES
An effective housing with services program will have a "menu" of services from which to choose based on the needs of the consumer. It will have the ability to be flexible in the delivery of those services to meet the needs of the consumer. The array of services may include:

- Nursing
- Counseling
- Home health aide
- Personal care
- Independent living skills
- Transportation
- "Concierge"
- Case management
- Congregate dining
- Social activities
- …and more

CONSUMERS
Supportive housing is effective for consumers who can benefit from general oversight and/or who need services available on-site 24 hours a day.

INTENSITY/DURATION OF SERVICE
Some consumers may live in supportive housing as a transition to a less restrictive community-based housing option. Others may need this level of support permanently.

TRAINING/CREDENTIALS REQUIRED TO PROVIDE
Varies due to supportive housing residential license, service provided, type of consumer, and funding source.

EVIDENCE OF EFFECTIVENESS

- One study evaluating the effects of supportive housing on mentally ill homeless individuals found significant decreases in visits to psychiatric emergency services and psychiatric hospitalizations from the time of admission to three months later.[85]
- Formerly hospitalized supportive housing residents reported showing personal growth since entering supportive housing in terms of greater independence, more instrumental role involvement, and improved self-esteem and social skills. Increased feelings of competence were due to the social support of staff and friends, and participation in the residence and community activities. After five months of living in supportive housing, residents significantly improved in terms of personal empowerment and instrumental role involvement. Days of hospitalization were reduced.[86]

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[85] Hopman, 1997
[86] McCarthy, 1993

COST/COST SAVINGS

Supportive housing can help prevent need of costly emergency services and hospitalization. Cost effectiveness is dependent on many factors. The cost of the service itself depends on the needs of the consumer and the funding source. It also includes the consumer's ability to pay for a portion of the living expenses related to the shelter costs. Providing programs in settings with more than one consumer provides efficiency of scale and thus services can more frequent and more intense.

- Consumers who had been consecutive voluntary admissions to the substance abuse treatment program of a large medical center were assigned to either an inpatient program or supportive housing while attending the inpatient program on weekdays. Consumers in supportive housing achieved identical outcomes as those in inpatient treatment. The cost of a successful treatment for the inpatient group was $9,524. For the supportive housing group, it was only $4,291.[87]

RESOURCES/FOR ADDITIONAL INFO

An evaluation of supportive housing: Qualitative and quantitative perspectives. McCarthy, Janice; Nelson, Geoffrey; Canadian Journal of Community Mental Health, Vol 12(1), Spr 1993. pp. 157-175. [Peer Reviewed Journal]

An evaluation of supportive housing for current and former psychiatric consumers. McCarthy, Janice; Nelson, Geoffrey; Hospital & Community Psychiatry, Vol 42(12), Dec 1991. pp. 1254-1256. [Peer Reviewed Journal]

Best Practice Fidelity Tools Case Management; Supported Housing, Competitive Employment, Reduction of State Hospitalization (1999). Lawrence, Kansas: The University of Kansas School of Social Welfare. http://www.socwel.ku.edu/mentalhealth/Resource%20Guide/resource%20guide.htm

Corporation for Supportive Housing http://www.csh.org/ (see resources by topic link)

Effects of supportive housing on mentally ill homeless. Hopman, Catherine Elizabeth; Dissertation Abstracts International Section A: Humanities & Social Sciences, Vol 58(3-A), Sep 1997. pp. 1116.

Recommended for good programs by a University of Kansas supportive housing researcher: the mental health departments in Ohio, Connecticut and Texas

Ridgway, P., & Rapp, C.A. (1997). The Active Ingredients of Effective Supported Housing: A Research Synthesis. (33 pages). http://www.socwel.ku.edu/mentalhealth/Resource%20Guide/resource%20guide.htm

Technical Assistance Collaborative (Boston) http://www.tacinc.org

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[87] Comparative outcomes and costs of inpatient care and supportive housing for substance-dependent veterans. Schinka, John A.; Francis, Elie; Hughes, Patrick; Psychiatric Services, Vol 49(7), Jul 1998. pp. 946-950. [Peer Reviewed Journal]

Community Health Maintenance—Partial Hospitalization Lodging

DEFINITION/SERVICES
Supervised board and lodging for individuals who are participating in a partial hospitalization program (PHP) for the treatment of mental illness. This service would be available 7 days per week and 24 hours per day. Three meals per day would be included. Supervision would not include providing any healthcare services. Rather, a "resident assistant" would be available to answer consumer questions, assist with communications as needed, and to access emergency services if that became necessary. This is modeled after the residential component of chemical dependency treatment as currently offered in Minnesota and covered by the Consolidated Fund and the private insurance and managed care companies in the state.

CONSUMERS
Adults who are participating in a partial hospitalization program. A similar service could be available for children and adolescents, but the level of supervision would need to be greater and some healthcare services would need to be added into the "lodging" benefit. Lodging would only be available to consumers who require it due to geographical distance from treatment program, home instability that would be counterproductive to treatment, inability to transport self because of medication side effects, lack of financial resources to pay for own lodging, and/or necessity due for treatment adherence (such as in the case of substance abuse treatment).

INTENSITY/DURATION OF SERVICE
Average length of stay in a partial hospitalization program is between 5 and 10 days.

TRAINING/CREDENTIALS REQUIRED TO PROVIDE
Resident assistants would need job orientation, but no specific formal education is required.

EVIDENCE OF EFFECTIVENESS
The same measures that are currently used for PHP or inpatient services could be applied here. These would include consumer satisfaction, successful completion of the treatment plan, readmission to inpatient or PHP within a specified time frame, and functional status at a specified time frame following discharge.

COST/COST SAVINGS
The cost of providing this board and lodging service would be approximately $100 per day for adults, $110 per day for adolescents and $125 for children. This cost will vary by location in the state. When these costs are added to PHP costs, the total is approximately 50% of the cost for an inpatient day. If a consumer could be treated in a PHP with lodging setting vs. an inpatient setting, an episode of care might be reduced by 50%. If an inpatient stay could be shortened by moving the consumer to a PHP with lodging level of care, the episode of care costs would still be reduced but the cost savings would vary from case to case.

RESOURCES/FOR ADDITIONAL INFORMATION
No formal studies have been done on this benefit. Rather, it is recommended based on the logical assumption that consumers will not be able to seek treatment if they have no place to stay, and that providing this benefit would cost less than providing inpatient services.

Supportive Employment

DEFINITION

Supported employment refers to an approach to vocational rehabilitation that emphasizes rapid placement of the consumer into a competitive[88], not necessarily full-time, job based upon the consumer's preferences and skills, and provision of ongoing supports and training to help the consumer maintain employment. For this reason it is also referred to as a "place and train" model of vocational rehabilitation, in contrast to the "train and place" approach that is much more widely used by rehabilitation services and that has not been found to consistently help consumers achieve competitive employment. The evidence-based supported employment programs that have been found effective incorporate the key elements of individualized job development, rapid placement emphasizing competitive employment, ongoing job supports, and integration of vocational and mental health services.[89]

Core principles of the supported employment approach:

- Supported employment is integrated with treatment. Employment specialists coordinate plans with the treatment team, e.g., case manager, therapist, psychiatrist, etc.
- Competitive employment is the goal. The focus is community jobs anyone can apply for that pay at least minimum wage, including part-time and full-time jobs.
- Job search starts soon after a consumer expresses interest in working. There are no requirements for completing extensive pre-employment assessment and training, or intermediate work experiences (like prevocational work units, transitional em-ployment, or sheltered workshops).
- Follow-along supports are continuous. Individualized supports to maintain employ-ment continue as long as consumers want the assistance.
- Consumer preferences are important. Choices and decisions about work and support are individualized based on the person's preferences, strengths, and experiences.

SERVICES[90]

- Employment specialists meet frequently with the treatment team (i.e., practitioners who provide services, such as case manager, therapist, psychiatrist) to integrate supported employment with mental health treatment.
- Employment specialists help people look for jobs soon after entering the program, instead of requiring extensive pre-employment assessment and training, or intermediate work experiences.
- Support from the employment specialist continues as long as consumers want the assistance. The help is often outside of the work place and it can include help from other practitioners, family members, coworkers, and supervisors.
- Employment specialists help consumers find further jobs when they leave jobs. Jobs are seen as transitions and consumers commonly try several jobs before finding a job they want to keep.
- Consumers have skills training, introductory training, and participate in job shadowing.[91]

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[88] meaning work in the community that anyone can apply for and where the person with mental illness is paid the same wage as others doing that job

[89] http://www.milbank.org/reports/2004lehman/2004lehman.html

[90] http://www.dartmouth.edu/~westinst/supempl.htm

[91] http://www.mentalhealth.samhsa.gov/cmhs/communitysupport/toolkits/

CONSUMERS
Adults with mental illness who want to participate. Eligibility is based on consumer choice. Nobody is excluded due to past substance abuse or other factors.

INTENSITY/DURATION OF SERVICE
As long as assistance is desired

TRAINING/CREDENTIALS REQUIRED TO PROVIDE
Employment specialist. BA-level social services professional.

EVIDENCE OF EFFECTIVENESS

- Supported employment programs:
  - Are effective for helping people to obtain competitive employment
  - Address a top priority of people with severe mental illness and their families
  - Help people to move beyond the consumer role and develop new employment-related roles as part of their recovery process
  - Help to decrease stigma around mental illness by helping people become integrated into community life through competitive employment
- Research shows: 70% of adults with a severe mental illness desire work; and 60% or more of adults with mental illness can be successful at working when using supported employment.[92]
- Randomized trials have consistently demonstrated the effectiveness of supported employment in helping persons with schizophrenia to achieve competitive employment (see Figure 5).[21] Employment outcomes related to the duration of employment and the amount of earnings also favor supported employment over traditional vocational services, and there is no evidence that engagement in supported employment leads to stress, increased symptoms, or other negative outcomes.[22 93]
- Vocational rehabilitation interventions positively affect rehabilitation outcome on measures such as recidivism, time spent in the community, employment and productivity, skill development, and consumer satisfactions.[94]
- All forms of employment, supported, transitional, and sheltered are more productive and less costly than adult day care.[95]
- Much of this cost methodology should be applicable to evaluating vocational rehabilitation programs for persons with severe and persistent mental illness consumers.[96]

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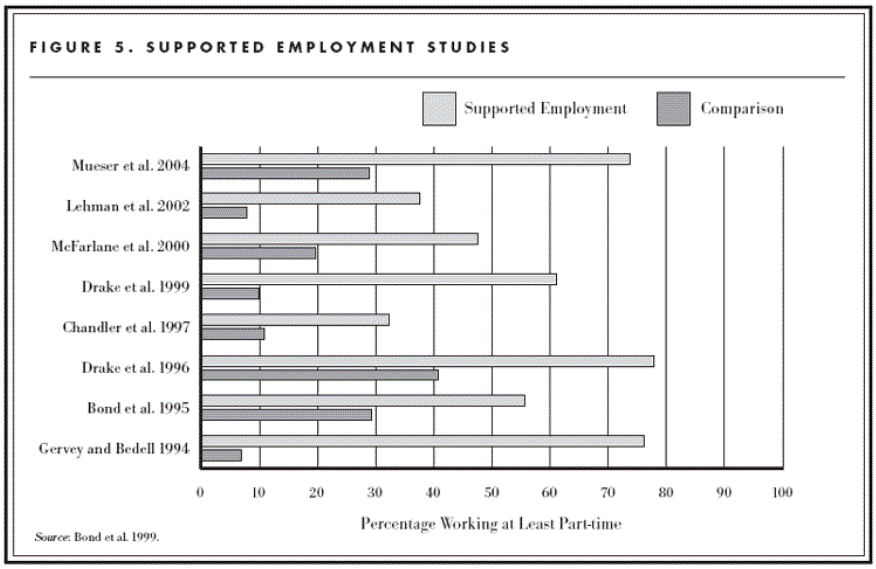
[92] http://www.mentalhealth.samhsa.gov/cmhs/communitysupport/toolkits/
[93] http://www.milbank.org/reports/2004lehman/2004lehman.html
[94] Dion and Anthony, 1987
[95] Noble and Conley, 1978
[96] Martin C., McGurrin, AN OVERVIEW OF THE EFFECTIVENESS OF TRADITIONAL VOCATIONAL REHABILITATION SERVICES IN THE TREATMENT OF LONG TERM MENTAL ILLNESS , Psychosocial Rehabilitation Journal, 0147-5622, January 1, 1994, Vol. 17, Issue 3



Source: http://www.milbank.org/reports/2004lehman/2004lehman.html

COST/COST SAVINGS

The cost figures vary according to many factors, including the severity of disability of the consumers served, the local wage scales for employment specialists, and the degree to which indirect costs and costs of clinical services are included in the estimates. Some programs have found the cost ranges from $2,000 to $4,000 per consumer, per year.

Funding mechanisms vary among states. In most cases, state divisions of Vocational Rehabilitation, Division of Mental Health, and Medicaid work out a mechanism to pool monies that can be used to reimburse the services of supported employment programs. Medicaid rules allow reimbursement for selected supported work activities.[97]

RESOURCES/FOR ADDITIONAL INFO

http://www.mentalhealth.samhsa.gov/cmhs/communitysupport/toolkits/

Best Practice Fidelity Tools Case Management; Supported Housing, Competitive Employment, Reduction of State Hospitalization (1999). http://www.socwel.ku.edu/mentalhealth/Resource%20Guide/resource%20guide.htm

Bond, G.R., Becker, D., Drake, R., Rapp,C.A., Meisler, N., Lehman, A., & Bell, M.(2001). Implementing Supported Employment as an Evidence-Based Practice. Psychiatric Services, 52(3), 313-322 http://www.socwel.ku.edu/mentalhealth/Resource%20Guide/resource%20guide.htm

Gowdy, E.A., Carlson, L. & Rapp, C.A. (2001) The Consumer Experience with Supported Work. http://www.socwel.ku.edu/mentalhealth/Resource%20Guide/resource%20guide.htm

Gowdy, E.A., Carlson, L. S., & Rapp, C. A. (2003). Practices Differentiating High Performing from Low Performing Supported Employment Programs. Psychiatric Rehabilitation Journal, 26(3), 232-239 http://www.socwel.ku.edu/mentalhealth/Resource%20Guide/resource%20guide.htm

Gowdy, E.A. (2000). "Work is the Best Medicine I Can Have": Identifying Best Practice in Supported Employment for People with Psychiatric Disabilities. http://www.socwel.ku.edu/mentalhealth/Resource%20Guide/resource%20guide.htm

Ridgway, P., & Rapp, C. A. (1999). The Active Ingredients in Achieving Competitive Employment for People with Psychiatric Disabilities: A Research Synthesis. In Mancuso, L.L. and Kother, J.D. (Ed.) http://www.socwel.ku.edu/mentalhealth/Resource%20Guide/resource%20guide.htm

[97] http://www.mentalhealth.samhsa.gov/cmhs/communitysupport/toolkits/

Transportation to Treatment

DEFINITION/SERVICES
Transportation to treatment. Transportation is not limited to public transportation, personal transportation or rides. It also includes police, ambulance, other emergency vehicles, private entrepreneurs like Medivans, etc.

CONSUMERS
Adults and children who would not be physically or financially able to get to care without assistance. Income, diagnosis, and other restrictions apply.

INTENSITY/DURATION OF SERVICE
Varies depending on consumer need.

TRAINING/CREDENTIALS REQUIRED TO PROVIDE
Varies depending on diagnosis. In some cases the consumer will be able to utilize public transportation.

EVIDENCE OF EFFECTIVENESS/NEED
Lack of transportation is a major barrier to regular and follow-up care that can keep chronic, manageable conditions under control.

- Nine percent or between 3.5 and 4 million children in families with incomes of up to $50,000 miss essential doctors appointments due to a lack of transportation, regardless of whether they are insured or not.
- Roughly 21 percent or one in five children living in poverty lack appropriate access to care because they cannot get to a doctor's office.
- Families below the poverty line are three times more likely to be affected as those who are low-income.
- Poor and low-income rural families who may live as far as 50 miles away from the nearest medical facility are hardest hit, but transportation is also a problem in urban centers.
- Alarmingly, 3.4 percent of families in a survey had to rely on costly ambulance service because no other means of transportation was available.
- Transportation is key for detoxification services and acute episodic mental crisis.

COST/COST SAVINGS
Reduces need for more costly, deep-end services by making sure consumers with manageable, chronic conditions get to routine appointments for preventive and follow-up care.

RESOURCES/FOR ADDITIONAL INFO
The Federal Government funds 63 different transportation programs designed to create access to health and human services. Coordination of those systems has become a focus for the Federal Government and the States under a new initiative called "United We Ride." A Minnesota Task Force put together recommendations for the 2005 Legislature with respect to this initiative. The following web address is a place to look at a general description of this:
http://www.mentalhealth.samhsa.gov/consumersurvivor/listserv/122303.asp

Therapeutic/Treatment Foster Care

DEFINITION
(Minnesota definition) Treatment Foster Care is a community-based, family-based, culturally relevant, service delivery approach providing individualized treatment for children, youth and their families. Treatment is delivered through a planned, integrated constellation of services with key interventions and supports provided by treatment foster parents who are trained, supervised and supported by qualified program staff.

Therapeutic foster care provides 24-hour placement services for children/adolescents who require a higher level of care, structure and supervision than can be provided in regular foster care or in their parent/guardian's home. In therapeutic foster care programs, youth who cannot live at home are placed in homes with foster parents who have been trained to provide a structured environment that supports their learning social and emotional skills. Community resources are used in a planned, purposeful and therapeutic manner that encourages residents' autonomy as appropriate to their level of functioning and safety. This service is designed to be consumer-centered and strength-based. Comprehensive multi-modal therapies to fit the specialized needs of the child/adolescent are a part of the placement plan on a consultative or referral basis and are consistent with the goals of the family service plan. Such care is provided as an alternative to incarceration, hospitalization, or different forms of group and residential treatment for children and adolescents with a history of chronic antisocial behavior, delinquency, or emotional disturbance.

Therapeutic foster care is also known by other names, including therapy foster care, multi-dimensional treatment foster care, specialist foster care, treatment-foster family care, family-based treatment, and parent-therapist programs.

SERVICES MAY INCLUDE[98]

- Coordination and Community Liaison. Frequent contact is maintained between the case manager and the youth's parole/probation officer, teachers, work supervisors, and other involved adults.
- Training for community families. Emphasized behavior management methods to provide youth with a structured and therapeutic living environment.
- Services to the youth's family. Family therapy is provided for the youth's biological (or adoptive) family, with the ultimate goal of returning the youth back to the home. The parents are taught to use the structured system that is being used in the foster home.
- Foster family advocates for the child and assists in establishing and creating child's goals
- Close supervision at home, in the community, at school; and consistent discipline
- Individual attention and 1-to-1 mentoring by foster parents
- Extensive daily documentation on medication, school, family contact, medical appointments and treatment implemented

CONSUMERS[99]
Child/adolescent with severe emotional disturbance or behavior problems in need of a 24-hour structured environment to support his/her efforts to meet basic needs, utilize appropriate judgment, coping skills and comply with treatment.

- Behaviors cannot be safely maintained effectively in a lower level of care.

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[98] http://library.adoption.com/Resources-and-Information/Treatment-Foster-Care/article/5184/1.html
[99] http://www.valueoptions.com/provider/handbook2002/clinical/five/5_103_TherapeuticFosterCare.htm

- Child/adolescent is able to function with some independence and participate safely in age-appropriate, community-based activities for limited periods of time with appropriate supervision depending on their developmental status.[100]
- Child/adolescent demonstrates the capacity to function adequately in a family and community environment with the added structure of a specialized foster care program and to respond favorably (based on his/her developmental status) to rehabilitative counseling in such areas as problem solving and life skill development such that reintegration into the family unit is a realistic goal.
- Selection of this type of care should be based on the child's level of need not by particular diagnosis or label. Existing evidence is based on use with children/adolescents whose disorder manifests itself in behavioral problems. Therefore, this benefit may be most effective for children/adolescents with conduct disorder or related disorders, and not appropriate for children with internalizing disorders such as depression.

INTENSITY/DURATION OF SERVICE
4 to 7 months average

TRAINING/CREDENTIALS REQUIRED TO PROVIDE
Case managers are trained in adolescent development and developmental psychopathology, and social learning principles. Primary among their responsibilities is treatment planning and leadership of the treatment team which typically is composed of a case worker, a supervisor or clinical consultant, the child and his/her parents, the treatment parents and other professionals closely involved with the child and family such as therapists or special education instructors. Other major responsibilities required of TFC program staff include, but are not limited to, case assessment, case management, parent support and consultation, clinical and administrative supervision of staff, 24-hour crisis intervention on-call services, treatment parent recruitment, orientation, training and selection, youth intake and placement, record-keeping and program evaluation.[101]

Treatment foster care parents are put through a rigorous and systematic training program and attend regular meetings and support groups. They are licensed to care for children/adolescents whose behavior results from mental health or substance abuse issues and/or family dysfunction.

EVIDENCE OF EFFECTIVENESS
- In 1997, a review of an early intervention treatment foster care program for severely abused and neglected children aged 4-7 years reported reduction in behavior problems.[102]
- Evaluations of a therapeutic foster care program in Colorado found that program youth compared to control group youth:[103]
    - Spent 60% fewer days incarcerated at 12 month follow-up;
    - Had significantly fewer subsequent arrests;
    - Ran away from their programs, on average, three time less often;
    - Had significantly less hard drug use in the follow-up period; and
    - Quicker community placement from more restrictive settings (e.g., hospital, detention).

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[100] http://www.valueoptions.com/provider/handbook2002/clinical/five/5_103_TherapeuticFosterCare.htm
[101] FFTA Standards for Treatment Foster Care
[102] Chamberlain P, Moreland S, Reid K. Enhanced services and stipends for foster parents: effects on retention rates and outcomes for children. Child Welfare 1992;71:387--401.
[103] Chamberlain, P., & Mihalic, S.F. (1998). Blueprints for Violence Prevention, Book Eight: Multidimensional Treatment Foster Care. Boulder, CO: Center for the Study and Prevention of Violence

- A study reported a substantial decrease in the proportion of juveniles in the intervention group incarcerated after the being in a therapeutic foster care program, compared with those in the control group. This effect declined from 57.1% in the first year after the intervention to 46.7% after 2 years. Duration of therapeutic foster care treatment was inversely correlated ($r = --0.71$; $p = 0.001$) with the number of days of subsequent incarceration, suggesting a dose-response benefit of treatment. [104]
- Compared with the year before being in a therapeutic foster care program, the proportion of juveniles arrested for violent crimes the year after intervention decreased 74.7% for boys and 69.2% for girls. All participants in the study benefited, regardless of age or sex, except for girls aged 14 years, for whom an increase was reported in the rate of certain nonviolent status offenses.[105]
- When demographic and criminal background were controlled for, boys receiving therapeutic foster care reported committing approximately 73.5% fewer felony assaults after intervention than did those placed in group care.[106]
- On average, foster care participants also spent almost twice as many days living at home after the program as group-care participants.
- SAMSHA uses the model as an evidence-based program and the program is considered a blueprint program.

COST/COST SAVINGS

Most foster parents get a room and board reimbursement and a difficulty of care reimbursement. The placing agency (often a private agency) also receives an administrative per diem which pays for the case management and professional services delivered to the child and foster family.

- A study found that for every dollar spent in justice system costs, therapeutic foster care saved $14.07. Costs average $2600/youth per month.[107] Incremental benefits for a 37% reduction in crime were $83,576/youth, including taxpayer benefits ($22,263/youth) and crime victim benefits ($61,313/youth). Taxpayer benefits include reduced burden on and expense of sheriff offices, courts and county prosecutors, juvenile detention, juvenile probation, juvenile rehabilitation, adult jail, state community supervision, and the department of corrections. Total net benefits (benefits minus costs) ranged from $20,351 to $81,664/youth. This estimate does not include benefits to youth in the programs.[108]
- A cost-analysis study assessed program costs for therapeutic foster care provided adolescents with chronic delinquency problems. Only those program costs incurred by state and local governments were considered in the analysis, including costs for personnel (i.e., case manager, program director, therapists, recruiter, and foster parent trainer) and foster-parent stipends, as well as additional health services (e.g., mental health care). Average program costs (in 1997 dollars) ranged from $18,837 to $56,047/youth, depending on the emotional state of the child, the intensity of services required, and

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[104] Chamberlain P. Comparative evaluation of specialized foster care for seriously delinquent youth: a first step. Community Alternatives: International Journal of Family Care 1990;2:21--36.
Chamberlain P, Reid JB. Differences in risk factors and adjustment for male and female delinquents in treatment foster care. J Child Fam Stud 1994;3:23--39.
Chamberlain P, Reid JB. Comparison of two community alternatives to incarceration for chronic juvenile offenders. J Consult Clin Psychol 1998;66:624--33.

[105] Chamberlain P, Reid JB. Differences in risk factors and adjustment for male and female delinquents in treatment foster care. J Child Fam Stud 1994;3:23--39.

[106] Chamberlain P, Reid JB. Comparison of two community alternatives to incarceration for chronic juvenile offenders. J Consult Clin Psychol 1998;66:624--33.

[107] Chamberlain, P., & Mihalic, S.F. (1998). Blueprints for Violence Prevention, Book Eight: Multidimensional Treatment Foster Care. Boulder, CO: Center for the Study and Prevention of Violence

[108] Aos S, Phipps P, Barnoski R, Lieb R. The comparative costs and benefits of programs to reduce crime. Olympia, WA: Washington State Institute for Public Policy, 2001.

Medicaid and juvenile corrections division reimbursement rates. These costs will vary greatly from state to state[109]

- The Washington State Institute for Public Policy found that multidimensional treatment foster care (vs. regular group care) resulted in savings of $26,748 in other systems and cost only $2,459, a net savings of $24,290, or $10.88 returned for every dollar spent.[110]

RESOURCES

Minnesota model

Multi-modal Intensive Treatment Homes (including respite and Wraparound services)
Cynthia Packer, Clinical Coordinator for Community Services, 612-306-1578, Cynthia.Packer@state.mn.us

Research studies

Briss PA, Zaza S, Pappaioanou M, et al. Developing an evidence-based Guide to Community Preventive Services---methods. Am J Prev Med 2000;18(Suppl 1):35--43.

Burns, B. J., & Freidman, R. M. (1990). Examining the research base for children's mental health services and policy. The Journal of Mental Health Administration, 17, 87-99.

Burns, B. J., Hoagwood, K., & Maultsby, L. T. (1998). Improving outcomes for children and adolescents with serious emotional and behavioral disorders: Current and future directions. In M. H. Epstein,

CDC. First reports evaluating the effectiveness of strategies for preventing violence: early childhood home visitation and firearms laws. Findings from the Task Force on Community Preventive Services.

Chamberlain, P. (1994). Family connections: Treatment foster care for adolescents with delinquency. Eugene, OR: Castalia.

Chamberlain, P., & Reid, J. B. (1987). Parent observation and report of child symptoms. Behavioral Assessment, 9, 97-109.

Chamberlain, P., & Reid, J. (1998). Comparison of two community alternatives to incarceration for chronic juvenile offenders. Journal of Consulting and Clinical Psychology, 6(4), 624-633.

Chamberlain P. Treatment foster care. Washington, DC: US Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention, Juvenile Justice Bulletin, December 1998.

Chamberlain P, Reid JB. Using a specialized foster care community treatment model for children and adolescents leaving the state mental hospital. J Community Psychol 1991;19:266--76.

Eddy JM, Chamberlain P. Family management and deviant peer association as mediators of the impact of treatment condition on youth antisocial behavior. J Consult Clin Psychol 2000;68:857--63.

Evans ME, Armstrong MI, Kuppinger AD, Huz S, McNulty TL. Preliminary outcomes of an experimental study comparing treatment foster care and family-centered intensive case management. In: Epstein MH, Kutash K, Duchnowski A, Outcomes for children and youth with emotional and behavioral disorders and their families: programs and evaluation best practices. Austin, TX: 1998:543--80.

Dishion, T. J., & Andrews, D. W. (1995). Preventing escalation in problem behaviors with high risk young adolescents: Immediate and 1-year outcomes. Journal of Consulting and Clinical Psychology, 63, 538-548.

Dishion, T. J., McCord, J., & Poulin, E (1999). When interventions harm: Peer groups and problem behavior. American Psychologist, 54, 755-764.

Fisher, P. A., Ellis, B. H., & Chamberlain, P. (1999). Early intervention foster care: A model for preventing risk in young children who have been maltreated. Children Services: Social Policy, Research, and

[109] Chamberlain P, Mihalic SF. Blueprints for violence prevention: multidimensional treatment foster care. Boulder, CO: University of Colorado at Boulder, Center for the Study and Prevention of Violence, 1998.
Moore KJ, Osgood DW, Larzelere RE, Chamberlain P. Use of pooled time series in the study of naturally occurring clinical events and problem behavior in a foster care setting. J Consult Clin Psychol 1994;62: 718--28.

[110] S. Aos et al. (2004) Benefits and Costs of Prevention and Early Intervention Programs for Youth. Olympia: Washington State Institute for Public Policy, http://www.wsipp.wa.gov/rptfiles/04-07-3901.pdf

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US Department of Justice Office of Juvenile Justice and Delinquency Prevention

Treatment Foster Care www.ncjrs.org

TFC: A Blueprint Program, Center for the Study and Prevention of Violence University of Colorado www.Colorado.edu/cspv/blueprints

Therapeutic Foster Care: Critical Issues by Robert P. Hawkins (book)

Therapeutic Foster Care for the Prevention of Violence 05 Jul 2004 http://www.medicalnewstoday.com/medicalnews.php?newsid=10328

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Integrated Treatment for Co-Occurring Mental Health and Substance Abuse Disorders

DEFINITION
Integrated treatment is a model of how services should be designed to address dual disorders. It provides the individual with both mental and chemical health diagnoses an integrated treatment approach rather than sequential or parallel services which have been found to produce poor clinical outcomes. This treatment approach helps people recover by offering mental health and substance abuse services at the same time and in one setting.

SERVICES MAY INCLUDE[111]

- Assessment
- Individualized treatment, based on a person's current stage of recovery
- Education about the illness
- Medication management
- Case management
- Help with housing and money management
- Relationships and social support
- Outpatient counseling designed especially for people with co-occurring disorders
- Residential/inpatient services
- Harm reduction
- Motivational interviewing

Providing effective integrated dual disorders treatment involves the following:[112]

- Clinicians know the effects of alcohol and drugs and their interactions with mental illness.
- Integrated services – Clinicians provide services for both mental illness and substance use at the same time.
- Stage-wise treatment – People go through a process over time to recover and different services are helpful at different stages of recovery.
- Assessment – Consumers collaborate with clinicians to develop an individualized treatment plan for both substance use disorder and mental illness.
- Motivational treatment -- Clinicians use specific listening and counseling skills to help consumers develop awareness, hopefulness, and motivation for recovery. This is important for consumers who are demoralized and not ready for substance abuse treatment.
- Substance abuse counseling – Substance abuse counseling helps people with dual disorders to develop the skills and find the supports needed to pursue recovery from substance use disorder.

CONSUMERS
Integrated treatment is for people who have co-occurring disorders – serious mental illness and a substance abuse addiction.

For individuals whose primary issue is mental illness and secondary chemical use/abuse issues, a coordination model is recommended (i.e.- joint treatment planning without integrating services). A consultative model is recommended for individuals for whom either the mental illness or

[111] http://www.mentalhealth.samhsa.gov/cmhs/communitysupport/toolkits/default.asp
[112] http://www.mentalhealth.samhsa.gov/cmhs/communitysupport/toolkits/

chemical use is of lower intensity. These individuals may present at primary care clinics, schools, etc.

INTENSITY/DURATION OF SERVICE
Variable based on the individual's clinical picture

TRAINING/CREDENTIALS REQUIRED TO PROVIDE
Extensive--Involves training of both mental health and chemical dependency providers on the components of an integrated model. Clinicians must understand the effects of alcohol and drugs and their interactions with mental illness. A service program is not an integrated model if the provider simply adds, for example, a chemical dependency provider to a mental health treatment setting. Rather, mental health providers need the skills to recognize and evaluate mental health and chemical use for all consumers and develop treatment protocols, plans and service components that treat both disorders at the same time.

EVIDENCE OF EFFECTIVENESS
The research literature is very extensive in this area. Reported consumer outcomes include:

- Improved symptom reduction
- Reduced ER and inpatient hospital services
- Improved adherence to medication
- Greater community stability.

Consumers with dual disorders have high rates of recovery when provided integrated dual disorders treatment, which means combining mental health and substance abuse treatments within the same system of care. Integrated treatment leads to dual recovery and reduces costs.[113]

COST/COST SAVINGS
More than half of the adults with severe mental illness in public mental health systems are further impaired by co-occurring substance use disorders.

Additionally, mental health systems spend most of their resources on a small percentage of individuals with difficult problems, often consumers with dual disorders. Mental health services for these consumers cost, on average, nearly twice as much as for consumers with single disorders.[114] Often people with dual disorders have been forced into a parallel method of treatment, where substance abuse treatment was provided separately and independently of treatment for mental illness. This has proven to be ineffective and expensive. Integrated treatment is more effective, and thus saves money on ineffective treatment. Reduction in service duplication results in additional cost savings.

Consumers with dual disorders are at high risk for negative outcomes if not treated correctly, including hospitalization, overdose, violence, legal problems, homelessness, victimization, HIV infection, and hepatitis.

RESOURCES FOR ADDITIONAL INFO
SAMHSA Website for Evidence-based practices http://www.mentalhealth.samhsa.gov/cmhs/communitysupport/toolkits/

"Co-Occurring Psychiatric and Substance Disorders in Managed Care Systems: Standards of Care, Practice Guidelines, Workforce Competencies, and Training Curricula," Center for Mental Health Services (1998)

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[113] http://www.mentalhealth.samhsa.gov/cmhs/communitysupport/toolkits/
[114] http://www.mentalhealth.samhsa.gov/cmhs/communitysupport/toolkits/

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American Academy of Addiction Psychiatry

American Managed Behavioral Healthcare Assn www.ambha.org

American Society of Addiction Medicine www.asam.org

Assn for Medical Education and Research in Substance Abuse http://center.butler.brown.edu/AMERSA

www.naatop.org

www.naadac.org

www.naphs.org

www.ncadd.org

www.casacolumbia.org

hhtp://dualrecovery.org

Center for Mental Health Services at the Substance Abuse and Mental Health Services Administration: www.mentalhealth.org

National Association of State Mental Health Directors' Evidence-Based Practices Center: www.nasmhpd.org

www.mentalhealthpractices.org

Emergency/Crisis Care

DEFINITION
Crisis services are used in emergency situations either to furnish immediate and sufficient care or to serve as a transition to longer-term care within the mental health system. The goals of crisis services include intervening immediately, providing brief and intensive treatment, involving families in treatment, linking consumers and families with other community support services, and averting visits to the emergency department or hospitalization by stabilizing the crisis situation in the most normal setting for the consumer.

SERVICES MAY INCLUDE
Mental health crisis assessment is an immediate face-to-face assessment by a physician, mental health professional, or mental health practitioner under the clinical supervision of a mental health professional, following a screening that suggests the child may be experiencing a mental health crisis or mental health emergency situation.

Mental health mobile crisis intervention services is face-to-face, short-term intensive mental health services initiated during a mental health crisis or mental health emergency. Mental health mobile crisis services must help the recipient cope with immediate stressors, identify and utilize available resources and strengths, and begin to return to the recipient's baseline level of functioning. Mental health mobile services must be provided on-site by a mobile crisis intervention team outside of an emergency room, urgent care, or an inpatient hospital setting.

Mental health crisis stabilization services is individualized mental health services provided to a recipient following crisis intervention services that are designed to restore the recipient to the recipient's prior functional level. The individual treatment plan recommending mental health crisis stabilization must be completed by the intervention team or by staff after an inpatient or urgent care visit. Mental health crisis stabilization services may be provided in the recipient's home, the home of a family member or friend of the recipient, schools, another community setting, or a short-term supervised, licensed residential program if the service is not included in the facility's cost pool or per diem.

Stabilization services may include:

- Group Therapy
- Family Therapy
- Discharge Planning Group
- Medication Education and Psychoeducational Groups
- Recreational Therapy

Sub-Acute Care facility means a place for short-term treatment (four days or fewer) similar to, but less intense than, inpatient hospitalization. Can involve overnight stays. Unit is unlocked and has a lower level of psychiatric oversight. The facility can also serve as a short-term transitional resource for consumers stabilized in the hospital and awaiting supports needed to allow a safe return to the community.[115]
Psychiatric Emergency Walk-in

[115] Minnesota statutory definition: (1) the services meet the requirements of Code of Federal Regulations, title 42, section 440.160;
(2) the facility is accredited as a psychiatric treatment facility by the joint commission on accreditation of healthcare organizations, the commission on accreditation of rehabilitation facilities, or the council on accreditation; and
(3) the facility is licensed by the commissioner of health under section 144.50.

A planned program to provide psychiatric care in emergency situations with staff specifically assigned for this purpose. Includes crisis intervention, which enables the individual, family members and friends to cope with the emergency while maintaining the individual's status as a functioning community member to the greatest extent possible and is open for a consumer to walk-in.

Crisis services may also include telephone hotlines, crisis group homes, runaway shelters, mobile crisis teams, and therapeutic foster homes (for children/adolescents) when used for short-term crisis placements (see separate section).

CONSUMERS

Consumers who are assessed as experiencing a mental health crisis or emergency (Persons who are suicidal, homicidal, or decompensating (rapid return of severe symptoms such as uncontrollable behavior, suicidal/homicidal ideation or attempts, hallucinations, psychotic episodes, or acute sleeping/eating disorders)) and mobile crisis intervention or mental health crisis stabilization services are determined to be medically necessary. Consumers who require immediate care, but do not require inpatient hospitalization.

INTENSITY/DURATION OF SERVICE

Crisis programs are small in order to facilitate close relationships among the staff, consumer, and family. Short-term services are provided, with the staff meeting more frequently with the consumer at the outset of the crisis. A typical treatment plan consists of 10 sessions over a period of 4 to 6 weeks. Crisis services usually are available 24 hours a day, 7 days a week (Goldman, 1988).

TRAINING/CREDENTIALS REQUIRED TO PROVIDE

Under statute, crisis teams must consist of at least two mental health professionals or a combination of at least one mental health professional and one mental health practitioner with the required mental health crisis training and under the clinical supervision of a mental health professional on the team. They must have at least two people with at least one member providing on-site crisis intervention services when needed. Team members must be experienced in mental health assessment, crisis intervention techniques, and clinical decision making under emergency conditions and have knowledge of local services and resources.

EVIDENCE OF EFFECTIVENESS

- Positive behavioral and adjustment outcomes for youth presenting to crisis programs and emergency departments across the country were reported in 12 studies. Most programs also demonstrated the capacity to prevent institutionalization.[116]
- A mobile crisis team, the Youth Emergency Services (YES) program in New York, sent clinicians directly to the scene of the crisis. The data showed that YES prevented ER visits and out-of-home placements.[117]
- In a study of 100 children served by a crisis program in New York over a 2-year period, more than 80 percent were discharged in less than 15 days. Most were diverted from inpatient hospitalization, and inpatient admissions to the state children's psychiatric center for Suffolk County were reduced by 20 percent after the program was established.[118]

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[116] Kutash and Rivera, 1996
[117] Shulman & Athey, 1993
[118] Schweitzer & Dubey, 1994

- Records were analyzed from a sample of nearly 700 youth presenting to the Home Based Crisis Intervention program in New York over a 4-year period. Youth received short-term, intensive, in-home emergency services. After an average service episode of 36 days, 95% of the youth were referred to, or enrolled in, other services.[119]
- In 2002 the Milwaukee Wraparound Mobile crisis Team received several thousand phone calls, had 4000 face-to-face contacts and successfully diverted many children from unnecessary psychiatric hospitalizations. This was a 15% reduction from 2001.

COST/COST SAVINGS

Mental health crisis stabilization is not reimbursable when provided as part of a partial hospitalization or day treatment program.

Use of crisis intervention services minimizes the use of hospital resources.

RESOURCES/FOR ADDITIONAL INFO

http://www.surgeongeneral.gov/library/mentalhealth

Fairview Hospital in St. Paul has an adolescent subacute facility scheduled to open in October. The facility will be funded with a combination Fairview dollars and a grant from an ad-hoc health plan foundation that has been established on a temporary basis to direct health plans' resources toward relieving the psychiatric inpatient crisis. It will serve both east and west metro.

The East Metro Adult Crisis Stabilization service has served over 300 individuals to date. It is the result of a partnership among three counties, three hospitals, four health plans and the state to develop a 24/7 crisis response service in the East Metro for public and private consumers.

[119] Boothroyd, 1995

Pre-Diagnostic Screening

DEFINITION/SERVICES
Screening is a relatively brief process designed to identify persons who are at increased risk of having disorders that warrant immediate attention, intervention or comprehensive review. Identifying the need for further assessment is the primary purpose for screening. Mental health screening instruments are never used for diagnosis, but rather identify the need for further assessment.[120] Screens are typically a brief questionnaire which can be administered in person, over the phone, on a computer, over the Internet, etc. They can be administered in doctor's offices, schools, public health clinics, etc.

Screening tools often vary with the provider or setting. Screening instruments must accurately identify mental health needs. The tools should demonstrate effective use with the particular populations they screen. Good tools are easy to administer and score and require minimal expertise to use and have acceptable levels of:

- Sensitivity and specificity
- Reliability
- Validity
- Brevity

CONSUMERS
Anyone can be screened. Screening can either be done across the board for a broad population group or targeted at specific higher-risk subgroups

INTENSITY/DURATION OF SERVICE
Screens are designed to be brief, and may take as little as a few minutes.
Screening may be done at regular intervals, such as yearly, or at times of high-risk, such as times of major transition or after experiencing trauma, etc.

TRAINING/CREDENTIALS REQUIRED TO PROVIDE
Most screening tools are designed to be self-administered or administered by someone with minimal training, such as a receptionist. They are *not* designed to require a mental health professional or someone with training at the master's or PhD level. More complicated screening instruments can be administered by staff such as social workers and case managers.

EVIDENCE OF EFFECTIVENESS
Screening can help catch mental disorders that would have otherwise gone unidentified and untreated.

- Studies indicate that fewer than thirty percent of children with substantial dysfunction are recognized by primary care clinicians. Nationally, referral rates of children seen by pediatricians to mental health services range from 1-4%.[121]

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[120] Mental health diagnostic assessment is a comprehensive examination of the psychosocial needs and problems identified during a mental health screening. Assessments identify whether mental health disorders are present and recommend treatment interventions. Assessments routinely include individualized data collection, often psychological testing, clinical interviewing and reviewing past records. A mental health professional is needed to conduct the assessment and develop a comprehensive report. The purpose of a diagnostic assessment is to define the problems and develop a comprehensive treatment plan.
[121] Jellinek, M. "Approach to the Behavior Problems of Children and Adolescents." In T.A. Stern, J.B. Herman, P.L. Slavin (Eds.) The MGH Guide to Psychiatry in Primary Care. 1998.

- Often recognition depends on parental complaint or school report of overt behavioral problems or less overt dysfunction (such as secondary and childhood depression, or family factors such as divorce).[122]
- Physicians who solely rely on clinical judgment fail to identify children with mental health problems. When the Child Behavior Checklist (an assessment tool)[123] was used to identify the prevalence of psychiatric disorders in children ages 7 to 11 years visiting a primary care physician, 24% of the children were noted to have evidence of mental health problems. However, only 3.6% of the children had received a mental health referral from their primary care physician. [124]
- Compared with usual care, feedback on depression screening results to providers generally increased recognition of depressive illness in adults. Meta-analysis suggests that overall, screening and feedback reduced the risk for persistent depression (summary relative risk, 0.87 [95% CI, 0.79 to 0.95]). Compared with usual care, screening for depression can improve outcomes, particularly when screening is coupled with system changes that help ensure adequate treatment and follow-up.[125]
- Studies have shown that usual care by primary care physicians fails to recognize 30% to 50% of depressed patients. Because patients in whom depression goes unrecognized cannot be appropriately treated, systematic screening has been advocated as a means of improving detection, treatment, and outcomes of depression. [126]
- Effectiveness data is available for individual screening tools. For example, The Pediatric Symptom Checklist (PSC) is a one-page questionnaire a parent of a child age 4-16 can complete in the waiting room in 2-5 minutes. The PSC has proven validity with low-income and middle-income kids, and with both Caucasians and populations of color. The cutoff score of 28 has sensitivity of 95% for middle income and 88% for lower income children, and a specificity of 68% for middle income and 100% for lower income children. Children "incorrectly" identified usually have at least mild impairment, and can still benefit from services and closer supervision. Use of the PSC has been shown to improve recognition rates for psychosocial problems in pediatric primary care settings.[127]

COST/COST SAVINGS

Screening tools can often be self-administered and self-/automatically scored on paper or online, therefore costing little or nothing.

The cost benefit of screening comes from identifying problems early, before they become more severe, and require more costly treatment, and while better outcomes are more likely. Potential cost savings to the system are significant.

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[122] Jellinek, M. "Approach to the Behavior Problems of Children and Adolescents." In T.A. Stern, J.B. Herman, P.L. Slavin (Eds.) The MGH Guide to Psychiatry in Primary Care. 1998.

[123] The Child Behavior Checklist is an assessment tool, not a screening tool, and was used for the study to determine which children had a disorder that was missed. Screening tools are brief (as little as 2-3 minutes) tools used to determine which consumers need a lengthier assessment.

[124] "Why do we wait? A mental health report," Minnesota Office of the Ombudsman for Mental Health and Mental Retardation. 1999.

[125] Screening for Depression in Adults: A Summary of the Evidence for the U.S. Preventive Services Task Force Michael P. Pignone, MD, MPH; Bradley N. Gaynes, MD, MPH; Jerry L. Rushton, MD, MPH; Catherine Mills Burchell, MA; C. Tracy Orleans, PhD; Cynthia D. Mulrow, MD, MSc; and Kathleen N. Lohr, PhD

[126] Screening for Depression in Adults: A Summary of the Evidence for the U.S. Preventive Services Task Force Michael P. Pignone, MD, MPH; Bradley N. Gaynes, MD, MPH; Jerry L. Rushton, MD, MPH; Catherine Mills Burchell, MA; C. Tracy Orleans, PhD; Cynthia D. Mulrow, MD, MSc; and Kathleen N. Lohr, PhD

[127] http://psc.partners.org/psc_home.htm

- Research indicates that the appropriate identification and treatment of mental disorders in childhood can reduce symptoms of child psychopathology, improve adaptive functioning, and sometimes serve as a buffer to long-term impairment.[128]
- In 2001, mental disorders were the leading cause of hospitalization for 5-14 year-olds (2,172 children and youth) in Minnesota. Another 2,051 children and youth ages 5 - 14 were treated (not admitted) in emergency departments for a mental disorder. For Minnesotans age 15-44, mental disorders were the second leading cause of hospitalization.[129]
- Individuals with untreated mental illness often consume excessive amounts of general health care services. They make multiple trips to their primary care physician with complaints of an upset stomach, headache, difficulty sleeping, and general aches and pains, when the real problem is an undiagnosed mental disorder. The American Psychological Association estimates that 50-70% of usual visits to primary care physicians are for medical complaints that stem from psychological factors.[130]
- Annual health care costs for consumers with untreated depression are nearly twice that of consumers who do not have depression.[131]
- Mental disorders ranked among the top ten leading causes of hospitalization for Minnesotans in every age group.[132]
- The decreased disability payments in the first 30 days following initial treatment for major depression results in employer savings totaling $93 per consumer, which can exceed the cost of treatment for a similar period of time. The workplace benefits from improved functioning are substantial and may, in fact, exceed the usual costs of depression treatment. Thus, purely on economic rather than clinical or quality-of-life grounds, this argues in favor of more aggressive outreach to employees with symptomatic disease that results in initiation of treatment before their symptoms are allowed to persist and result in a disability claim.[133]

RESOURCES

http://www.ncmhjj.com/pdfs/publications/Screening_And_Assessing_MHSUD.pdf

http://www.teenscreen.org/

http://www.mentalhealthscreening.org/

http://www.healthyplace.com/Communities/Eating_Disorders/concernedcounseling/eat/EATtest.htm

www.brightfutures.org/mentalhealth/index.html

www.aap.org/policy/re0062.html

Example obsessive-compulsive disorder screen http://www.zoloft.com/index.asp?pageid=15&PFW_jump2
Example post-traumatic stress disorder screen http://www.zoloft.com/index.asp?pageid=20&PFW_jump2
Example eating disorder screen

Child Psychol Psychiatry. 2004 Jan;45(1):109-34. Assessment of young children's social-emotional development and psychopathology: recent advances and recommendations for practice. Carter AS, Briggs-Gowan MJ, Davis NO.

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[128] Ringeisen H., Oliver KA., and Menvielle E. in *Pediatric Drugs. Vol 4(11) (pp 697-703), 2002.*
[129] Minnesota Department of Health, 2001
[130] *"The Costs of Failing to Provide Appropriate Mental Health Care," American Psychological Association, 2003.*
[131] Agency for Healthcare Research and Quality (HS09397)
[132] Minnesota Dept. of Health, 2003.
[133] "Management of Major Depression in the Workplace: Impact on Employee Work Loss" Howard G. Birnbaum, Pierre Y. Cremieux, Paul E. Greeenberg and Ronald C. Kessler

Targeted Prevention

DEFINITION
Services targeted toward and proven effective with specific populations at high risk of developing a mental disorder

SERVICES
Varies with the targeted population. Often includes outreach; parent and teacher training; and child intervention.

CONSUMERS
Groups known to be at high risk for emotional disturbance/mental illness.

INTENSITY/DURATION OF SERVICE
Depends on the intervention and consumer

TRAINING/CREDENTIALS REQUIRED TO PROVIDE
Typically mental health practitioners, paraprofessionals under the direction of a mental health professional, or public health nurses.

EVIDENCE OF EFFECTIVENESS
Example Program: Parent-Child Interaction (PCI) Program (formerly NCAST)
Infant mental health is grounded in the relational aspects of caregiver-child interactions. The PCI (formerly NCAST) feeding and teaching scales are psychometrically sound tools that assess caregiver-child interaction in infancy and up to age 3. The conceptual framework supporting the scales builds upon research into key aspects of healthy relations between caregivers and infants. In cases where there is interference in the adaptive behavior from either the caregiver (e.g. lack of knowledge, illness, stress, depression) or the infant (e. g. drug exposed, physical conditions), the interaction is likely to be maladaptive putting the infant at risk for infant mental health disorders (e.g. non-organic failure to thrive). Professionals trained in the use of the PCI scales use the results to reinforce the positive aspects of the relationships as well as identify maladaptive interactions. The trained professionals target problematic behaviors and work with caregivers to learn and implement more positive interactions. Time to do the scale ranges from three minutes to one hour depending on how long the feeding or teaching episode is. The professional then scores (10 minutes to 2 hours if she is viewing videotaped feeding or teaching episodes) the episode. The follow-up interventions are generally one hour weekly home visits, but this can vary from daily to monthly. Research illustrating improved scores with these types of interventions include:

- Improved mental health of the mother and improved parent-child interaction (Armstrong et al., 1999)
- Improved parent-child (preterm infants) interaction (Kang et al, unpublished; Kang et al, 1999)
- Improved parent (adolescent mothers)-child interaction (Causby et al, 1990; Clarke and Strauss, 1992, Koniak-Griffin et al, 1992)

Example program: Early Risers *Skills for Success*
Early Risers is a multi-component, high-intensity, competency-enhancement program that targets elementary school children 6 to 10 years old at high risk for early development of conduct problems, including substance use, and their families. The program is specifically aimed at children who display early aggressive, disruptive, and/or nonconformist behaviors. Early Risers is based on the premise that early, comprehensive, and sustained intervention is necessary to target

multiple risk and protective factors. The program uses a full-strength intervention model with two complementary components to move high-risk children onto a more adaptive developmental pathway. Cost-effective operation of Early Risers requires one family advocate for every 25 to 30 child/family participants. A supervisor is also needed. A minimum of six home visits per year is recommended.

- Significant gains in social competence including improved social skills and social adaptability
- Significant gains in academic achievement
- Children with the most severe aggressive behavior showed significant reductions in self-regulation problems
- Children whose parents achieved recommended levels of participation reported less parental distress and improved methods for disciplining children
- Reduction in attention/concentration problems
- Reduction in self-regulation problems
- Parents of children with the highest level of aggressive behavior reported improved investment in their child and less personal distress.

Example program: Incredible Years

Incredible Years has been identified as a proven approach for increasing the percentage of children who have age-appropriate mental and physical health. Parent Training-teaches parents how to promote child's social competence and reduce behavior problems, teaches parents how to play with children, help children teach, use limit-setting, praise and incentives and handle misbehavior. There are also advanced versions that focus more on anger management etc. and help with school involvement, etc. Child Training uses a curriculum for children showing "conduct" problems (high rates of aggression, defiance, and oppositional and impulsive behaviors). It promotes friendship skills, empathy skills, anger management, problem solving, etc. Teacher Training helps with classroom management and using specific strategies for the whole classroom.

- When used with children referred for conduct problems, the BASIC program resulted in significantly improved parental attitudes and parent-child interactions, reduced parents' use of violent forms of discipline, and reduced child conduct problems.[134]
- The ADVANCE program has been highly effective in promoting parents' use of effective problem-solving and communication skills, reducing maternal depression, and increasing children's social and problem solving skills. Users are highly satisfied and dropout rates are low. Effects are sustained up to four years after intervention.[135]
- In randomized trials with over 500 Head Start families, the parenting skills of parents in the BASIC program significantly improved compared with the control group.[136] These findings were replicated with daycare providers and low-income African American mothers in Chicago.[137]
- In a universal, school-based program with a sample of Head Start mothers, the intervention group mothers used less harsh discipline and were more nurturing, reinforcing and competent in their parenting. Their children exhibited significantly fewer conduct problems and more positive affect and pro-social behaviors.[138]
- Preliminary results in a randomized study suggest that combining academic skills training for parents with training for teachers improves children's outcomes in terms of

[134] Webster-Stratton, 1984, 1989 and 1990b
[135] Webster-Stratton, 1990b
[136] Webster-Stratton, 1998
[137] Gross, Fogg and Tucker, 1995
[138] Webster-Stratton, 1998

strengthening both academic and social skills, promotes more positive peer relationships and reduces behavior problems at home and at school. (Priefer, S. *Innovative Mental Health Interventions for Children: Programs that Work*, 2001.)

Example program: Families and Schools Together-FAST (Lynn McDonald)
Intervention with children age 3-14 and their families who are at risk for school failure, juvenile delinquency, substance abuse and mental health problems. Uses family therapy, multifamily group approach. 14 week youth group school meetings for middle school sites. 8-10 week series of school-based evening activities for up to 12 families per cycle with rituals and interactive family activities to include peer support for parents, youth group and one to one parent child time to practice new skills. Regular cycle is followed by two years of monthly FASTWORKS meetings led by parent graduates-stresses parent leadership

- National data shows statistically significant improvement in child's behaviors at home and school in 8-10 weeks.
- Child behavior improvements maintained on behavior problems, withdrawal and anxiety, and attention span problems.

Example program: Marilyn Steele's "Strengthening Multi-Ethnic Families and Communities
Intervention with parents of children age 3-18 that addresses violence against self, violence in the family, and violence in the community. Integrates parent training/education and community resource awareness though flexible curriculum organized by components of: cultural/spiritual, relationship, positive discipline, rites of passage and community involvement. Responds to variety of learning styles by using role play, discussion, lecture, discussion and parent follow-up activities. Consists of orientation and 12 weekly 3 hour meetings. Integrates parent training/education and community resource awareness though flexible curriculum organized by components of: cultural/spiritual, relationship, positive discipline, rites of passage, and community involvement. Consumers plan some sessions.

- Parents report significant improvement in general parenting, problem solving skills, ability to manage child behaviors and in positive discipline and communication
- Parents report significant improvement in child's self esteem, ethnic identification, and ability to avoid drugs and gangs.

COST/COST SAVINGS
Prevent problems from developing and requiring costly services, such as hospitalization. Scientific evidence indicates that the appropriate identification and treatment of mental disorders in childhood can reduce symptoms of child psychopathology, improve adaptive functioning, and sometimes serve as a buffer to further long-term impairment.[139] Intervention programs can be very effective. For example, the prevention program, "Strengthening Families Program," for parents and youth age 10-14 returned $7.82 in benefits for every dollar in cost.[140]

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