CHCS Center for Health Care Strategies, Inc.

Improving Medicaid Managed Care for Youth with Serious Behavioral Health Needs:
A Quality Improvement Toolkit

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Improving Medicaid Managed Care for Youth with Serious Behavioral Health Needs: A Quality Improvement Toolkit

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The **Center for Health Care Strategies** is a nonprofit health policy resource center dedicated to improving health care quality for low-income children and adults, people with chronic illnesses and disabilities, frail elders, and racially and ethnically diverse populations experiencing disparities in care. CHCS works with state and federal agencies, health plans, and providers to develop innovative programs that better serve Medicaid beneficiaries.

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Contents

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The goal of plans focused on these issues is to provide the most appropriate services to children and youth based on their clinical and functional needs.
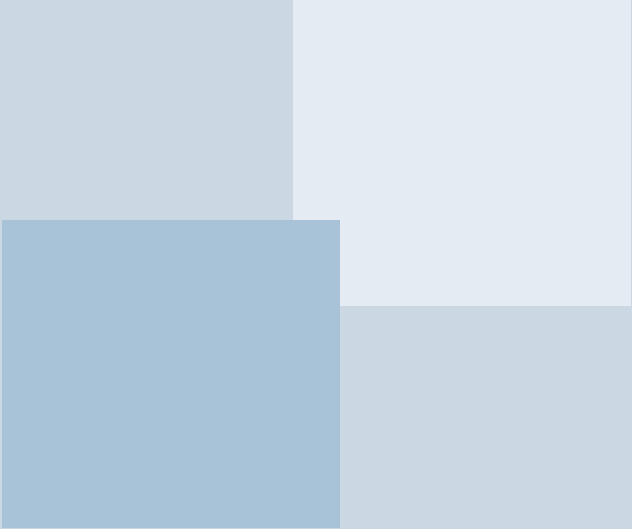
I. Preface: *Why Focus Quality Improvement Efforts on Youth with Serious Behavioral Health Needs?*

Approximately one out of every 10 young people in the U.S. has a serious emotional disturbance (SED).[1] National studies have long documented that large numbers of children with SED do not receive appropriate care. Data suggest that there are between 2.7 and 4.2 million youth ages 9 to 17 with SED; an estimated two-thirds of these youth and their families do not receive the help they need.[2]

Although gains have been made in recent years, stigma and lack of understanding of mental health problems in children continue to impede access to appropriate services. Inadequate mental health coverage, particularly in commercial health plans, leaves children and families with limited options. Various public systems, such as the schools, social services, and the courts, typically play significant roles in the lives of children with SED and their families; fragmented accountability across these systems also creates gaps in care. While recently enacted national mental health parity legislation will help to improve access, public systems can still expect to play a major role in the delivery of care to children with SED — both those who are Medicaid-eligible and those with private insurance — who often need extended services that are not covered by traditional insurance.[3]

The Substance Abuse and Mental Health Services Administration's (SAMHSA) Center for Mental Health Services (CMHS) defines children with SED as those younger than age 22 who have a diagnosable mental health disorder that results in reduced functioning in home, school, or community settings or requires multi-agency intervention; and whose disability has been present or is expected to be present for at least one year.[4] The definition recognizes the complexity of disorders that can impact a child's functioning and require interventions from multiple child-serving agencies.

Medicaid, which is jointly funded by states and the federal government, plays a significant role in the provision of services to children and youth with behavioral health needs. According to the CMHS Uniform Reporting System, Medicaid provides 33% to 79% of the funding for behavioral health services delivered in the 46 reporting states.[5]

For over 20 years, national policy has supported the development of "systems of care" for children with SED and their families.[6] A system of care is an approach to the organization and delivery of services emphasizing:

- Early identification;
- Service coordination and care management;
- Access to a broad array of services and supports;
- Services in the least restrictive setting;

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[1] Substance Abuse and Mental Health Services Administration, Center for Mental Health Services (2008). "Child and Adolescent Mental Health." Available at **http://mentalhealth.samhsa.gov/publications/allpubs/CA-0004/default.asp**.

[2] National Association of Mental Health Program Directors Research Institute (2007). "URS Table 1: Estimated Number of Children and Adolescents, Age 9 to 17, with Serious Emotional Disturbance, by State, 2007." Available at **www.nri-inc.org/projects/SDICC/Reports/SMI2007.xls**.

[3] Note: Mental health parity legislation was passed as part of the Children's Health Insurance Program Reauthorization Act of 2009. For more information, visit **http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_public_laws&docid=f:publ003.111.pdf%20**.

[4] Substance Abuse and Mental Health Services Administration, Center for Mental Health Services (1999). "Annual Report to Congress on the Evaluation of the Comprehensive Community Mental Health Services for Children and Their Families Program, 1999." Atlanta, GA: ORC Macro. Available at **http://mentalhealth.samhsa.gov/publications/allpubs/CB-E199/default.asp**.

[5] Substance Abuse and Mental Health Services Administration, Center for Mental Health Services (2007). "2007 CMHS Uniform Reporting System Output Tables." Available at **http://mentalhealth.samhsa.gov/cmhs/MentalHealthStatistics/URS2007.asp**.

[6] Substance Abuse and Mental Health Services Administration (2008), op. cit.

- Family and youth engagement; and
- Cultural and linguistic competence.

More recently, the children's mental health field has seen a growth in the development of evidence-based practices for children with SED and their families. Embedded within these practices are systems-of-care principles, such as provision of services in home and community settings, and family and youth engagement.

Implementing systems-of-care approaches and evidence-based practices makes sense for public-sector managed care programs. Youth with SED are a high-utilizing and high-cost Medicaid population that receives services through managed care organizations (MCOs) including integrated health maintenance organizations (HMOs) and stand-alone behavioral health organizations (BHOs). In the absence of effective home- and community-based services and care management, delivery systems over-rely on restrictive — and expensive — services. As a result, children are often placed too frequently, repeatedly, or for too long in hospital and residential treatment settings. Access to home and community services, engagement of youth and families, and care management supports can reduce unnecessary use of expensive hospitalizations and residential treatment.[7] Similarly, monitoring appropriate use of psychotropic medications for children to guard against offline use and inappropriate polypharmacy prescribing can improve outcomes and reduce the costs of care.[8] State Medicaid programs and their contracted MCOs are perfectly positioned to employ systems of care and apply evidence-based practices that have been shown to improve the quality of care and outcomes for children and their families.

MCOs, particularly those serving Medicaid populations and a large percentage of the children with SED who receive care, can affect both the outcomes and costs of their care significantly. By applying managed care tools wisely, MCOs can play a key leadership role in ensuring that children with SED receive appropriate care. For example, they can: identify high-need children with use of sophisticated data systems; customize care management approaches; monitor outlier utilization and provider practices; utilize flexible financing to support home and community alternatives; and educate providers and families about best practices.

The overarching goal of the *Collaborative on Improving Managed Care Quality for Youth with Serious Behavioral Health Needs* was for Medicaid MCOs to develop and implement better clinical and/or administrative practices for this population. This resulting toolkit is a resource for policymakers, state agencies, MCOs, families, youth, and others interested in innovative approaches to behavioral health care for children and youth. It profiles quality initiatives undertaken by participating MCOs, which have confirmed that a focus on this high-need, high-cost population can improve outcomes and reduce costs of care.

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[7] B. Stroul and G. Blau (Eds.). *The System of Care Handbook: Transforming Mental Health Services for Children, Youth, and Families*. (Baltimore, MD: Paul H. Brookes Publishing, 2008).
[8] P. Jensen. "The Use of Psychotropic Medications for Children Involved in Child Welfare." Presentation given via Center for Health Care Strategies webinar, February 14, 2008.

II. Introduction

Improving Outcomes for Youth with Serious Behavioral Health Needs through Managed Care

This toolkit details the experiences of a workgroup of nine Medicaid MCOs in the *Collaborative on Improving Managed Care Quality for Youth with Serious Behavioral Health Needs*, designed by the Center for Health Care Strategies (CHCS) and supported by the Annie E. Casey Foundation. The MCOs collaborated over a two-year period to identify ways to improve care for youth with serious behavioral health needs.

The workgroup identified Medicaid managed care as an opportune vehicle for driving these quality improvements, based on a number of trends in the Medicaid marketplace. For example, 65% of Medicaid beneficiaries are enrolled in managed systems of care for physical health services,[9] and 33 state Medicaid programs are delivering behavioral health services through managed care arrangements.[10] In its last state survey report, the federally funded Health Care Reform Tracking Project noted, over the previous eight years, a 45% increase in Medicaid managed care programs covering the Supplementary Security Income (SSI) child population, a 20% increase in programs covering the child welfare population, and a 3% increase in programs covering the juvenile justice population.[11] These populations include significant percentages of children with serious behavioral health disorders.

Twenty-one percent of U.S. children and youth suffer from diagnosable mental health and substance abuse problems; of those, only 20% receive needed treatment.[12,13] This is a population for which improvements in screening, early identification, appropriate treatment, and care management can make a critical difference. Health plans have the infrastructure, data capacity, and utilization management processes to provide these services, and the flexibility to customize approaches to care for this population's unique needs. As children represent half of Medicaid enrollees and nearly all Children's Health Insurance Program (CHIP) enrollees, the potential for Medicaid MCOs to improve access and outcomes for children with serious behavioral health needs is indeed significant.[14]

Both within public-sector managed care and the larger children's mental health field, the emphasis on quality and outcomes related to clinical and administrative practices is growing. More is now known about effective treatment for children with serious behavioral health needs, including evidence-based interventions that have been evaluated in rigorous, controlled studies.[15] The evidence base is also growing for psychosocial and psycho-pharmacological interventions for children with selected disorders, including

[9] Centers for Medicare and Medicaid Services, U.S. Department of Health and Human Services (2008). "Medicaid Managed Care Penetration Rates by State as of June 30, 2007," special data request, August 2008.

[10] Centers for Medicaid and Medicare Services. U.S. Department of Health and Human Services (2006). "2006 National Summary of State Medicaid Managed Care Programs Program Descriptions." Available at **http://www.cms.hhs.gov/MedicaidDataSourcesGenInfo/**.

[11] B.A. Stroul, S.A. Pires, and M.I. Armstrong. "Health Care Reform Tracking Project: Tracking State Managed Care Reforms As They Affect Children and Adolescents With Behavioral Health Disorders and Their Families – 2000 State Survey." University of South Florida, 2001.

[12] Substance Abuse and Mental Health Services Administration, Center for Mental Health Services (1999). "Mental Health: A Report of the Surgeon General—Executive Summary." Available at **www.surgeongeneral.gov/library/mentalhealth/home.html**.

[13] D. Shaffer, P. Fisher, M.K. Dulcan, M. Davies, J. Piacentini, M.E. Schwab-Stone, et al. "The NIMH Diagnostic Interview Schedule for Children Version 2.3 (DISC-2.3): Description, Acceptability, Prevalence Rates, and Performance in the MECA Study. Methods for the Epidemiology of Child and Adolescent Mental Disorders Study," *Journal of the American Academy of Child and Adolescent Psychiatry*, 35 (1996a), 865–877.

[14] The Kaiser Family Foundation, statehealthfacts.org (2006). "Distribution of Medicaid Enrollees by Enrollment Group, FY2006." Available at **www.statehealthfacts.org/comparebar.jsp?ind=200&cat=4**.

[15] B.J. Burns and K. Hoagwood. *Community Treatment for Youth: Evidence-Based Interventions for Severe Emotional and Behavioral Disorders*. (New York, NY: Oxford University Press, 2002).

attention-deficit/hyperactivity, major depressive, disruptive behavior, and anxiety disorders. In addition, both evidence-based interventions and promising practices are emerging for populations of children with multiple and complex behavioral health disorders who are simultaneously involved in various child-serving systems, including child welfare and juvenile justice.

Although Medicaid managed care programs are covering children with serious behavioral health disorders, limited funds for program evaluation have prevented most from examining their impact on children's behavioral health care. The 10-year, SAMHSA-funded Health Care Reform Tracking Project found that in roughly 45% of Medicaid managed care programs, the impact of managed care on children's behavioral health care (e.g., service utilization, quality, cost, and family satisfaction) was unknown, and in 63% of programs, impact on clinical and functional outcomes was unknown. Notably, SAMHSA found that the Medicaid fee-for-service system did not provide such data either.[16] This *Collaborative* provided a timely opportunity for participating MCOs to look more closely at their data for this population, and develop new data to inform and track quality enhancements.

Key Challenges

A key challenge to improving quality in children's behavioral health care is translating smaller tests of evidence-based interventions — and promising, untested approaches — into larger, real-world arenas. Other challenges to focusing on youth with serious behavioral health needs include:

- Youth with SED do not cluster into any one Medicaid eligibility category — they are in both the generally "healthy" TANF population and the high-need foster care and SSI eligibility groups — making identification of the population difficult.
- The lack of diagnostic consistency, wherein adolescent presentation of mental illness differs from adult presentation, leads to delays in accurate/adequate diagnosis.
- Diagnosis does not necessarily equate with severity of need (or potential cost of care). This can complicate stratification of the population for quality improvement purposes.
- The stigma associated with behavioral health issues, confusion over the availability and accessibility of behavioral health services, and difficulty maintaining current member contact information make it more challenging to engage youth and families.
- Disparate, unlinked data systems across service sectors (e.g., physical, behavioral, pharmaceutical, etc.), the multi-system involvement of children with SED, and the complexity of multiple systems and payers with differing eligibility and exclusion criteria make outreach and collaboration more challenging.
- Treating this population is made more difficult by a shortage of child psychiatrists, placing greater behavioral health service demands on primary care providers (PCPs).
- There is a large co-occurrence of emotional disorders in youth with substance abuse problems, learning disorders, and developmental disabilities, making treatment and financing more challenging.
- The absence of placebo-controlled trials in this age group for most psychotropic medications underlies a lack of efficacy and safety evidence.

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[16] Stroul, Pires, and Armstrong, op. cit.

About this Toolkit

This toolkit is designed primarily for MCOs that want to improve administrative and clinical practices that support the delivery of services to children and youth with serious behavioral health needs and their families. In addition, purchasers of managed care services for this population can use the toolkit to identify promising approaches for their managed behavioral health care programs. Providers can also learn from the initiatives described, and implement their own quality improvement processes at the practice level. Finally, families can use the toolkit to identify and advocate for programs focused on improved outcomes for their children.

The toolkit is organized in the following sections:

- Overview of the *Collaborative,* and a brief introduction to the CHCS Quality Improvement Framework and its application to children with serious behavioral health needs.
- Promising practices tested by workgroup participants to improve care for children and youth, including details on each quality enhancing initiative (QEI), and the resulting impact on access, appropriateness of care, and avoidance of unnecessary services and costs.
- A synthesis of the challenges identified and addressed by the plans, the most salient lessons learned, and opportunities for continued innovations in care for the target population.

III. Project Overview

About the Workgroup

The *Collaborative on Improving Managed Care Quality for Youth with Serious Behavioral Health Needs* was CHCS' first attempt to translate and apply a quality-improvement methodology to the children's behavioral health arena. The workgroup brought together senior leaders and key implementation staff from select MCOs to develop and test innovative strategies to improve care for youth with serious behavioral health needs. The peer network supported a culture of improvement among the plans and provided a mechanism to share best practices.

Participation in this *Collaborative* was open only to MCOs operating in states or counties in which children's behavioral health services are delivered predominately through a managed care arrangement. Participating MCOs, chosen through a competitive selection process, included:

- Health plans integrating and providing both physical and behavioral health services, including some with subcontracts to behavioral health entities;
- Public-sector plans run by divisions of county government; and
- National specialty BHOs managing behavioral health carve-outs.

The QEIs successfully implemented by the participating plans clustered roughly into three areas:

1. Reducing the avoidable use of long-term, high-cost residential services (King County Mental Health Plan and ValueOptions New Jersey);

2. Providing customized care management services (Colorado Access Behavioral Care, Massachusetts Behavioral Health Partnership, and Community Care Behavioral Health); and

3. Educating PCPs to improve identification and treatment of adolescent depression (AMERIGROUP Community Care and Community Health Choice).

Table 1 provides an overview of the participating plans and their project goals:

Table 1: *Collaborative Participants and QEI Goals*

MCO	Service Area	Plan Type	QEI Goal
AMERIGROUP Community Care	TX	HMO	Increase by 25% the rate of adolescents screened for depression by PCPs.
CareLink*	Detroit, MI	Public-Sector Plan	Increase the number of cases conducted by family team conference.
Colorado Access Behavioral Care	Denver, CO	BHO	Engage 40% of high-needs children and adolescents up to age 18 in a behavioral health care management program for three months or more.
Community Care Behavioral Health	Allegheny County, PA	BHO	Ensure that 75% of youth discharged from residential treatment facilities have a first aftercare appointment within seven days of discharge.
Community Health Choice	TX	HMO	Decrease by 25% the number of antidepressant prescriptions written by primary care physicians.
King County Mental Health Plan	WA	Public-Sector Plan	Increase by 50% the proportion of eligible youth served by the new crisis stabilization services compared to the proportion served by the previous program.
Massachusetts Behavioral Health Partnership	MA	BHO	Improve clinical functioning scores for 60% of a target group of children who are placed in kinship care.
Community Behavioral Health*	Philadelphia, PA	Public-Sector Plan	Ensure that 75% of judicial dispositions match clinical recommendations for detained juveniles who have gone on to further evaluations through use of the CANS-JJ.[17]
ValueOptions New Jersey	NJ	BHO	Reduce by 30% the number of low-needs (clinically discharge-ready) children who are in residential treatment.

* Two of the nine plans that participated in the *Collaborative* were unable to fully implement and sustain their initiatives.

Applying the CHCS Quality Framework to Youth with Serious Behavioral Health Needs

The *Collaborative* used the Best Clinical and Administrative Practices (BCAP) Quality Framework[18] to guide the creation of the individual teams' quality improvement strategies. CHCS created this framework to address the complexities of improving health care services and delivery for people in Medicaid managed care. The framework was based on input from health plan medical directors and quality improvement staff across the country, and has been refined based on the experiences of more than 130 Medicaid health plans. Elements of the framework were adopted from learning models developed by the Institute for Healthcare

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[17] CANS refers to the Child & Adolescent Needs and Strengths Methodology, a strengths-based assessment instrument developed by Dr. John Lyons at Northwestern University. The CANS-JJ is used within the juvenile justice system.

[18] For more information about the Best Clinical and Administrative Practices (BCAP) quality improvement methodology, visit **www.chcs.org**.

Improvement[19] and others focusing on chronic disease, such as the Robert Wood Johnson Foundation's Improving Chronic Illness Care program.[20] The BCAP Quality Framework comprises the following elements:

- **BCAP Typology** – Categorizes, defines, and quantifies quality improvement activities.
- **Rapid Cycle Improvement** – Tests small changes and systematically analyzes improvement processes.
- **Measurement** – Enables health plans to measure short-term process changes and long-term outcomes.
- **Sustainability** – Promotes the formalization of identified best practices, and extends the use of the BCAP Typology within an organization.

The BCAP Typology noted above offers a useful template for designing quality initiatives that can be customized for clinical improvement projects. It is a standardized improvement process that emphasizes the importance of incremental change and frequent measurement to assess the impact of changes. The following typology categories provide a logical, stepwise approach to the design of a quality improvement initiative:

Identification	How can the MCO identify the population of children with behavioral health needs within its larger enrollment?
Stratification	How can the identified population of children with behavioral health needs be stratified by different levels of need or risk?
Outreach	How do health plan staff effectively reach children with behavioral health needs, their families, or providers?
Intervention	What changes improve outcomes effectively for children with behavioral health needs?

Depending on the nature of proposed activities, it is sometimes appropriate to combine the above categories to allow flexibility in program design. This is particularly true in the behavioral health arena, in which identification often includes stratification, and outreach activities may constitute interventions.

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[19] Institute for Healthcare Improvement **www.ihi.org**.
[20] Improving Chronic Illness Care, **www.improvingchroniccare.org**.

IV. Overview and Impact of Plans' Quality Enhancing Initiatives

This section describes each plan's QEI activities, categorized by area of focus. Discussion includes how each applied the typology categories, and the results achieved.

Reducing the Avoidable Use of Long-Term, High-Cost Residential Services

In the last 20 years, children's mental health advocates and practitioners have worked to decrease reliance on long-term, out-of-home placements. These arrangements separate children from their families, make community supports inaccessible, and largely lack evidence of long-term efficacy.[21] The system of care movement and SAMHSA grants for the development of local systems of care for children with SED have bolstered progress toward community-based services and supports.

Restrictive and expensive out-of-home placements — including inpatient psychiatric hospitals, residential treatment facilities (RTFs), group homes, and treatment homes — are often the *de facto* service providers for children and youth with serious behavioral health needs in communities without adequate home- and community-based service capacity. The 1999 Surgeon General's Report on Mental Health expressed concern about the use of residential treatment for youth with SED, citing weak evidence for the effectiveness of some types of residential treatment services and potential risks of residential treatment overall.[22] Use of hospitalization and residential treatment services by youth who do not require them does not improve their outcomes, and may hinder availability for children whose needs warrant these levels of care. Additionally, though an estimated 8% of children with SED are treated in RTFs, these services account for approximately 25% of mental health expenditures.[23]

The goal of plans focused on these issues is to provide the most appropriate services to children and youth based on their clinical and functional needs. Two of the participating BHOs — ValueOptions New Jersey (VO-NJ) and King County Mental Health Plan (KCMHP) in Seattle, Washington — focused on the diversion of youth with serious behavioral health needs from residential treatment and inpatient psychiatric hospitals. Both organizations manage behavioral health carve-out plans.

ValueOptions New Jersey: Reducing the Child Census in Unnecessarily Restrictive Levels of Care

At the time of the *Collaborative*, VO-NJ had a non risk-based contract with the state to act as an administrative service organization for the Children's Behavioral Health Services System of Care, which serves all children in the state using public behavioral health services (Medicaid, SCHIP, and non-Medicaid/SCHIP). Reporting enrollment of 34,223 children in the New Jersey child behavioral health system of care, VO-NJ targeted children who had the longest stays in a range of residential placement types without an obvious clinical rationale. It sought to reduce the number of low-need, long-stay youth — defined as potentially discharge-ready (PDR) — in RTFs.

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[21] Burns and Hoagwood, op. cit.

[22] Substance Abuse and Mental Health Services Administration, Center for Mental Health Services (1999), op. cit.

[23] B.J. Burns, K. Hoagwood, and L.T. Maultsby. "Improving Outcomes for Children and Adolescents with Serious Emotional and Behavioral Disorders: Current and Future Directions." In M.H. Epstein, K. Kutash, and A.J. Duchnowski (Eds.). *Outcomes for Children and Youth with Emotional and Behavioral Disorders and Their Families: Programs and Evaluation Best Practices.* (Austin, TX: Pro-Ed., 1998)

Identification

VO-NJ initially identified 1,765 children in any of the following types of residential care settings: group homes, RTFs, treatment homes, and psychiatric community residences.

Stratification

The plan defined two criteria for children who were PDR: exceedingly long length of stay for placement type, and low-needs according to the CANS assessment. Each child in out-of-home placement in New Jersey is screened for behavioral health needs using the CANS, making the assessment data readily available. VO-NJ focused its intervention on children with lengths of stay that were more than three standard deviations above the mean for the specific service type, then determined which of those children had CANS scores indicating a low level of clinical and functional impairment. These children thus had no apparent clinical need to continue their current level of residential care.

Of the 1,765 children and youth in residential care, VO-NJ initially identified 769 as PDR. Quarterly reports captured both those remaining in placement from previous quarters, and those newly meeting long-stay criteria. Over the 18-month intervention, 830 children and youth in residential settings were identified as PDR.

Outreach/Intervention

VO-NJ supplied reports of PDR children to the NJ Division of Child Behavioral Health Services (DCBHS) and the case management organizations within the system of care. Case management in the system of care is done by care management organizations (CMOs) and youth case management organizations (YCMs). The CMOs work with children and youth who have the most complex needs, while the YCMs offer services for moderate-needs children and youth.

Triggered by this list of PDR children, the CMOs and YCMs conducted meetings with the residential facility providers, as well as with families and child welfare staff as indicated. These meetings were designed to determine whether there was a continued need for residential treatment, and if so, to better understand that need, identify and address barriers to discharge, and develop appropriate discharge plans.

The CMOs and YCMs had to report their results to DCBHS, including action plans for each child/youth and any recommended system performance improvement plans.

Impact

The project aimed to reduce by 30% the number of PDR children in residential treatment. Impact was measured by the proportion of PDR children remaining in residential placements, as well as their average lengths of stay in these placements. At the start of the intervention (June 2005), 830 PDR children were in residential placement; at its completion, (June 2006), only 38 of those remained (see Figure 1). This represents a 95% decrease, far exceeding the impact goal.

Figure 1: Reduction in Out-of-Home Placements among Initial PDR Children
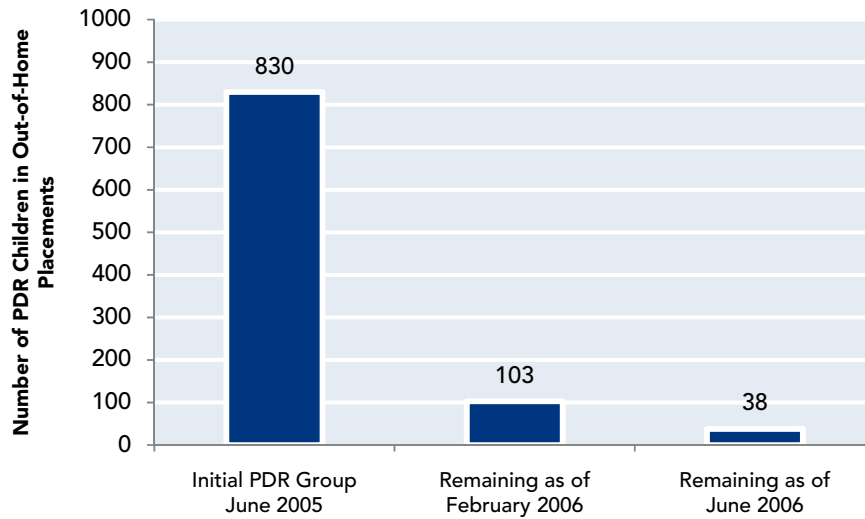
Average lengths of stay in out-of-home placement for PDR children decreased for all placement types (see Figure 2), with an overall reduction of 28% (from 443 to 319 days). The greatest decrease (42%) was achieved in group homes, and the smallest (18%) seen in treatment homes.

Figure 2: Average Length of Stay for PDR Children by Placement Type
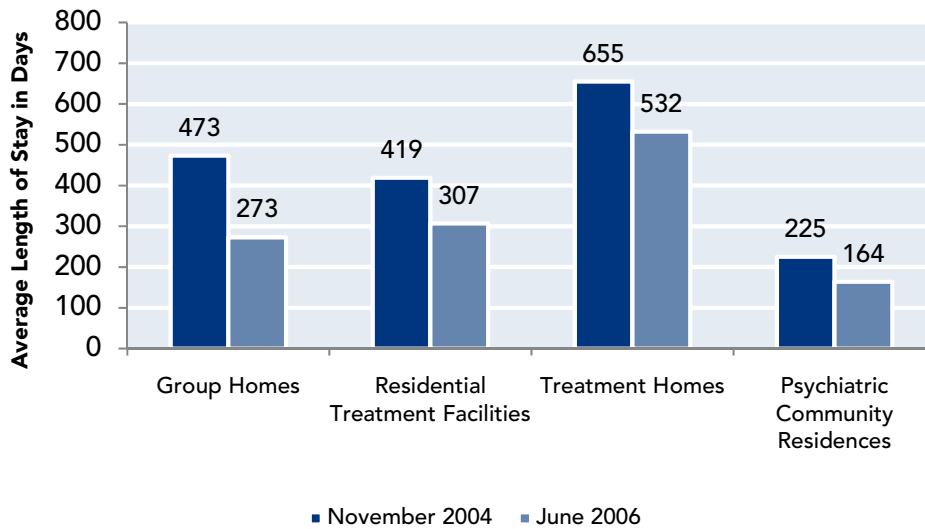
Sustainability

NJ DCBHS is invested in helping children who no longer need residential services return to their homes. Doing so ensures that children receive the most appropriate care, frees up limited resources for others in need, and creates system efficiency. After the initial pilot project, NJ DCBHS's system of care continued to utilize the CANS and other relevant clinical information to identify PDR children. The care management entities continue to work with residential providers to ensure that children can be returned to their homes and communities as quickly as possible once their clinical needs are met. When children are discharged

from residential settings, a case manager helps ease the transition and links them and their families to needed community-based services, maximizing the potential for children to remain stable at home.

King County Mental Health Plan: Implementing an Alternative to Inpatient Mental Health Treatment for Youth

KCMHP in Washington State manages a behavioral health carve-out for King County's adult and child Medicaid beneficiaries. At the start of its QEI, there were 181,697 Medicaid enrollees in King County; KCMHP served 26,124, of whom 5,549 were children or youth.

The plan aimed to reduce the county's reliance on inpatient hospitalization and residential services by redesigning and increasing utilization of its crisis stabilization system. Its strategy included implementation of a new home- and community-based continuum of services (the Children's Crisis Outreach Response System, CCORS) designed to stabilize children in their homes or in other community settings and reduce admissions to hospitals and RTFs. The crisis system serves all children and youth in King County who are not currently enrolled in a KCMHP outpatient benefit, regardless of Medicaid status.

Identification/Stratification

Through a call for proposals, KCMHP's initial identification efforts focused on finding potential hospital alternative/community-based service providers that could supply mobile outreach and crisis stabilization services, including a wraparound mobile team, family advocates, and crisis stabilization beds in specially designated therapeutic foster homes. KCMHP also sought to identify those referral sources and hospital-authorizing entities for which additional outreach and training would be needed to facilitate the system redesign.

Outreach

One of KCMHP's greatest challenges was changing the traditional practice of referring children and youth in crisis directly to hospitals and RTFs for inpatient treatment, to referring them to CCORS for crisis outreach, community-based stabilization, and hospital diversion when clinically appropriate. To achieve this, KCMHP provided outreach and training to primary referral sources and hospital-authorizing entities. The plan provided more extensive orientation for select police precincts identified as major referral sources, and ultimately expanded its outreach and training to schools and other health-serving entities in the county.

Intervention

KCMHP implemented a mobile crisis-response team, along with guidelines for screening and response dispatch. These enable the provision of wraparound services to stabilize youth in their homes and support each child and family through a more effective system of community-based treatment services and supports. Following crisis stabilization, a child and family team is developed as part of the wraparound process. The child may be connected back to a PCP, community clinic, ongoing mental health services, or another system. The wraparound team is responsible for getting the child, if eligible, into the public mental health system. The plan also developed a means to track screening performance against KCMHP's standards for hospital diversion.

Impact

This intervention sought to increase by 50% the proportion of youths served by less restrictive, crisis stabilization services compared to the previous system. In fact, demand for the crisis stabilization program was significantly greater than expected: KCMHP received twice as many referrals to the model relative to historical demand. Notably, those who accessed services through CCORS included a significant number of children "new" to the mental health system — those who had not qualified for the public mental health

system or who had qualified but had not accessed services before, and would have otherwise sought services through the emergency department or been hospitalized.

The percentage of children/youth ultimately served by the CCORS program increased by 79% over the previous system (see Figure 3), exceeding the program goal. Furthermore, the percentage of hospital admissions that were evaluated through CCORS for alternative services increased from 7% to 22% over the course of the project.

Interim measures indicated that between May 2005 and April 2006, 707 children were referred to and served through CCORS, promoting use of less restrictive treatment settings. Specifically, 80% were able to stay in their homes without special supports, 8% remained in the community with natural supports, and fewer than 5% were hospitalized. In addition, community mental health agencies used the crisis-stabilization beds to effectively divert youth enrolled in public mental health services from inpatient hospitalization.

Figure 3: Percentage of Eligible Children and Youth Using Crisis Stabilization Services
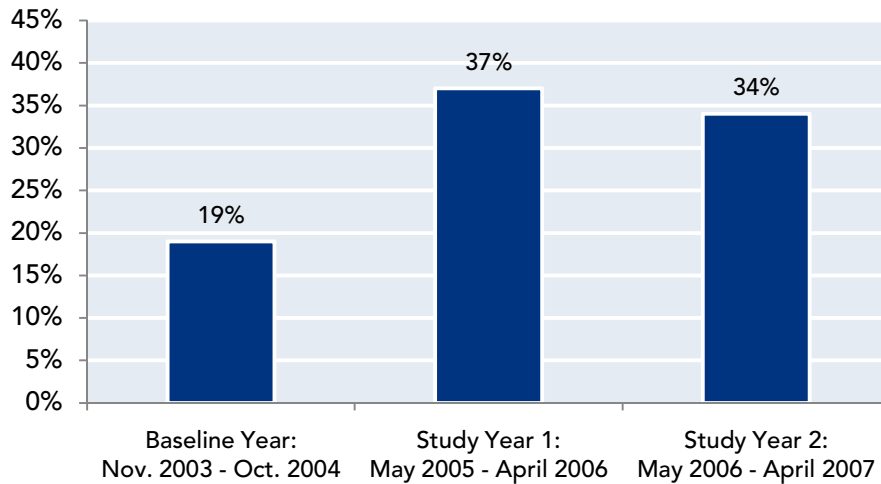
Finally, substantially more children and families received outreach under this model than in the previous system. Historically, outreach was provided to about 25% of children and their families calling the crisis line in an acute crisis. Under the new model, 95% of these callers received outreach in less than two hours from a team of crisis-intervention specialists that included a master's-level child and family therapist and a family advocate. Outreach consisted of face-to-face contact at the location of the escalating behavior; assistance with de-escalation of the immediate crisis; identification of strengths and needs of the family; coaching and skill-building; and linkage to appropriate community-based services.

Sustainability
Hospital diversion services are now standard in the KCMHP system, available to youth and families across King County, 24 hours a day, seven days a week. Based on the program's impact, the county's child welfare agency doubled its funding, allowing KCMHP to add another level of service. In addition, the target population and goals were expanded to include preventing youth with SED from entering the child welfare system unnecessarily, and preventing placement disruption for youth already involved with the system. This Intensive Stabilization Services Program is available to a limited number of children and youth through referral from the child welfare agency or KCMHP.

Providing Customized Care Management Services

Children with SED require customized care management approaches to meet their complex needs. They may receive treatment through the primary care system, services through specialty mental health providers, and other related services, such as special education. Two-thirds of children with SED in the Medicaid population are involved with the child welfare and/or juvenile justice systems, and many also have individualized education plans. Coordination of care among these systems is essential to achieving better outcomes. Improving their care also requires the engagement and coordination of care with their families; for children in child welfare, these include birth, kinship and adoptive families, and guardians.

Children with SED are also at high risk for co-occurring disorders, such as developmental disabilities and substance abuse, and the intensity and acuity of their needs tend to vary over time. They can benefit from a concerted care management focus, which helps to ensure appropriate care, fewer gaps in care, and lower costs as a result of earlier, more comprehensive approaches.

Three of the participating plans — Colorado Access Behavioral Care; Community Care Behavioral Health in Allegheny County, Pennsylvania; and Massachusetts Behavioral Health Partnership — focused on care management strategies.

Colorado Access Behavioral Care: Engaging At-Risk Families in Care Management

Colorado Access Behavioral Care (COABC) is a Medicaid carve-out plan that provides behavioral health services to all Medicaid beneficiaries in the city and county of Denver. Its QEI focused on identifying high-utilizing/high-cost youth and engaging them in a care management program for at least three months. This intervention targeted COABC's 1,722 child Medicaid members.

Identification
COABC identified all youth ages 0 to 17 who might be candidates for the care management program based on existing high-level service authorizations (e.g., hospitalization, sub-acute and day treatment). All of those with existing authorizations for intensive behavioral health services were identified.

Stratification
COABC developed an operational definition of "high-risk" based on multi-system involvement and clinical and functional status across several domains. This information was used to establish a risk and stability index (RSI) to determine which youth would be targeted for intervention and enrollment in the program, called the Access Family Focused Intervention and Recovery Model.

Outreach
To track the provision of care management services to the target population, COABC used proprietary software. Resource coordinators conducted telephonic outreach and home visits, if needed, to those identified via the RSI. Service coordinators called providers and other stakeholders to help them complete both the CANS assessment and a care plan for the member and his/her family.

Intervention
COABC used the RSI to develop care plans collaboratively with the youth, their families, providers, and key stakeholders. It also created an educational program for consumers, families, and providers based on relevant best practices and self-management skills. COABC used the CANS to improve family engagement around high-priority areas. It continued to assess clinical status, self-management, and family self-efficacy, re-administering the CANS at least every three months during the youth's engagement with care managers to ensure attention to emergent needs.

Impact

Over the one-year initiative, COABC's engagement rate (i.e., percentage of youth and families that entered and remained in the care management program for at least three months) increased from 21% to 91% (see Figure 4), far exceeding its goal of 40%. Without the care management program, this population typically would have used more services, as well as more restrictive levels of care, such as hospitals.

Figure 4: Increase in Youth and Family Engagement
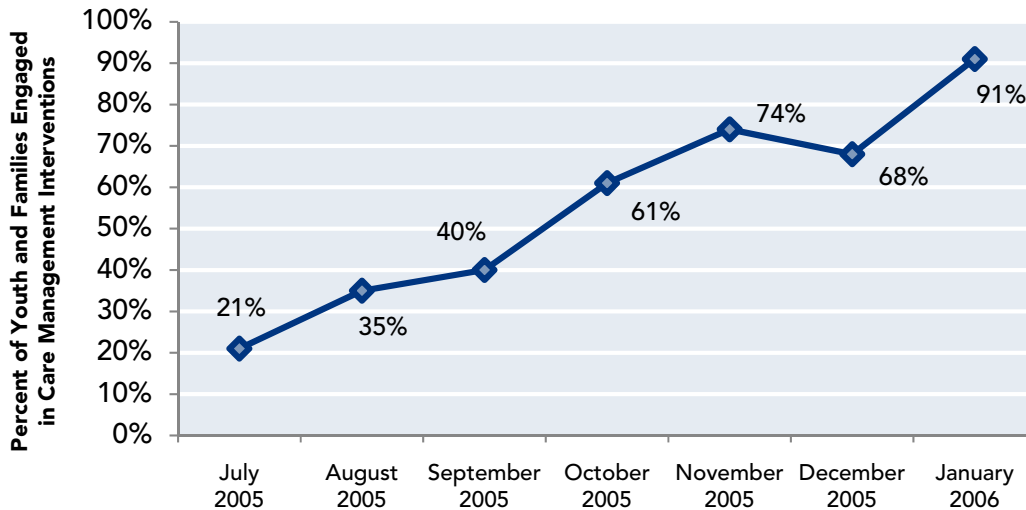
COABC conducted an interim analysis of CANS scores before and after the intervention for a random sample of 15 children. Of these, every child showed a score decrease in at least one of the CANS domains, and two-thirds showed decreases in more than half of the domains, indicating improvement in clinical and functional status.

Sustainability

Although COABC reported more attention to family engagement among its providers, staff reductions prevented continuation of the formal care management program. Components of the program, however, have been integrated into the organization's standard procedures for engaging high-risk children and families.

Community Care Behavioral Health Organization

Community Care Behavioral Health Organization (Community Care) is a nonprofit behavioral health MCO serving 35 counties in Pennsylvania. It holds the behavioral health carve-out contract in Pittsburgh's Allegheny County for HealthChoices, the state's Medicaid managed care program. Community Care manages behavioral health services for nearly one million members whose health coverage is sponsored through Medicaid, Medicare, and commercial plans. At the time of this project, 41,582 of Community Care's Medicaid members in Allegheny County were children and youth age 21 or younger.

Community Care focused its QEI on the subset of child and adolescent HealthChoices members who were receiving behavioral health services in psychiatric RTFs in Allegheny County. Its goal was to shorten the time between RTF discharge and first clinical appointment, aiming for 75% of appointments to occur within seven days of discharge. This goal was based on clinical research indicating that the sooner a follow-up appointment is scheduled to occur after discharge from acute inpatient psychiatric hospitalization, the

more likely the individual is to attend; [24] those who attend a follow-up appointment are subsequently less likely to be re-hospitalized. [25]

Two important changes with implications for implementation occurred during the roll-out of Community Care's QEI. First, the state added psychiatric RTFs to its Medicaid-covered services, resulting in a 2.5-fold growth in RTF providers in the Allegheny HealthChoices network. Second, HealthChoices experienced a significant growth in contracts across the state. Thus, there were more RTFs to train and more children in RTF placements to address.

Identification/Stratification

To identify all youth admitted to any RTF in a specific quarter, Community Care searched its data warehouse for RTF authorizations that were open during that quarter for members ages 0 to 21 on the date of service. In order to analyze time to discharge, all youth discharged from any RTF in a specific quarter were extracted from RTF discharge data in PsychConsult® (Community Care's proprietary database). During the project period, the number of youth in RTFs was between 80 and 352, a wide range driven by the two changes described above.

Outreach/Intervention

To shorten the time between RTF discharge and first aftercare appointment, Community Care implemented both an organizational policy change and provider training. The policy change allowed an overlap between the final weeks of an RTF stay and initiation of the youth's aftercare, which was not permitted previously. Given the increase in RTF providers and children in RTF placements, the training was more resource-intensive than anticipated.

Community Care developed a provider training module on the importance of discharge and aftercare planning, use of its discharge summary template, and the clinical rationale for scheduling follow-up care appointments to occur within seven days of discharge. During training, RTF providers were encouraged and supported to make a referral to the youth's planned aftercare provider 30 to 60 days prior to the anticipated discharge date. This was accomplished in three ways: (1) the plan's care managers and Community Care's associate medical director for Child Services recommended it during provider meetings; (2) care managers reinforced the practice at discharge planning meetings; and (3) during pre-discharge phone consultations, Community Care's child psychiatrists and psychologists reminded RTF physicians and psychologists to do so.

Impact

While not reaching its ambitious goal of providing the first appointment within seven days of discharge for 75% of youth, Community Care decreased the average number of days until first appointment for members with aftercare appointments by 50%: from 28.9 during the third and fourth quarters of 2004, to 14.4 for the same quarters of 2006 (see Figure 5).

Community Care believes that an even greater reduction was achieved, but was difficult to capture due to RTF providers' not submitting a large percentage of discharge summaries to the plan. As a result, data for many of the youth were incomplete.

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[24] B.D. Stein, J.N. Kogan, M.J. Sorbero, W. Thompson, and S.L. Hutchinson. "Predictors of Timely Follow-Up Care Among Medicaid-Enrolled Adults After Psychiatric Hospitalization," *Psychiatric Services*, 58 (2007): 1563-1568.
[25] Personal communication from Barbara Johnson, MD. December 9, 2008.

**Figure 5: Decrease in Average Number of Days Until
First Aftercare Appointment**
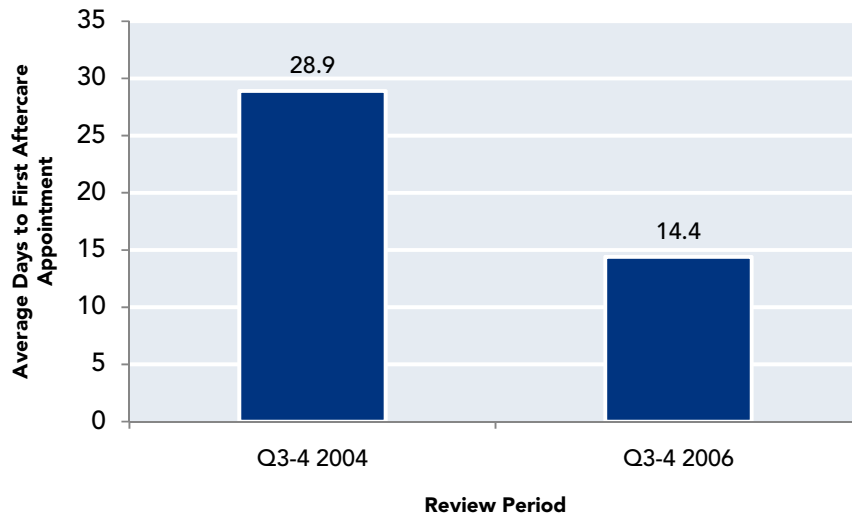
Sustainability

Subsequent to this project, Community Care instituted a follow-up care management initiative to address the disparity between the number of children who are discharged and the number utilizing post-discharge services. The initiative addresses various barriers to treatment initiation and engagement, working, for example, to help families reschedule missed appointments.

Massachusetts Behavioral Health Partnership: Targeting Care Management to High-Risk Children in Kinship Care

Massachusetts has five Medicaid MCOs, one of which is a primary care case management (PCCM) program. Massachusetts Behavioral Health Partnership (MBHP) is a behavioral health carve-out established to manage mental health and substance abuse services for Medicaid members who select the PCCM plan. It also functions as the predominant behavioral health plan for children involved in state agencies, such as child welfare. At the time it launched its QEI, MBHP's membership was nearly 325,000, including approximately 171,000 children and youth.

MBHP's QEI focused on children who were already or newly assigned to certain child welfare placements, seeking to prevent the children's needs for inpatient services and to maintain or improve their Child & Adolescent Functional Assessment Scale (CAFAS) scores[26] through an enhanced outpatient program (EOP) model. MBHP implemented the QEI in two sites within the state (Fall River and Lowell) for children in the care and custody of the Department of Social Services (DSS) and placed in kinship care or foster care.

Identification

MBHP relied on the DSS field offices for data on children in kinship or foster care for first or second placement. Enrollment criteria were developed to ensure consistent identification of children across the two sites; 6,199 children statewide met the criteria.

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[26] For more information about CAFAS, visit **http://vinst.umdnj.edu/VAID/TestReport.asp?Code=CAFAS**.

Stratification

Of those identified as meeting the project criteria, 817 resided in the two target sites. CAFAS scores identified 141 as being in greatest need of additional services and supports from the EOP.

Outreach

MBHP conducted three distinct outreach activities. The plan: (1) contacted all families of the highest-need children; (2) established strategies to engage the relevant DSS staff and providers; and (3) identified providers through a competitive application process, and trained them on the service model. Approximately 200 targeted DSS staff and the selected providers received training on the EOP, criteria for participation, and the referral protocol.

Intervention

Children who met the inclusion criteria were enrolled in an EOP in which the outpatient clinician coordinated clinical services within a wraparound model. Outpatient services were organized as a home- and community-based "package," with family involvement and decision-making integral to effective treatment. Service planning and delivery involved the family, professionals, and individuals with established supportive relationships with the family. There was no limit on the duration for which the child and family could receive the EOP services.

Impact

MBHP's goal was to achieve clinical and functional improvements in 60% of children enrolled in the EOP. Of the 141 highest-need children, 94 (67%) were enrolled in the program. The primary diagnoses for those children were adjustment disorders, depression, and attention deficit hyperactivity disorder. All 94 had pre- and post-intervention scores (based on CAFAS data) for clinical and functional status, indicating improvements for 36 (38%) and no change for 27 (29%). Thirty-three percent of those enrolled continued to show decreases in their clinical and functional status.

Sustainability

Massachusetts decided to expand the pilot from two to five sites through an MBHP performance incentive project in fiscal year 2006. During that year, MBHP continued to collect outcomes data; the pilot EOP sites will continue collecting data through fiscal year 2009. With the implementation of the Massachusetts Child Behavioral Health Initiative in fulfillment of *Rosie D. vs. Romney*, the principles of EOP are to be incorporated into outpatient care beginning in fiscal year 2010.[27]

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[27] The escalating problems of children "stuck" in hospitals, gaps in treatment and uncoordinated services drew statewide attention in Massachusetts and led to *Rosie D. vs. Romney*, a class action lawsuit filed in 2002. The court ruled that the Commonwealth had failed in its responsibility to adequately care for 15,000 children with SED. As a result, the Commonwealth is implementing new systems to improve mental health screening; creating tools to better assess mental health needs; implementing several new home- and community-based services; implementing care management; and enhancing information technology.

Educating Primary Care Providers to Improve Identification and Treatment of Adolescent Depression

The two participating Texas health plans — AMERIGROUP Community Care, and Community Health Choice (CHC) — focused on outreach and education for PCPs on the detection and treatment of adolescent depression. The primary care setting is increasingly the first point of contact for children's behavioral health care. Concurrent to the *Collaborative*, there was a significant national focus on the use of antidepressants to treat adolescent depression, including a mandate from the U.S. Food and Drug Administration for a "black box warning" — the most serious warning placed on prescription medication — on all antidepressants. [28] This warning cautioned patients and prescribers of the risk of suicidality and encouraged prescribers to balance this risk with clinical need when treating youth with depression, as only one commonly prescribed antidepressant had been approved for use in children and youth.

While the American Academy of Child and Adolescent Psychiatry argued against the black box warning due to fears about limiting access to a potentially effective treatment,[29] the implications for access were unclear. A black box warning could deter providers from prescribing antidepressants to children who could benefit from them. Alternatively, concern about the risk of adverse affects was high in light of recent child deaths. AMERIGROUP and CHC each sought to encourage appropriate treatment by providing a depression screening tool and training to PCPs, and encouraging referrals to behavioral health specialists as needed. There was significant overlap in the provider networks of these two HMOs, suggesting that messages from the two plans would reinforce each other.

AMERIGROUP *Community Care*

AMERIGROUP Community Care, a subsidiary of AMERIGROUP Corporation, is an HMO operating in six contiguous counties including Harris County, which encompasses the city of Houston. The plan has a Medicaid enrollment of roughly 151,000, including approximately 22,500 beneficiaries who are ages 13 to 21.

AMERIGROUP's goal was to increase adolescent depression screening with a standardized instrument by PCPs serving its pediatric population. The plan sought to monitor depression screenings by the PCPs who were serving the greatest number of youth within its membership.

Identification/Stratification
AMERIGROUP used claims data and physician panel reports to identify all PCPs in its network who had provided any services to adolescents within the previous year. It ultimately targeted 120 high-volume providers — defined as those who were treating 50 or more adolescents.

Outreach
AMERIGROUP solicited its medical advisory committee to determine what tools and information physicians would find helpful for adolescent depression screens; the committee subsequently approved the PHQ-9 [30] — a patient health questionnaire for mental health screening and diagnosis — and PCP

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[28] U.S. Food and Drug Administration (Oct. 15, 2004). "FDA Launches a Multi-Pronged Strategy to Strengthen Safeguards for Children Treated with Antidepressant Medications" Available at **http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/2004/ucm108363.htm**.

[29] American Academy of Child and Adolescent Psychiatry (Sept. 28, 2004). "AACAP Comment on Pending Pediatric Antidepressants Warning." Available at **http://www.aacap.org/cs/root/resources_for_families/psychiatric_medication/aacap_comment_on_pending_pediatric_ antidepressants_warning**.

[30] For more information about the PHQ-9 tool, visit **www.phqscreeners.com/pdfs/PHQ-9/English.pdf**.

communication strategies. Provider relations representatives delivered the screening tool to the 120 high-volume PCPs.

Intervention

AMERIGROUP provided all PCPs in its network with the PHQ-9 and gave high-volume providers face-to-face training on its use. Medical record reviews were conducted to measure the change in the screening rate among adolescent members. This review coincided with HEDIS data collection efforts in order to minimize disruption in PCP offices and use staff resources efficiently.

Impact

To assess whether it achieved its target 25% increase in provider use of depression screens for adolescents, AMERIGROUP examined a random sample of 89 medical records for adolescent members served by the targeted PCPs at baseline, and another random sample of 35 records following the intervention. While there is more work to be done, a more than two-fold increase in the screening rate — from 16% to 37% — was observed (see Figure 6).

Figure 6: Increase in Screening Rate among Targeted Primary Care Physicians
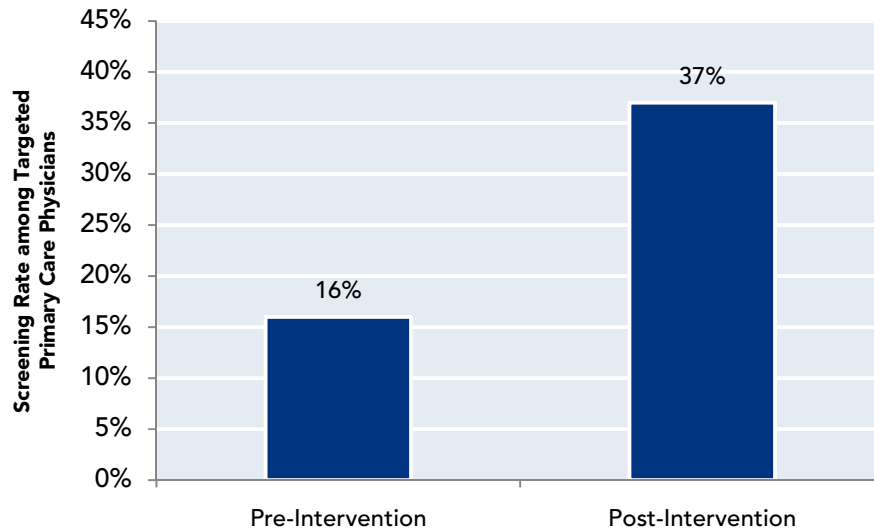
Sustainability

AMERIGROUP maintains a commitment to depression screening, and reports regularly on screening rates to both plan management and the medical advisory committee. Provider relations addresses depression screening in its routine provider education, and the plan has incorporated other strategies to increase PCP referrals to behavioral health services, including: distribution of a brochure listing behavioral health resources; provision of the PHQ-9 in English and Spanish; and educational lunch meetings. It also developed member education materials on accessing behavioral health services, and began including these materials in member orientation packets.

Community Health Choice (CHC)

CHC is a Medicaid/CHIP non-profit HMO operating in Houston. At the time of the *Collaborative*, its total Medicaid membership was nearly 47,000, with roughly 12,000 members between 13 and 21 years of age. Its youth membership is racially and ethnically diverse, as follows: 47% Hispanic, 33% Black, 15% Caucasian,

and 5% Asian or other. Documentation showed that 305 (3%) adolescent members were treated for a behavioral health diagnosis in the baseline year. Through this project, CHC sought to educate PCPs about depression in youth, and appropriate screening, referral and treatment.

Identification

CHC used baseline data from pharmacy and administrative claims to identify all adolescent members with depression-related claims and all non-psychiatrist prescribers of antidepressants to adolescents. It also used pharmacy data to identify primary care and behavioral health physicians writing initial prescriptions for antidepressants to adolescents, and to determine which members received refilled prescriptions.

Stratification

While only 1% of CHC's adolescent members had depression-related claims, national attention on antidepressant use in children and youth drove organizational interest in this topic. CHC wanted to ensure that these medications were being prescribed to adolescents by child psychiatrists — those best trained to assess the need for them. Accordingly, the plan stratified the top 10 non-psychiatrist prescribers to target with intensive intervention and support.

Outreach/Intervention

Working with its behavioral health subcontractor, APS Healthcare, CHC conducted child psychiatrist-led onsite visits with PCPs both to deliver the guidelines and to answer any questions about referring children with behavioral health needs to the behavioral health care provider. It provided all of its network PCPs with clinical practice guidelines for adolescent depression, with a focus on screening and referral, and educated them about the warning signs of youth depression and suicide. The two entities also collaborated with the state vendor drug program responsible for the Medicaid pharmacy program to send a prescription reminder letter to practitioners and members to ensure continuity of depression medication management.

Impact

Seven of the top 10 prescribing PCPs decreased their antidepressant prescriptions to adolescents over the course of the intervention. This resulted in an overall 48% decrease in total antidepressant prescriptions by those physicians over the same period in the previous year, far exceeding the 25% reduction goal.

Sustainability

Following this QEI, CHC achieved and continues to maintain URAC accreditation as an Adolescent Depression Disease Management Program.[31] CHC uses pharmacy data from the State Vendor Drug Program to identify members with depression-related pharmacy claims for outreach by its accredited program.

When an adolescent is identified as a candidate for the disease management program via pharmacy data, paid claims or a referral, CHC attempts to contact the adolescent and his/her family to introduce the program. CHC makes five attempts — via telephone, letters and/or a program brochure — to reach each member, and has offered small incentives ($5 gifts) for responding and/or participating in the program.

CHC has maintained a process improvement goal of increasing the percentage of adolescents with a depression diagnosis who are referred to behavioral health providers. It also has focused on enhancing the screening of adolescents and working more closely with its BHO. In order to reduce unnecessary

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[31] For more information about URAC accreditation, visit **www.urac.org/programs/prog_accred_DM_po.aspx?navid=accreditation&pagename= prog_accred_DM**.

readmissions, CHC has implemented a weekly case conference model to more closely monitor youth who are in treatment and those needing additional assistance post-discharge from psychiatric facilities.

One of CHC's 2009 goals is to offer an adolescent depression forum, in partnership with its contracted BHO, for school nurses and counselors from area school districts. The forum will address the myth that children in Medicaid either do not have behavioral health benefits or are limited to services from the local mental health authority — two misperceptions that have created barriers to care.

V. Quality Enhancing Initiatives: Lessons Learned

The workgroup identified a number of challenges to implementing QEIs, which the MCOs developed strategies to address during the planning phase of the *Collaborative*. In most instances, the MCOs were able to move successfully through each phase of the quality improvement process to implement their interventions.

Identification

Challenges

Identifying children and youth with serious behavioral health needs within the Medicaid managed care population is inherently challenging for a number of reasons:

- Use of any one Medicaid eligibility category is insufficient because many youth with SED appear not only within SSI and foster care eligibility categories, but, predominantly, in the low-income (TANF) population.[32]
- Use of diagnostic claims tends to be problematic, as diagnostic categories do not necessarily indicate severity.
- Use of claims data may be insufficient if a plan is interested in early intervention, as claims are generated only after treatment has begun.
- Engagement of other systems, as well as families, may be needed to identify certain subsets of children and youth with SED, such as those in the child welfare system or those at risk for hospitalization.
- Identifying stakeholder groups involved in the care of children with SED, such as providers, can be a difficult, complex task.

Strategies

Most participating plans used a combination of internal data — including diagnostic and pharmacy claims, service authorizations, and provider profiles — to identify youth with SED and those involved in their care. This required relationship-building and engagement across multiple departments within each MCO. In most cases, the MCO had to enlist an internal "champion" at a senior level, such as a medical director, to gain the cooperation of the various departments. Virtually all of the plans also had to work closely with in-house information technology staff to develop special analyses to obtain the required data. Additionally, several of the plans had to forge relationships with other systems, such as the local child welfare agency or the state's contracted pharmacy benefit manager, to obtain data outside their control (see Table 2).

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[32] J.A. Buck and K. Miller. *Mental Health and Substance Abuse Services in Medicaid, 1995*. DHHS Pub. No. (SMA) 02-3713. (Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, 2002). Available at
http://mentalhealth.samhsa.gov/publications/allpubs/SMA02-3713/default.asp.

Table 2: *Identification – Selected Examples*

MCO	Identification Goal	Critical Challenge	Strategies	Results
Colorado Access Behavioral Care	Identify children and adolescents, 0-17, with SED who are high service utilizers.	Initially used diagnosis of bipolar disorder, which yielded low incidence and did not equate reliably with high utilization.	Developed an algorithm, based on an adaptation of the CANS tool, called a "Risk and Severity Index," to guide identification of high service utilizers.	Identified 7% of adolescents with SED as high service utilizers.
Community Care Behavioral Health Organization	Identify all children and youth admitted to RTFs.	Too long of a lag in claims data to be useful in identifying population early enough.	Utilized service authorization data.	Identified 2% of children, 0-17, with open service authorizations as children authorized for RTFs.
Community Health Choice	Identify all non-psychiatrist prescribers of anti-depressants for adolescents.	Requires IT staff to conduct special analyses of claims and pharmacy data, pulling medication-related claims, and identifying providers by specialty and volume.	Enlisted support of medical director to engage IT staff.	Identified 32 non-psychiatrist prescribers of anti-depressants for adolescents.
King County Mental Health Plan	Identify potential providers of hospital alternative services, hospital referral sources (e.g., families, schools, ERs, police), and hospital-authorizing entities.	Requires identification of multiple entities in large, urban community.	Created an internal workgroup and systematically developed comprehensive lists for targeted identification.	Identified 100% of potential providers of alternative services, hospital referral sources, and hospital-authorizing entities.
Massachusetts Behavioral Health Partnership	Identify children enrolled in plan placed in DSS kinship care or in foster care for the first or second time.	Information on DSS placement type controlled by DSS.	Created a steering group that included DSS, enlisted support of high-level DSS manager, worked closely with DSS data staff, and established a DSS liaison within MBHP.	Identified 1% of MBHP enrollment as children in DSS kinship care, and 4% of enrollment as children placed in foster care for the first or second time.

Stratification

Challenges

Stratification of subsets of children with SED, or of providers serving children with SED, poses challenges similar to identification:

- Plans were required to work with multiple internal and external entities and to compare data from multiple data sets.
- IT staff were challenged by the level of customization or specificity required.
- Plans had to rely upon specially developed algorithms to guide stratification without the benefit of validity and reliability trials.

Strategies

As noted, a number of the plans developed and tested algorithms to guide stratification. Some of the plans formed workgroups, comprised of MCOs and outside entities, to inform stratification. Others created "work-around" strategies when initial approaches to stratification were unsuccessful (see Table 3).

Table 3: *Stratification – Selected Examples*

MCO	Stratification Goal	Critical Challenge	Strategies	Results
Community Care Behavioral Health Organization	Stratify youth, 13-21, by RTF discharge date within a specific quarter.	Planned to use information from custom fields of service authorization data, but relevant data were not always in file.	Plan care managers contacted RTFs and created reports with which plan stratified youth.	Percentage of youth discharged by quarter varied from 26% to 53%, with an average of 37% over 12 quarters.
Community Health Choice	Stratify top 10 non-psychiatrist prescribers of anti-depressants for adolescents.	Analysis of multiple data sets required to identify top 10 prescribers.	Developed algorithm that defined top 10 prescribers by: a) # of prescriptions written for depression, b) # of adolescents for whom they prescribed, and c) # of adolescents assigned; compared pharmacy data, data from master provider file, and claims data; enlisted buy-in from IT staff, medical committee, and provider relations staff.	Identified top 10 of 32 prescribers.
Massachusetts Behavioral Health Partnership	Stratify children enrolled in plan placed in DSS kinship care or in foster care for the first or second time who could benefit from EOP model.	Required understanding of model and cooperation from DSS managers and workers, EOP providers, and families.	Trained DSS workers (over 200); held regular meetings with DSS and providers; added providers and family members to steering group.	Stratified 141 children as needing EOP.
ValueOptions New Jersey	Stratify children in RTFs who are discharge-ready.	Required development of an algorithm to define discharge-ready.	Developed algorithm and ran quarterly reports to identify discharge-ready children.	Percentages of youth stratified as discharge-ready varied from 26% to 44% over the project period.

Outreach

Challenges

Participants reported that the intensity of effort required to reach multiple stakeholders both within and outside of the MCOs was their primary challenge. Specifically:

- MCOs trying to engage families had difficulty making contact, especially when relying primarily on telephonic means, and with those involved in the child welfare system.
- MCOs first had to secure buy-in from their medical committees in order to outreach to providers.
- MCOs trying to engage other systems, such as child welfare, faced numerous challenges in getting buy-in from managers in these systems and in reaching line staff who needed to know about the project.

Strategies

Plans used a variety of effective methods to reach target groups. For example, one plan trying to reach families involved in child welfare utilized home visits, instead of telephone contact. Many of the plans used internal resources — provider relations staff, resource coordinators, service coordinators, and care management staff — to help engage target audiences. Several of the plans enlisted the help of select members of their medical committees to gain buy-in from other members (see Table 4).

Table 4: *Outreach – Selected Examples*

MCO	Outreach Goal	Critical Challenge	Strategies	Results
Community Care Behavioral Health Organization	Engage RTF providers to support use of discharge summary form.	RTF provider pool not static — new providers coming on (as state shifted to Medicaid Psychiatric Residential Treatment Facility coverage); unresponsiveness of some RTFs.	Held monthly meetings with RTFs and trained RTF providers about QEI and use of discharge summary form; identified appropriate staff within unresponsive RTFs and sent personal invitations.	Trained all RTF providers in discharge summary form.
Community Health Choice	Send clinical practice guidelines for adolescent depression to 100% of providers in network with imprimatur from plan medical committee, and visit top 10 prescribers.	Getting buy-in from plan medical committee.	Partnered with BHO subcontractor to have BHO child psychiatrist present QEI to medical committee; enlisted nurse manager from Adolescent Depression Disease Management Program, quality improvement manager, and medical director to talk to committee members about the project.	Secured buy-in from medical committee, distributed newsletters and guidelines to all providers, and visited top 10 prescribers.
Massachusetts Behavioral Health Partnership	Contact 100% of families who could benefit from EOP.	Difficulty in reaching families; initial process for enrollment involved DSS worker visiting family and mandating family participation in EOP as part of the family's child welfare plan — this led to family resistance.	Changed outreach methods to families to include home visits by DSS workers <u>and</u> the EOP provider to explain EOP and its benefits, and to stress voluntary participation.	Enrolled 94 families in EOP.
ValueOptions New Jersey	Contact 100% of RTF providers with discharge-ready children.	Getting buy-in from RTF providers.	Enlisted clinical department to partner in reaching out to RTF providers.	Contacted all RTF providers with discharge-ready children.

Intervention

Challenges

A central challenge for many of the plans was that their interventions entailed changing the culture of provider organizations and/or altering practices of MCO staff or outside entities, such as child welfare agencies. Such changes do not occur quickly, requiring the plans to implement and sustain a variety of communication and training strategies.

Strategies

Many plans changed policies to broaden support for desired quality improvements. For example, they revamped billing procedures to increase provider adoption of new approaches; incorporated the use of standardized tools into training approaches; and utilized peer-to-peer technical assistance and peer "champions" (respected colleagues) to introduce desired changes in provider practice. Recommendations from the champions were particularly effective at shifting practices on a small scale. Plans found that a less intensive approach was then needed once a critical mass had adopted the desired change and could influence so-called "late adopters." Overall, the participating plans were very successful in attaining their intervention goals (see Table 5), with the majority exceeding their program impact goals (see Table 6).

Table 5: *Intervention – Selected Examples*

MCO	Intervention Goal	Critical Challenge	Strategies	Results
AMERIGROUP Community Care	Train 100% of high-volume PCPs on adolescent depression screening tool.	Difficulty getting appointments with PCPs.	Enlisted support of plan medical director (peer-to-peer) to intervene with PCPs regarding the importance of the screening tool.	Trained 96% of high-volume PCPs on use of screening tool.
Colorado Access Behavioral Care	Enroll 100% of youth identified as needing care management in the program.	Difficulty reaching families by phone; getting provider staff comfortable with using assessment and engagement tools; creating a culture of family engagement in provider organizations and in MCO staff.	Resource coordinators made necessary home visits to reach families; service coordinators enlisted providers to contact families about care management program; trained provider staff in use of CANS tools.	Enrolled 86% of those youth identified as needing care management.
Community Care Behavioral Health Organization	Train 100% of RTF providers on pre-discharge planning processes.	Changing the practice of RTFs to support partnering with the MCO on after-care planning for discharge-ready youth.	Held training and regular meetings with RTF staff; tracked and reached out to new RTFs; enlisted the support of CCBH care management staff; changed reimbursement requirements to allow billing for post-discharge services prior to discharge.	Introduced 100% of RTF providers to new policies, and trained and supported them in changing discharge planning practices.
Community Health Choice	Intervene with top 10 prescribing PCPs about best practices.	Changing clinical practice.	Used Clinical Best Practice Guidelines with follow-up visits from consulting child psychiatrist.	Visited and provided clinical consultation to 100% of targeted providers.
ValueOptions New Jersey	Conduct face-to-face meetings with RTF providers to explore and address barriers to discharging potentially discharge-ready children.	Resistance from RTF providers.	Obtained peer technical assistance from another BHO (MBHP) on its Checklist of Best Practices for Discharging Children from Out-of-Home Settings; enlisted CMOs and YCMs to visit RTF providers to discuss discharge issues.	100% of RTF providers with discharge-ready children were visited and supported in developing discharge plans for children as needed.

Impact

All seven of the profiled plans had a measurable impact on their area of focus. Five of the seven exceeded their impact goals (see Table 6).

Table 6: *Impact*

MCO	Impact Goal	Results
AMERIGROUP Community Care	Increase by 25% the rate of adolescents screened for depression by PCPs.	Increased by 131% the rate of adolescents screened for depression by PCPs.
Colorado Access Behavioral Care	Engage 40% of high-needs children and adolescents up to age 18 in a behavioral health care management program for three months or more.	Engaged 91% of targeted youth and families in the care management program.
Community Care Behavioral Health	Ensure that 75% of youth discharged from RTFs have a first appointment within seven days of discharge.	Decreased the average time to first aftercare appointment by 50%. Insufficient data to determine the percentage of discharged youth seen in aftercare within seven days of discharge.
Community Health Choice	Decrease by 25% the number of antidepressant prescriptions written by non-psychiatrist physicians.	Decreased by 48% the number of antidepressant prescriptions written by PCPs.
King County Mental Health Plan	Increase by 50% the proportion of eligible youth served by the new crisis stabilization services compared to the proportion served by the previous crisis response program.	Increased by 79% the number of children served by crisis stabilization services.
Massachusetts Behavioral Health Partnership	Improve clinical functioning scores for 60% of a target group of children who are placed in kinship care.	Improved functioning for 38% of the target group, and maintained functioning for 29%.
ValueOptions New Jersey	Reduce by 30% the number of low-needs (clinically discharge-ready) children who are in residential treatment.	Reduced the number of low-needs children in residential treatment by 95%. Additionally, reduced the average length of stay in residential treatment by 28%.

VI. Conclusion

MCOs that serve youth with serious behavioral health disorders have varying degrees of financial leverage, depending on the services for which they are responsible and at risk for providing. The *Collaborative* included HMOs with relatively limited risk for youth with SED, as well as BHOs with greater responsibility and risk for this population, but still without complete access to information needed to improve service delivery, control over the array of services or provider practices, and/or an understanding of the barriers to child and family engagement.

The HMO behavioral health benefit tends to cover acute care services, primarily short-term hospitalization and outpatient treatment. Youth with SED, however, require access to longer-term care and a broader array of home- and community-based supports. Typically, within state Medicaid plans, home and community behavioral health supports are provided under the rehabilitation option; such services tend to remain either in fee-for-service Medicaid or are included within a behavioral health carve-out. These home and community supports are rarely the responsibility of health plans that primarily manage physical health care. The two Texas HMOs involved in the *Collaborative* operated in this environment, and, not surprisingly, targeted their quality initiatives to PCPs.

Behavioral health MCOs typically have responsibility and risk for managing a "fuller" behavioral health benefit, including home and community services. The behavioral health MCOs participating in the *Collaborative* focused on reducing inappropriate use of high-cost services, such as hospitalization and residential treatment. Even these MCOs, however, typically must contend with some behavioral health services that remain outside of their control. For example, psychotropic medications may be prescribed and managed on the physical health side or carved-out to a pharmacy benefit manager. Certain services, such as residential treatment, may not be included in some plans' scope of risk and may remain in a fee-for-service arrangement. In addition, other child-serving systems (e.g., education, child welfare, juvenile justice) with which youth with SED often are involved have related responsibilities for providing and financing care.

The complexity of the service delivery and financing environment for youth with SED created certain challenges for the *Collaborative*. Dialogue was needed at the beginning for plans to understand the differences among their various worlds and to identify common variables.

Variations in the plans' scope of risk and responsibility, and the complex needs of the target population also made it particularly challenging for the plans to obtain timely data on their individual initiatives and to identify and report common measures. Data often had to be obtained through other MCO divisions or from outside entities, such as the child welfare system, which had competing demands that hindered timely collection of data. An overall goal for the children's behavioral health sector is to identify a set of core measures, such as those being developed under the Children's Health Insurance Program Reauthorization Act (CHIPRA) of 2009,[33] as meaningful indicators of access, quality, and improved outcomes for children with serious behavioral health needs.

The plans learned a number of lessons through their participation in the *Collaborative* process:

- There is, indeed, potential to improve the quality and reduce the cost of care for youth with SED within managed care systems, though formal ROI analysis were not conducted as part of this project.

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[33] For more information about CHIPRA, visit **http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_public_laws&docid= f:publ003.111**.

- Plans must generate buy-in to improve the quality of care both internally and externally among their providers, other social service agencies, families and youth. Various approaches may be needed, such as enlisting the help of the medical advisory committee, medical director or family advocates, to determine the most effective education, outreach and engagement strategies.
- The larger service delivery and financing environment cannot be ignored. A number of the plans felt the impact of changing priorities of state agencies, such as Medicaid and child welfare. The success of many of the initiatives depended on interfacing with external systems for data-gathering or implementation purposes.
- A careful feasibility analysis at the outset of a project is crucial. This includes the identification of individuals and entities inside and outside of the plan critical to the project's success.
- The availability of data to support quality improvement activities leads to logical "next steps" and incremental improvements that make a difference over time.

At the conclusion of this *Collaborative*, one plan noted, "We may have to ask the wrong questions to find the right (ones) and accept that right answers may be embedded in a series of questions." Another summarized the progress made by observing, "When answers are found, it is not the end, but the beginning of another quality improvement cycle."

Anecdotal reports suggest that the avoidance of inappropriate prescribing practices and use of long-term, inpatient and residential treatment services did result in the provision of more appropriate and, in many instances, more cost-effective services. Future work in this area ideally should include an ROI analysis to document critical leverage points in QEI efforts.

Related CHCS Resources

The Center for Health Care Strategies (CHCS) works with state child welfare agencies and health plans to better integrate behavioral and physical health services and supports, with a particular focus on children in foster care. Visit Hwww.chcs.orgH to for more information on the following resources and initiatives:

Medicaid Managed Care for Children in Child Welfare: This issue brief examines the complex physical and behavioral health care needs and associated costs for children in child welfare and outlines critical opportunities and challenges within Medicaid to better manage care for this high-risk, high-cost population.

The Use of Psychotropic Medications for Children Involved in Child Welfare: This CHCS webinar presented evidence-based and promising practices related to the use of psychotropic medication among children involved in child welfare and the critical role of families as partners in care.

Improving Outcomes for Children Involved in Child Welfare: This national collaborative is working with nine managed care organizations to improve the delivery of physical and mental health care to children in child welfare.

www.chcs.org