

2014

Connecticut Medicaid Outpatient Behavioral Health Clinic Services

A Clinical Study

A report prepared by ValueOptions, Inc. for the Connecticut Behavioral Health Partnership State Agencies (CTBHP) regarding methods of improving the quality of care, outcomes, participant experience, payment methods, and cost effectiveness of outpatient mental health and substance abuse care.



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I. EXECUTIVE SUMMARY

The intent of this clinical study is to explore and describe methods of improving the quality of care, outcomes, participant experience, payment methods, and cost effectiveness of outpatient care. The outpatient level of care is the most highly utilized of Medicaid funded mental health services in Connecticut for both children and adults, and a foundational element of the behavioral health system of care. Based on a review of the literature and Connecticut data regarding the provision of outpatient behavioral health care, this study describes to an integrated, three-pronged approach focusing on innovations in the areas of clinical best practice, measurement of quality care, and value-based payment. These components identify options for; **“What kind of practice to incentivize”**; **“How to measure success”**; and **“How payments might be structured”**.

This paper reviews the outpatient level of care as it currently exists in Connecticut for the Medicaid population. An overview of best practices in outpatient treatment, including strategies for improving upon “usual care”, is also provided, along with an exploration of various measurement strategies to promote improved care and better outcomes. A review of various payment methodologies is included. The report surveys the national landscape to identify initiatives that other states have implemented in comparable efforts to maximize their healthcare dollars, focusing on a representative selection of specific programs from various states across the nation. Finally, an

integrated approach to practice improvement that incorporates clinical best practices, measurement systems, and payment reforms is described.

The review of the National and Connecticut landscape regarding the provision of outpatient care in the public sector resulted in the following conclusions:

- Outpatient Treatment in clinic settings serves more individuals in Medicaid than any other mental health service, and is a vital component of the system of care.
- The vast majority of care provided in outpatient mental health clinics is “usual care”, and most is not evidence based (i.e. including implementation with all the supports that would be necessary to achieve and sustain fidelity).
- Usual care is associated with a high rate of dropout and poorer outcomes than what is believed attainable at this level of care.
- The most common strategy to improve the quality and outcomes of behavioral health outpatient care has been the dissemination/implementation of Evidence Based Practices (EBPs).
- Efforts to increase the dissemination of EBPs in outpatient settings has been slow, and hampered by numerous obstacles and barriers.
- Evidence based practices cost more to install and sustain, and yet rates of pay for EBPs are typically comparable to “usual care” within fee-for-service systems.
- A major barrier has been the lack of incentives and funding for providers to implement evidence based practices.
- A particular challenge of delivering EBPs in outpatient settings is the need to offer a wide array of services that match the needs of the majority that seeks care.

- Simultaneous Implementation of multiple EBPs in outpatient settings may be beyond the capacity of most clinics and systems.

An alternative paradigm for improving the quality and outcomes of outpatient clinic treatment, beyond the selection, implementation, and sustainment of individual EBPs is an approach to practice improvement known as **Measurement Based Care** (MBC). It is defined as “an approach to improving outcomes and client experience by collecting standardized assessment information continuously throughout the course of treatment and regularly feeding back that information to clinicians as a clinical decision-support tool, and to clients as feedback on progress and motivation for change.” A suggested approach incorporates MBC along with **Implementation Science** (Fixsen, 2005), a **Common Elements Transdiagnostic Approach** (CETA, 2012), and a **pay-for-performance** incentive system.

The development of MBC systems is described with a review and analysis of 4 exemplary programs: Lambert’s OQ-45 (Slade, et al., 2008), Miller and Duncan’s Partners for Change Outcomes Management System (PCOMS, Duncan, 2012), Bickman’s Contextualized Feedback System (CFS, Higa-McMillan, 2011), and the Modular Approach to Therapy with Children (MATCH, Weisz, et al., 2012). The features of each approach are evaluated along with an alternative, custom-designed option. Best practices relevant to measurement based care, quality measurement, and pay-for-performance systems are incorporated throughout the report, culminating in several suggestions for integrated, practice improvement strategies.

Utilization of a series of learning collaboratives that employ the principles of Implementation Science are suggested as a strategy for promoting MBC and CETA.

Quality measures are a critical component of the approach, and those described are intended to function as decision support tools for clinicians and supervisors, motivational feedback for clients, and metrics for assessing outcome and awarding incentive bonuses if available. Payment reforms are structured within a multi-tiered bonus incentive system, layered on top of fee-for-service payments. The principles of behavioral economics and best practices in payment reform methodology are incorporated throughout. Over 40 specific suggestions are made regarding the details of structuring each of the three major program components. Funding options could also include pushing Medicaid outpatient compensation closer to the Medicare upper payment limit, using social impact bonds, bringing clinics under the Medicaid Rehabilitation Option, and/or exploring shared savings arrangements.

Outpatient care is the point of entry for most individuals served in the mental health and substance abuse systems; successful early intervention at the outpatient level can significantly redirect life trajectories away from illness, poverty, and early death and towards a full and productive life in the community. Lower utilization of higher levels of care, particularly emergency department use, inpatient psychiatric hospitalization, and inpatient detoxification, should accrue from improved access, quality of care, and outcomes of outpatient treatment.

II. STATEMENT OF PURPOSE

The State Agencies engaged in the Connecticut Behavioral Health Partnership (Department of Social Services, Department of Children and Families, Department of Mental Health and Addiction Services, heretofore referred to as the “State Partners”) are seeking ideas and innovations to inform improvement of Outpatient Clinic Services

reimbursed under Connecticut Medicaid. The intent of this clinical study is to explore and describe methods of improving the quality of care, outcomes, participant experience, payment methods, and cost effectiveness of outpatient care.

III. INTRODUCTION

The outpatient level of care is the most highly utilized of Medicaid funded behavioral health services in Connecticut for both children and adults, and a foundational element of the system of care. The proposed approach to restructuring the outpatient system is an integrated, three-pronged solution focusing on innovations in the areas of clinical best practice, measurement of quality care, and value-based payment. This paper describes recommended practice improvements, methods of assessing quality of care, and strategies for using various payment mechanisms to support and incentivize excellent care. Within this analysis, the section on Clinical Best Practice outlines one option regarding **“What kind of practice to incentivize”**. The section on Measurement explores **“How to define success and determine the amount of payment”** and the section on Payment Reform outlines **“How payments might be structured”**. Each component is equally important.

Passage of the federal Affordable Care Act (ACA) in 2010 focused the nation on the costs and quality of healthcare in the United States. National spending on healthcare in 2009 was approximately \$2.5 trillion, or 17.6% of the total national economy (Congress, 2010). Healthcare spending in Connecticut in 2009 was approximately \$30.4 billion (CT Health Policy Project, 2012). Despite higher levels of per capita spending compared to other developed nations, the US lags in overall life expectancy and other population

based measures of health, suggesting the presence of inefficiencies in the current system (PBS, 2014).

Like other states, Connecticut has become increasingly focused on maximizing efficiency and improving effectiveness, while enhancing the patient experience. The State Partners have been focused on improving the quality, coordination, and outcomes of services provided within Connecticut's Medicaid program through multiple initiatives including joint projects with State Agencies (Behavioral Health Home, State Innovation Model) and Administrative Service Organizations (ValueOptions – Connecticut Behavioral Health Partnership, Community Health Network, etc.). State leaders also have expressed an interest in exploring alternative methods of payment designed to align funding with the goals of enhanced value. Such methods include alternatives to, or enhancements of, standard fee-for-service payment systems that incentivize higher volumes of service versus better outcomes. These alternative payment methods include various types of case-rates and performance incentives.

Along with many other states, Connecticut has been looking for ways to maximize the impact of its healthcare dollars. Across the country, many approaches to improving healthcare outcomes and efficiencies have been attempted, including various methods of payment and systems of service delivery such as full and partial capitation systems, and varieties of managed care structures, including health maintenance organizations, preferred provider organizations, and administrative service organizations, etc. Connecticut has chosen the administrative service organization as the primary organizational and payment structure for managing services within Medicaid, but the State Partners have expressed a desire to incorporate methods of using value-based

payments to improve outcomes and improve the cost-effectiveness of care delivery. The approach considered in this paper promotes practice improvement through enhanced accountability and a payment structure for outpatient services that will provide a reasonable base rate to all providers, as well as an opportunity for providers to earn an increased rate or bonus payment if they meet certain practice and performance standards.

This paper will describe the outpatient level of care as it currently exists in Connecticut for the Medicaid population. An overview of best practices in outpatient treatment, including short, intermediate, and long-term strategies for improving upon “usual care”, will also be provided, followed by an exploration of various measurement strategies to promote improved care and better outcomes. This overview will be followed by a review of various payment methodologies. The report then will survey the national landscape to identify initiatives that other states have implemented in comparable efforts to maximize their healthcare dollars, focusing on a representative selection of specific programs from various states across the nation. Finally, the report describes an integrated approach to practice improvement that incorporates clinical best practices, measurement systems, and payment reforms.

OUTPATIENT CLINIC PRACTICE – NATIONAL CONTEXT

In a recent study conducted by the Center for Health Care Strategies (Pires, SA, 2013), it was reported that, of children enrolled in Medicaid who receive a behavioral health service, 53% receive outpatient treatment. Similar findings are reported with regards to adult utilization of outpatient services, indicating that outpatient psychotherapy is the dominant method/setting for the delivery of behavioral health care. It is also widely

reported that individuals who receive outpatient psychotherapy are better off than 8 out of 10 individuals with a behavioral health disorder who do not receive care (Hafkenscheid, A., Duncan, B.L., & Miller, S.D., 2010). Although those results are encouraging, much of the literature indicates that “Usual Care” delivered in clinic settings is seldom evidence-based and that “multiple studies have documented serious limitations of usual care” (Garland, et. al. 2013, page 6). Similarly Kazak (2010) reported that there is considerable evidence indicating that usual care in children’s services is “at best uneven, and at worst, harmful.” Few studies find positive outcomes for usual care beyond what is attained by placebo. Typically, what outcomes are attained are of limited clinical significance. For example, Warren 2010 reported that, of youths receiving usual care, 44% improved or recovered, 32% showed no reliable change, and 24% deteriorated. Similarly only 20% of over 6,000 adult clients receiving “usual care” were treated successfully, while three times as many were successful in evidence based practices (EBPs) developed in laboratory based settings (Bickman, et al., 2012).

Engagement and dosage have been cited as significant issues in the delivery of outpatient care. Many individuals and families do not attend a sufficient number of sessions or engage in treatment for a long enough period, to get an adequate dose of care. In the CHCS study (Pires, SA, 2013), a single session was the modal number of sessions attended, and the median number of psychotherapy sessions remained stable at 5 sessions across the 10 year period evaluated. Considerable research has demonstrated that certain groups within the public sector are less likely to access outpatient services, or engage beyond a few sessions. In particular, individuals or families living in poverty, experiencing high levels of parent and family stress, and those

of minority or single parent status attend the fewest number of sessions on average and in comparison to other groups (Gopalan, et al., 2010). This constitutes a significant portion of those served by Medicaid and in public behavioral health service systems.

Over the last 10 to 15 years, efforts to improve the quality and outcomes of outpatient behavioral health care have focused on the implementation of EBPs. Although there is no single authoritative definition of what constitutes an EBP, there is general agreement that there are at least three criteria that need to be met: 1) **Evidence of Effectiveness** – typically defined as 1-2, or more, randomized control trials demonstrating the superiority of the intervention over usual care, 2) **Sufficient Explication of the Model** – including manuals and other materials that facilitate reliable replication of key intervention components, and 3) **Dissemination Readiness** - as indicated by the development and availability of implementation supports such as quality assurance processes, training curricula, and data systems. A query of the National Registry of Evidence Based Practices and Programs (NREPP) maintained by the Substance Abuse and Mental Health Services Administration (SAMHSA) revealed a total of 61 EBPs, 50 for adult and 27 for youth that were appropriate for outpatient mental health treatment (some models were appropriate for the entire age range – search criteria are listed below¹). A similar query of NREPP for programs or practices appropriate for substance abuse (SA) treatment and treatment of co-occurring disorders revealed a total

¹ All Genders, Age Groups, and Race/Ethnicities: Mental health treatment, Outpatient, Mental health, Suicide, Trauma/injuries, Treatment/recovery

of 54 EBPs, 39 for adults and 15 for children/adolescents (search criteria are listed below²).

Despite significant growth in the number of Evidence Based Practices currently available for the treatment of health problems, mental health disorders, and substance abuse in outpatient settings, the evidence suggests that most treatment provided is not evidence based. Chorpita, et al (2011) reported that “the connection between evidence and practice in healthcare has been inefficient and fragmented, with approximately one third of all health practice being inconsistent with scientific findings, and more than 20% either unnecessary or harmful”. The Institute of Medicine found that the gap between medical research and practice is so wide that they referred to it as a “chasm” (McHugh & Barlow, 2010). The chasm may be even wider in the delivery of behavioral health treatment “with the majority of services delivered in usual care settings having little or no relation to practice supported by research (Zima, et al., 2005).” The CHCS (Pires, SA, 2013) study, cited above, found that 1% or less of current practice in the public sector is supported by an emerging or existing evidence base. In a review of social work practice, Mullen (2008) and colleagues lament that “available scientific knowledge is too often underutilized.” Finally, Barth (et al, 2011) reports that “the dissemination and implementation of manualized, evidence-supported treatments (MESTs) remains strikingly limited in practice settings.”

There are many reasons cited for the observed discrepancy between what is known to work versus how treatment is actually delivered. The last 15 years have

² All Genders, Age Groups, and race/ethnicities: Substance Abuse, Outpatient, Substance Abuse, Co-Occurring, Treatment/Recovery

demonstrated that efforts to improve the health and wellbeing of individuals “involved in public sector services is influenced as much by the process of implementing innovative practices as by the practices selected for implementation” (Aarons, Hurlbert, & Horwitz, 2011). This determination suggests that the process of implementing EBPs is complex and challenging and that, despite the growth of “Implementation Science” (Fixsen, 2005), the field has yet to articulate the best, most effective and cost-effective methods of implementation. Other barriers to EBP implementation include (Kazak, 2010):

- a lack of acceptance of EBPs by some providers, administrators and families
- the effect of implementing EBPs on clinician caseloads and supervisory structures and practices
- lack of integration of EBPs into existing management structures
- general absence of clinical decision support tools
- concerns about cultural responsiveness
- costs of training, consultation, skill building, QI systems, and other components of EBP implementation.

Kelleher (2010) has argued that most community mental health settings lack the organizational capacity to implement evidence based practices without substantial external support. He concludes that “Improving the diffusion of new evidence-based prevention and treatment services one at a time, while a sign of the maturity of the field of (child) mental health interventions research, will not be sufficient to improve the mental health status of most children and adolescents.” These issues are equally common among adult and substance abuse service sectors.

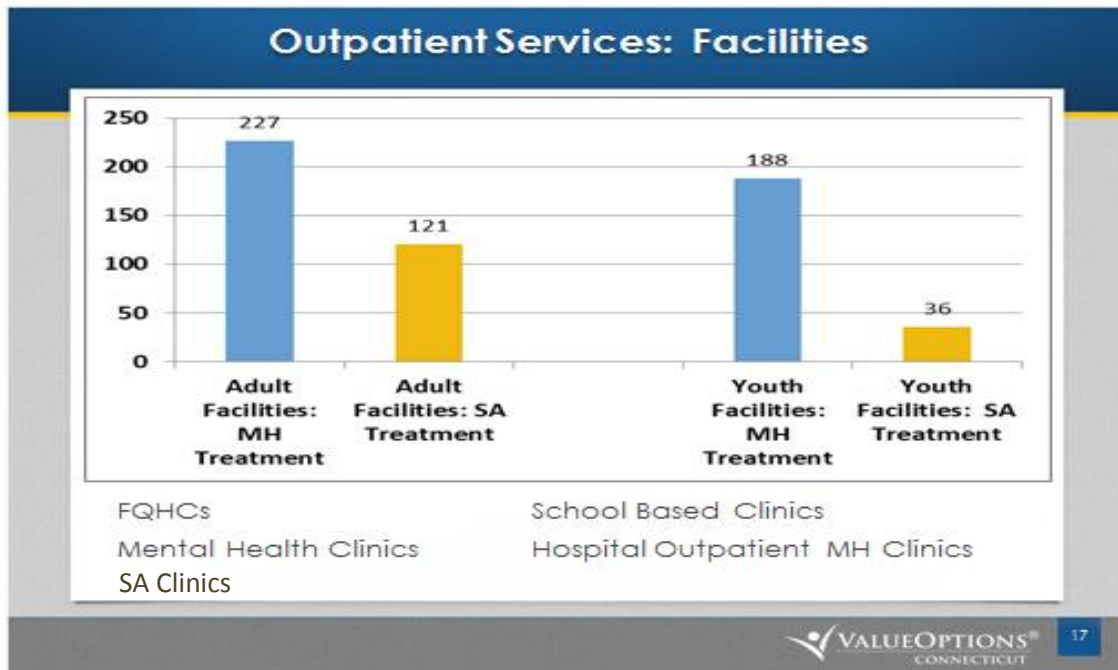
A major disincentive to EBP implementation is the cost associated with implementation and sustainability, combined with a lack of differential reimbursement to cover such costs. Few public or private systems provide higher rates or other financial incentives, for the provision of evidence based practices vs. usual care. Funding is typically the number one policy concern of public sector providers, particularly since funding in the public sector may not cover the full cost of providing care. Another factor that is particularly applicable in outpatient settings is the need to meet the diverse needs of a heterogeneous population. The typical outpatient clinic serves individuals with many different presenting problems and diagnoses, and a range of severity of illness. On the other hand, most evidence based practices are targeted to a specific disorder (e.g. anxiety, depression, trauma, etc.) or problem. Effectively providing evidence based care to the majority of those served in an outpatient setting would require the implementation of an array of separate EBPs. Doing so would require an expensive and complex implementation infrastructure that is beyond what could reasonably be expected of most clinic settings.

Although it remains advisable to pursue the implementation of evidence based practices in outpatient settings, the experience of the last 15 years suggests that progress will be very slow. Even with the advent of improved implementation strategies, broader applicability of specific practices, the availability of financial incentives, and other system improvements, the penetration rate of EBPs in the public sector is likely to remain low. Alternative strategies to promote improved quality of care and outcomes will be reviewed in Sections IV through VI.

STATE OF CONNECTICUT LANDSCAPE

Under Connecticut Medicaid, outpatient psychotherapy is provided by a number of different clinic types (e.g. Enhanced Care Clinics, Hospital Clinics, School Based Clinics, Free Standing Clinics, etc.) and by licensed private practitioners operating as solo or group private practices. This study will be focused on clinic-based services. Eventually, it may be advisable to include practitioners who deliver services outside of a clinic setting, given the growth in their share of outpatient service provision, and the lack of organizational or clinic infrastructure to support quality improvement in such settings.


The CT Healthcare Advocate reported in 2013 that the Department of Public Health licensed 205 psychiatric outpatient clinics for adults, and the Department of Children and Families licensed 63 psychiatric outpatient clinics for children and youth (OHA, 2013). A recent report of the Connecticut Behavioral Health Partnership regarding network adequacy (see series of charts below), identified a total of 227 Outpatient MH and 121 SA Clinic sites for adults and 188 Outpatient MH and 36 SA sites for children and adolescents.



The breakout of each category of clinic for adults and children/youth is provided in the tables below. Since some facilities serve both children and adults and/or MH and SA, the separate numbers may not sum to the totals listed above.

Outpatient Facilities Accepting Referrals Youth

Youth	CMAP	Accepting Referrals	% Accepting Referrals
Facilities Providing MH Treatment	188	187	99.47%
FQHCs	53	53	100.00%
Medical Clinic	36	36	100.00%
MH Clinics	75	75	100.00%
Rehabilitation Centers	3	3	100.00%
Hospital Outpatient Clinics	20	19	95.00%
Facilities Providing SA Treatment	36	36	100%
FQHCs	9	9	100%
Medical Clinic	1	1	100%
MH Clinics	24	24	100%
Hospital Outpatient Clinics	2	2	100%



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Outpatient Facilities Accepting Referrals Adults

Adults	CMAJ	Accepting Referrals	% Accepting Referrals
Facilities Providing MH Treatment	227	225	99%
FQHCs	40	40	100%
MH Clinics	123	121	98%
Rehabilitation Centers	6	6	100%
Hospital Outpatient Clinics	43	43	100%
State Institution Outpatient Clinics	11	11	100%
Facilities Providing SA Treatment	121	121	100%
FQHC	18	18	100%
MH Clinics	78	78	100%
Rehabilitation Centers	1	1	100%
Hospital Outpatient Clinics	17	17	100%
State Institution Outpatient Clinics	5	5	100%



Facilities include:
FQHCs, BH Clinics,
Rehab Centers,
Hospital Outpatient
Clinics & State
Outpatient Clinics

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Of the facilities listed above, a total of 124 sites are designated as Enhanced Care Clinics (this number includes satellite sites), with 63 Youth and 22 Adult MH clinics, and 20 youth and 19 adult SA clinics.

Outpatient Services: Enhanced Care Clinic (ECCs) (CTBHP Network Report 10-2-2014)



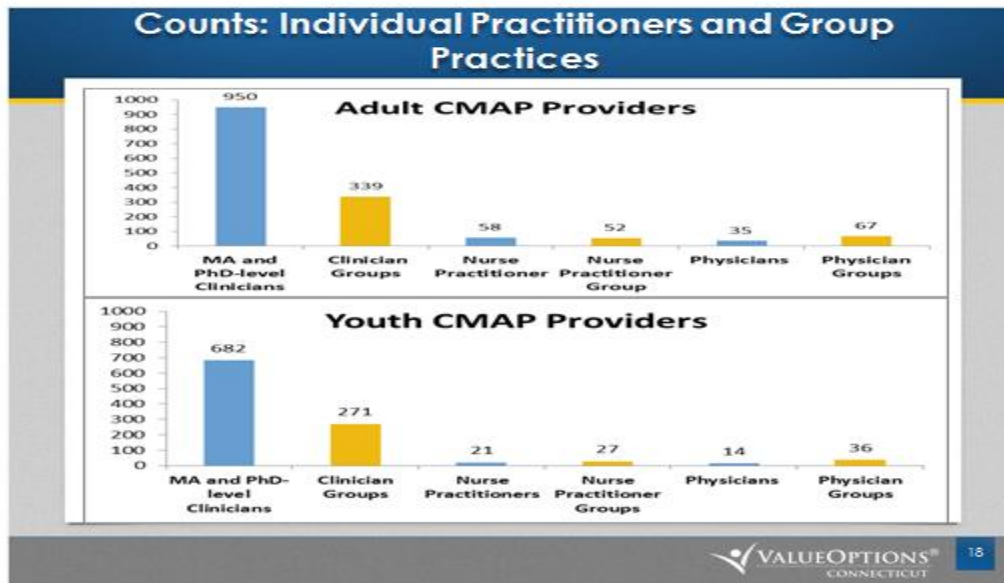
ECCs are reimbursed at a higher rate and held to higher standards

- Timely Access to emergent (2 hours), urgent (2 days) and routine (2 weeks) appointments
- Coordination of Care with Medical Providers
- Substance Use Evaluation and Treatment/Referral
- Mystery Shopper and Survey oversight
- Transportation
- Timely access to a prescriber
- Referral to Self-Help/Mutual Support

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The CT Behavioral Health Partnership network also includes 2,552 individual practitioners (Adults – 1501, Youth – 1051) operating as solo practitioners or as part of 361 group practices (see below).



The table below shows the number and percentages of open authorizations for outpatient services (MH & SA) on 10/1/2013 for both child and adult populations. The total of 104,939 open authorizations across children and youth represents the largest group of users across all behavioral health services in Medicaid. Outpatient care is the most common setting in which Medicaid recipients in Connecticut receive a behavioral health service, and is a mainstay of the behavioral health system of care. This finding parallels what is found nationally.

The penetration rate of outpatient services for the entire Medicaid population is 17.7% (104,939/ 593,468). In other words, nearly 18% of the entire Medicaid population had an authorization for Outpatient behavioral health services as of 10/1/13. The penetration rate of Medicaid adults is 25%. The penetration rate of Medicaid youth

is 10%. However, it should be noted that youth 0 to 3 years old account for a sizable portion of the Medicaid youth population, but are almost never authorized for outpatient behavioral health services. Excluding youth 0-3 from the analysis would yield a higher penetration rate overall, and for youth in particular. It should be noted that these authorizations include both substance abuse and mental health outpatient treatment.

Age Group	All Medicaid Members	Percent of Members	Medicaid Members Authorized for Outpatient Services	Percent Authorized for Outpatient Services
Total	593,468	100%	104,939	17.7%
Adult (18+)	303,529	51.1%	75,659	25%
Youth (0-17)	289,939	48.9%	29,280	10%

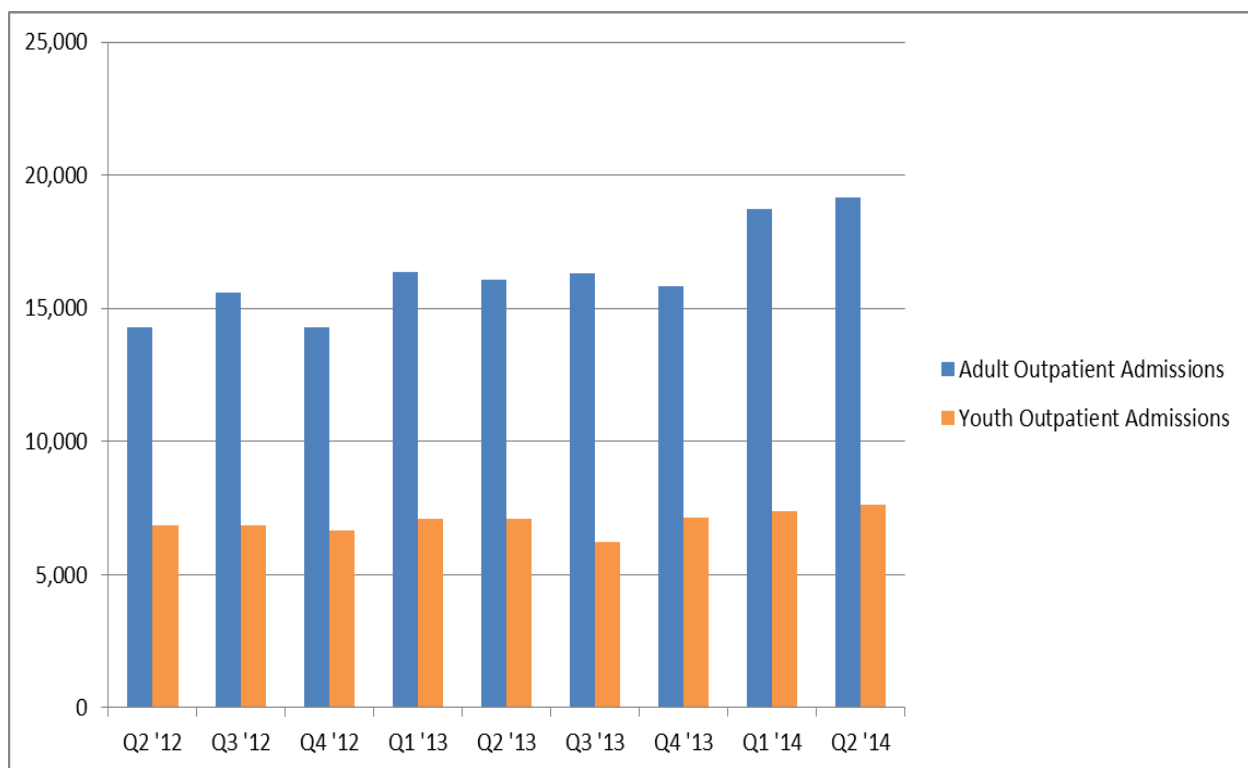
As noted in the table below, more than three quarters of adults authorized for outpatient services have a Mental Health primary diagnosis.

Primary Diagnostic Category	Number of Adults with Primary Diagnosis	Percent of Adults with Primary Diagnosis
MH	59,926	79.2%
SA	15,668	20.7%
Primary Diagnosis is V Code or outside of ICD-9 codes of 291-316.99	65	0.1%

For children, substance abuse is seldom used as the primary diagnosis for an outpatient authorization, as indicated below.

Primary Diagnostic Category	Number of Youth with Primary Diagnosis	Percent of Youth with Primary Diagnosis
MH	28,798	98.4%
SA	334	1.1%
Primary Diagnosis is V Code or outside of ICD-9 codes of 291-316.99	148	0.5%

The bar chart below shows the number of admissions to outpatient care for Adults and Youth for a two year and one quarter period from the second quarter of 2012 through the second quarter of 2014. During this time period, admissions for youth increased by 11%, from 6,864 to 7,620, and admissions for adults increased by 25%, from 14,284 to 18,709. During calendar year 2013, there were a total of 92,099 new admissions to outpatient care, including 64,581 adults and 27,518 youth. The expansion of Medicaid under the ACA has been seen as a primary factor in the growth in outpatient utilization.

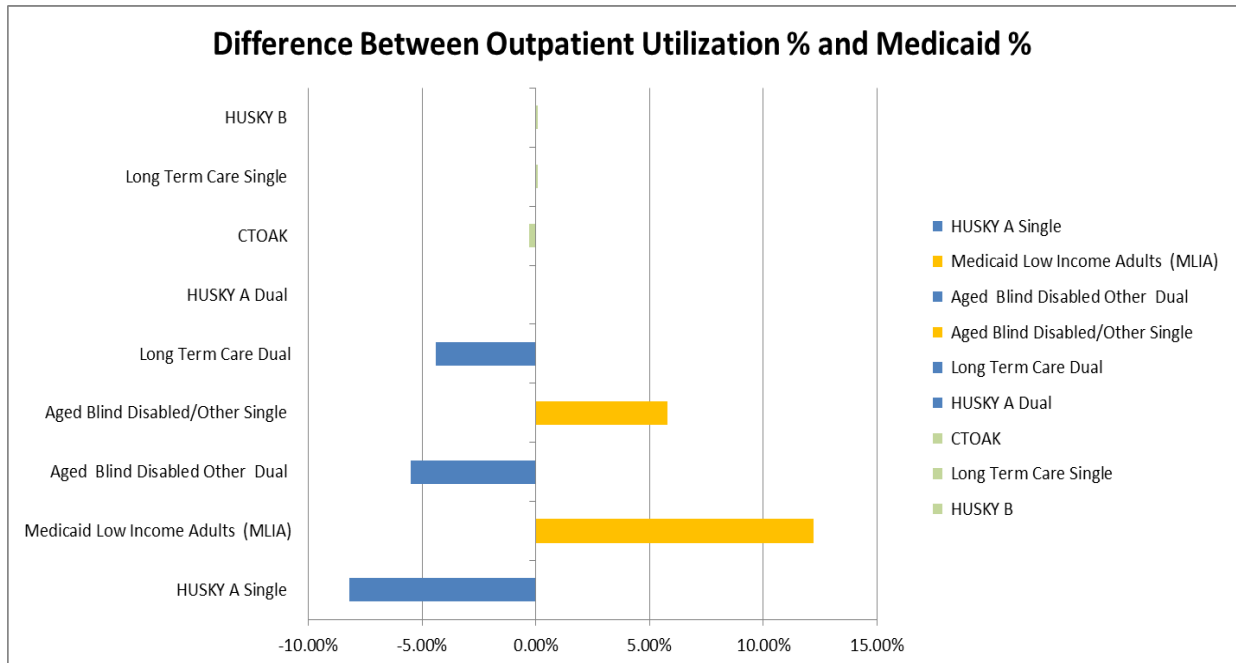


The table on the following page shows adult utilization of outpatient services by benefit category (2011 & 2012). There are disparities within some of the eligibility categories between the percentage of the Medicaid population they include and the percentage of their use of outpatient services. For example, the MLIA population accounts for 26.8% of the Medicaid population and for 39% of the outpatient utilizers.

Medicaid Eligibility Category	Medicaid Population	% of Population	Outpatient Utilizers	% Outpatient Utilizers
HUSKY A Single	165,065	43.9%	27,031	35.7%
Medicaid Low Income Adults (MLIA)	100,566	26.8%	29,527	39.0%
Aged Blind Disabled Other Dual	50,288	13.4%	6,001	7.9%
Aged Blind Disabled/Other Single	31,212	8.3%	10,697	14.1%
Long Term Care Dual	16,970	4.5%	85	0.1%
HUSKY A Dual	5,092	1.4%	1,066	1.4%
CTOAK	4,480	1.2%	664	0.9%
Long Term Care Single	1,338	0.4%	370	0.5%
HUSKY B	736	0.2%	195	0.3%
UNKNOWN (Temp)	-	0.0%	23	0.0%

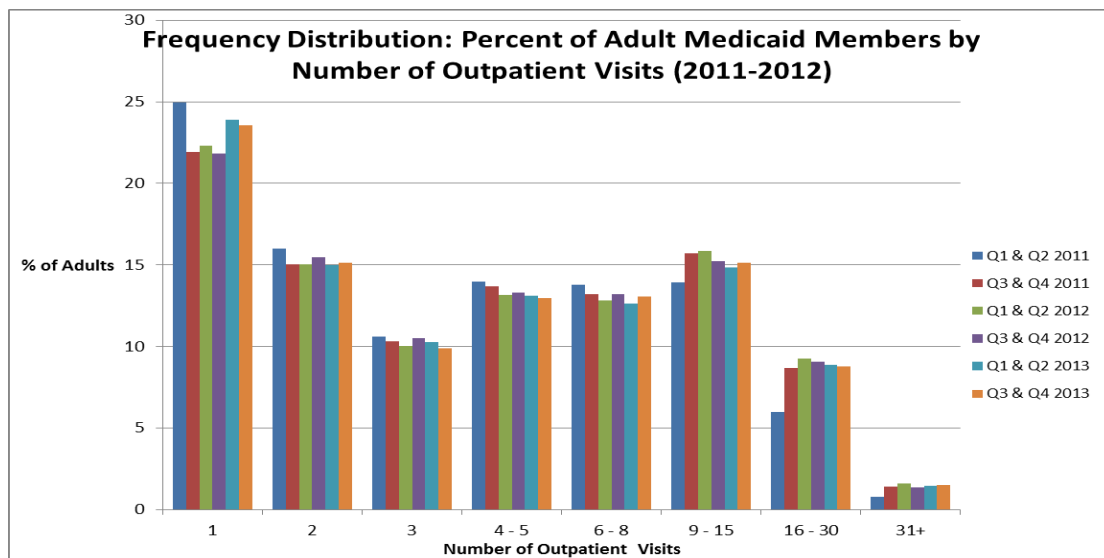
The bar chart on the following page shows the degree of disproportionate representation between the Medicaid Eligibility Categories and those that utilize outpatient treatment. The eligibility categories with blue bars to the left of the Y-axis indicate the degree to which there is less utilization of outpatient services than would be predicted by that category's percentage of the Medicaid Population. Husky A (-8.2%), Aged Blind Disabled/Other Dual (-5.5%), and Long Term Care Dual (-4.4%) all utilize outpatient services less than would be expected. As noted above, some degree of the lower-than-expected utilization by the Husky A population may have to do with the number of children 0-3 in this population. Those children seldom utilize behavioral health

services of any kind, including outpatient care. Aged Blind Disabled/Other Single (+5.8%) and MLIA (+12.2%) utilize outpatient services at a higher rate than would be predicted, given their base rate in CT. Medicaid. Husky A Dual, CTOAK, Long Term Care Single, and Husky B are neither disproportionately over- or under-represented, and utilize outpatient services at the rate that would be expected.



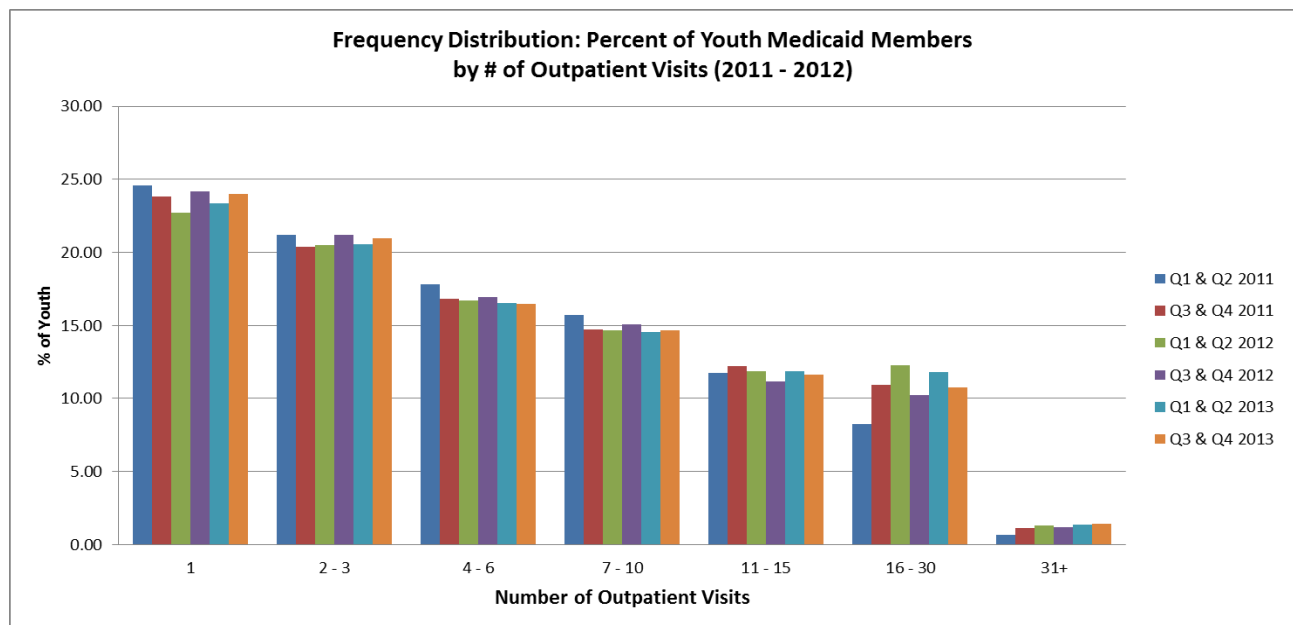
Currently, when a member begins outpatient services, the provider registers the member in the ValueOptions CONNECT system, and the member is automatically authorized to receive 90 units of outpatient services over a twelve-month period. If the initial 90 units are used before the 12 months expire, the provider must request additional units telephonically. This request is reviewed by a clinician and, if approved, an additional 45 units are authorized. If the 12-month period ends before the 90 units are used up, the provider may request additional units electronically. This request is automatically approved for 45 additional units, without a clinical review. Although

authorizations are for 90 units at a time, for adults, the modal frequency of actual visits used is 1, and 50% of members utilize 3 or fewer visits (see bar chart below).



For youth, the pattern of utilization of outpatient visits is comparable to what is observed for adults, with a mode of 1 visit and with 43% to 45% of members utilizing 3 or fewer visits across the time periods reported (see chart below).

Frequency Distribution: Percent of Youth Medicaid Members by Number of Outpatient Visits (2011 to 2013)



These utilization patterns mirror national data and suggest that sufficient engagement in outpatient services is an issue here in Connecticut, as it is across the country.

In addition to the provision of psychotherapy, an outpatient clinic provider for children also may bill for 12 units (15 minutes each) of case management, without requiring approval. If more than 12 units of case management are required, the provider must request additional units telephonically. This request is reviewed by a clinician.

Providers currently are paid for outpatient services on a fee-for-service basis. Additional outpatient services are funded by grants from the Department of Children and Families and the Department of Mental Health and Addiction Services.

In April 2014, the Behavioral Health Partnership reported the following annual expenditures to the Behavioral Health Partnership Oversight Council (CTBHPOC, 2014).

Year	Age	Service	# Members	Cost
2011	Youth	Clinic Outpatient	19,035	\$ 18,191,620
2011	Youth	Independent Clinician	7,560	\$ 5,634,193
2011	Adult	Hospital Outpatient	13,608	\$ 5,065,810
2011	Adult	Clinic Outpatient	64,648	\$13,371,665
2011	Adult	Independent Clinician	19,230	\$ 8,371,665
2012	Youth	Clinic Outpatient	19,823	\$ 18,582,599
2012	Youth	Independent Clinician	7,987	\$ 5,940,390
2012	Adult	Hospital Outpatient	18,708	\$ 7,616,058
2012	Adult	Clinic Outpatient	82,529	\$18,719,410
2012	Adult	Independent Clinician	22,115	\$ 9,532,584

Enhanced Care Clinics

To improve access to outpatient care, the Connecticut Medicaid Program currently has an enhanced payment rate for 30 of its 86 outpatient clinic providers. These clinics have been designated as Enhanced Care Clinics (ECCs) and must meet specified access standards for routine, urgent and emergent care, have memoranda of understanding with primary care practices, screen for co-occurring disorders and offer extended hours of operation.

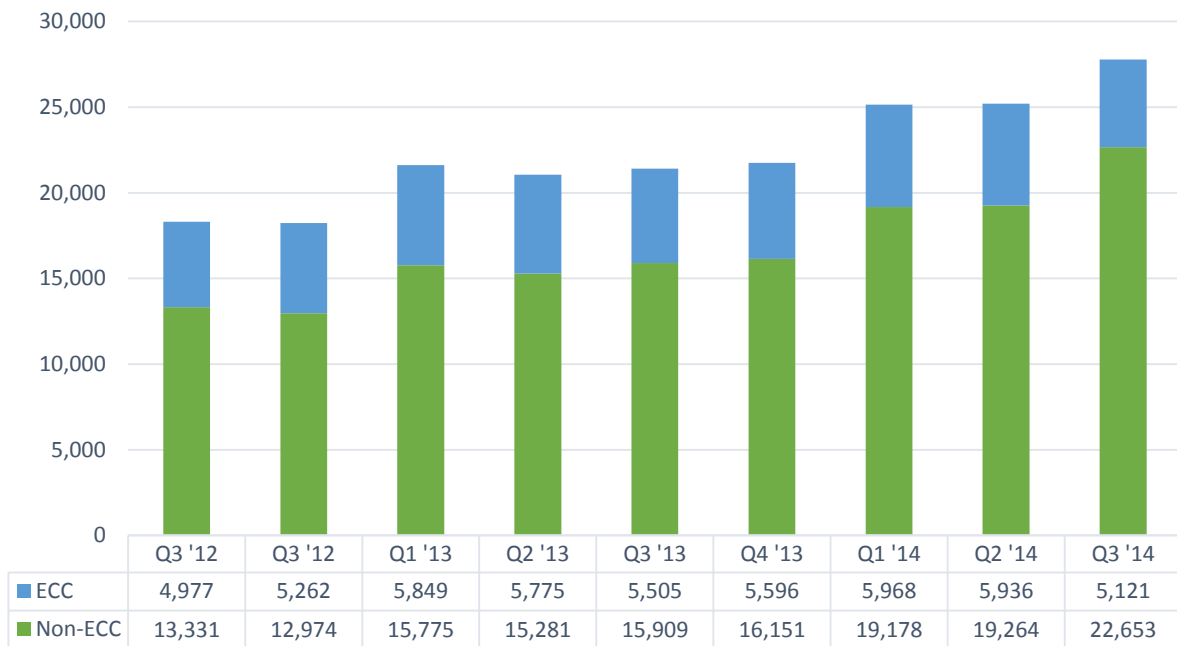
ECCs are held to the following standards:

- Centralized telephonic contact with triage and access to appointments.
- Timely access to care including:

- a. Routine appointments offered within 14 days 95% of the time.
- b. Urgent appointments offered within 48 hours 95% of the time.
- c. Emergency evaluations within 2 hours of arrival at the ECC 95% of the time.
- d. Psychiatric evaluations within 2 weeks of evaluation, when the need for psychiatric evaluation was identified.
- e. Extended clinic hours.
- A signed Memorandum of Understanding (MOU) with PCPs or Pediatricians in their areas providing consultation and timely access to those providers so that they may, in turn, provide psychopharmacologic treatment to HUSKY members within their practices.
- Screening for co-occurring disorders.

The bar graph below shows the number of outpatient authorizations for ECCs and Non-ECCs per quarter from Quarter 3 of 2012 through Quarter 3 of 2014. It indicates a total of 27,774 authorizations for outpatient services in the most recent quarter for which data was available. Q3 '14 was the highest volume reported in the 9 measured quarters, and utilization has risen steadily, at an average of 5.7% per year.

Total Outpatient Registration Volume, ECC and Non-ECC Q3 '12 To Q3 '14: All Memberships



ECCs accounted for 24.13% of the total outpatient registration volume, which increased 8.8% from Q4 '13 to Q1 '14, the largest increase since Q1 '13. There has been a gradual decrease in the relative percentage of outpatient registrations by ECCs, and an 11% increase accounted for by Non-ECCs. Non-ECC adult registrations accounted for nearly 60% of all outpatient registrations. ECCs have continually outperformed Free Standing Clinics (FSCs) in meeting access standards, though FSCs have improved for Routine outpatient evaluations from 88.14% provided within the targeted timeline in Q1 '12 to 92.99% in Q1 '14.

Overall, the ECC initiative has been successful at improving access, a critically important step in delivering excellent care and a major system improvement. Nationally, 2 of 3 individuals who require service do not receive it. If care cannot be accessed, there

is no chance of effective delivery. Two other factors mitigate the importance of this success, however. First, the most significant growth in outpatient service delivery has been outside the ECC network, by Non-ECC clinics and private practitioners. A limitation of the ECC initiative, as currently structured, is that nearly 75% of outpatient services occur outside of the ECC network. The ability to impact non-ECC providers is therefore limited. Second, while ECC Clinics have met the standards for coordination with primary care and further standards regarding evaluation of substance abuse treatment needs, there is little evidence that the initiative has contributed to significant improvement in quality of care or engagement, once initial access has been obtained. In fact, ECCs have faced the need to meet an increasing demand for service with fixed or limited staff/service capacity. This conflict may contribute to a lower level of engagement as larger clinician caseloads often require less frequent appointments.

In addition to ECCs, the state recently has developed several initiatives to provide coordinated care to Medicaid members, including Health Neighborhoods, Behavioral Health Homes and Person-Centered Medical Homes. In addition, under the Excellence in Mental Health Act, the federal government has developed criteria for Community Behavioral Health Centers of Excellence (CBHCE) and is promoting their creation in states across the country. Agencies that operate outpatient clinics will be participating in some of these alternative treatment delivery and coordination programs, and it will be important to coordinate any systemic changes to outpatient clinic design with the quality measures, standards of practice, or other aspects of the new initiatives.

In 2009, DCF commissioned a study of the Outpatient Mental Health System for Children by the Child Health and Development Institute (CHDI). Similar to recent trends

in outpatient utilization, the CHDI report noted a trend of increasing numbers of children and families served, from 10,023 in Quarter 1 of FY-2009 to 12,243 in Q4 of the same year. This period coincided with early implementation of the Enhanced Care Clinics and a focus upon improving access to care. It was also the time when the Programs and Services Data Collection System (PSDCRS) operated by DCF was in early implementation. Due to limitations in the previous Behavioral Health Data System (BHDS) and the early implementation status of the PSDCRS system, much of the data on staffing, capacity and access were derived from survey data collected from the clinics for this study. Based on the survey, the average number of FTEs at the clinics was 7.8, with a range of .6 to 26. Approximately 57% of staff members were licensed versus 43% unlicensed. The average caseload was 29. The self-report of session attendance was considerably higher than the more recent authorization and claims data that was reported above. The CHDI report indicated that 70% of children and families attended 6 or more sessions, while the CTBHP data indicated that 43% to 45% of children and families attended 3 sessions or less. With regards to EBP implementation, the report indicated that clinics had difficulty obtaining training, support for implementation, and quality assurance, and indicated that EBPs were more expensive to implement. CHDI also observed that few EBPs implemented in the children's system included "the necessary supports for effective implementation." They advised the state to consider investing in infrastructure to support EBP implementation. CHDI also observed that "all stakeholders reported that data has not been extensively utilized to monitor treatment outcomes, inform outpatient treatment practices, or guide treatment decision making." Some of the

recommendations from the CHDI report that are relevant to the children's system include the following:

- Track patient flow and capacity
- Explore methods of improving family engagement
- Increase use of standardized screening and assessment tools for use in treatment decision making
- Examine innovative strategies to promote improved performance and productivity
- Promote efforts to develop a culture in which data is viewed as part of the service, not as a separate activity

Beginning in the fall of 2014, DCF began a series of forums with DCF-funded outpatient psychiatric clinics for children (OPCC) in preparation for an update of the OPCC contract scope of service. CTBHP Regional Network Management Staff attended all regional forums and provided summaries of the key issues discussed. The Connecticut Community Providers Association (CCPA) also provided narrative feedback regarding their view of issues facing outpatient psychiatric clinics for children. A summary of CCPA and other provider's feedback regarding circumstances and issues facing outpatient clinics is provided below.

With regards to clients served, OPCCs report serving a broad array of children and families with diverse needs. They recommend that the service outcomes of clients with more significant needs be assessed differently than those with more typical presentations. There is a concern that many clients require more hours of case management and coordination than is currently available under the standard authorization. The report

suggests that the state authorize agencies to bill for a broader array of case management activities and for crisis management services. They also note the need for, and advantages of, providing services outside of the clinic setting, and encourage exploration of mechanisms that would allow providers to bill for such services within the children's system (e.g., possible application of the rehabilitation option to child outpatient clinic settings).

With regards to the use of currently endorsed screening and outcome measures, the providers expressed concern with the OHIO scales, finding them burdensome and not very helpful in monitoring progress throughout the course of care. They recommend additional measures to assess problem severity and progress in care. Providers suggest implementing a reliable measure of engagement, and practical outcome measures such as continued school attendance and avoidance of hospitalization or ED use, among others. They also would like to see additional indicators of successful treatment and recommend that expectations be lowered from 50% of clients completing treatment to 30%, given the challenges of the population they are serving. They contend that Medicaid funding is insufficient to cover costs, and that there is no clear rationale for the allocation of grant funding from DCF. Providers also contend that the need to meet Medicaid ECC access requirements results in many clinics not accepting individuals with commercial insurance, resulting in reduced access to care for the commercially insured. Providers also report that cost is a significant barrier to implementing and maintaining fidelity to evidence-based practices. They have suggested that the state provide incentives for implementing evidence-based practices.

DMHAS has promoted numerous EBPs across both the mental health and substance abuse service systems. The DMHAS website includes a webpage devoted to EBPs (<http://www.ct.gov/dmhas/cwp/view.asp?a=2901&q=472912>) that have been promoted and/or implemented in Connecticut. Each type of intervention or practice is listed below, with a hyper-link to additional information and resources. Not all of the practices listed below are intended for implementation in outpatient settings. Most links direct providers or other system stakeholders to information, training resources, implementation tools or other supports for implementing the practice in question. Some include reference to, and descriptions of, broader initiatives such as the Co-Occurring State Incentive Grant (COSIG), where training, data collection, implementation of screening tools and fidelity assessment in the delivery of co-occurring evaluation and treatment are described. Evidence based screening tools promoted under the COSIG have been incorporated into the DDAP system (is DDaP explained somewhere else in report?) to promote and support co-occurring care. These tools include the MH Screening Form III, Modified Mini and, for substance abuse, the Simple Screening Instrument for Alcohol and Other Drugs (SSI-AOD), the CAGE – AID (adapted to include drugs).

The DDCMHT and DDCAT have both been implemented (the DDCAT moreso) and are validated fidelity tools used to assess a mental health (DDCMHT) or substance use (DDCAT) program's capability to provide services to individuals with co-occurring mental health and substance use disorders. These assessments provide policy, practice, and workforce operational benchmarks for program services.

Other listed initiatives include the implementation of Decision Support through a learning collaborative methodology with 8 sites, including four MH Outpatient Clinics,

Person Centered Recovery Planning with 7 private-non-profit Local Mental Health Authorities currently, and a Trauma and Gender Initiative with 8 agencies (including their outpatient programs) currently. The person centered planning and Trauma/Gender initiatives are long standing initiatives for the past twelve years and have included all of the LMHAs and other MH agencies in the PCRPP initiative and more than twenty agencies in both the MH and SA systems in the Trauma/Gender project. In general, extensive support, guidance, education and training, and in some cases consultation, fidelity tools, and data systems, have been utilized to promote effective and lasting implementation. However, most EBP implementations in outpatient settings have been time-limited rather than continuous. The ability to sustain rigorous implementation supports to monitor and sustain fidelity over time has been challenging, given limited funding for this purpose. Given the large number of clinics and facilities that deliver outpatient mental health services, and the limited capacity and scope of many of these initiatives, it is not surprising that usual care continues to be the modal form of treatment in outpatient clinics. It is difficult to assess the degree to which actual practice in CT adult outpatient mental health clinics conforms to the highest standards of evidence based practice implementation. No evidence could be found, however, to indicate that there are more EBPs being fully implemented in either the child or adult Connecticut publically funded mental health system than is typical across the country, where rigorous delivery of EBPs in outpatient settings is the exception, rather than the rule.

Practices listed on the DMHAS website:

- [Advance Directives](#)
- [Assertive Community Treatment \(ACT\)](#)
- [Cognitive Behavioral Therapy \(CBT\)](#)

- [Community Support Program \(CSP\)/Recovery Pathway \(RP\)](#)
- [Co-Occurring Disorders Initiative](#)
- [Cultural Competency Initiative](#)
- [Decision Support and Shared Decision Making](#)
- [Dialectical Behavior Therapy \(DBT\)](#)
- [Diversion and Re-Entry Programs](#)
- [Family Involvement](#)
- [Group Home](#)
- [Illness Management and Recovery \(IMR\)](#)
- [Medication Assisted Treatment \(MAT\)](#)
- [Motivational Interviewing](#)
- [Person Centered Recovery Planning \(PCRP\)](#)
- [Problem Gambling Services](#)
- [Recovery Initiative](#)
- [Supported Employment Services](#)
- [Supportive Housing](#)
- [Trauma Initiative](#)
- [12-Step Facilitation](#)
- [Women & Children's Services](#)

DCF has made significant efforts to implement EBPs across the child and adolescent service systems, including child welfare, juvenile justice, and mental health. However, much of the emphasis has been on home-based or specialty services within child welfare or Juvenile Justice and not on mental health services delivered in outpatient clinics. At present, DCF continues to use learning collaborative methodologies to implement several evidence based practices in outpatient psychiatric clinics for children. Trauma Focused-Cognitive Behavioral Therapy (TF-CBT) has been implemented in many clinics across the state, and further learning collaboratives are planned with funding from The Connecticut Collaborative on Effective Practices for Trauma grant (CONCEPT). CONCEPT also will be implementing the Child and Family Traumatic Stress Intervention

(CFTSI) in multiple clinics over the next several years. These interventions represent excellent steps forward in addressing the high prevalence of trauma. However, these programs are targeted to a relatively small subpopulation of children and families who seek outpatient care. A separate project currently is implementing the Modular Approach to Therapy with Children (MATCH) in 4 clinics as part of a randomized controlled trial of the intervention. A series of 3, ten-month learning collaboratives to implement MATCH in additional clinics is also planned to begin in August of 2015. The key question with this initiative will be how to maintain/sustain fidelity to the model, once the learning collaborative is completed.

At the time of submission of this report, The Connecticut Community Providers Association (CCPA) was set to release a report that evaluates the costs of providing outpatient services in light of the revenue received for providing those services. Early unofficial drafts of the report, developed in conjunction with an outside consulting company, MTM Services, suggested that for outpatient revenue codes and provider types, the current Medicaid rates for outpatient treatment do not cover the costs of providing care. The analysis is intended to illustrate underfunding across the system and the need for improved reimbursement. The report also challenges the contention that the increasing volume of services associated with increased enrollment under the Affordable Care Act will improve provider's financial standing. CCPA notes that such expansion will not benefit providers as long as the cost of delivering care exceeds the rate of reimbursement.

IV. Clinical Best Practice (What is to be incentivized)

Rationale:

This review indicates that nationally, and in Connecticut:

- Outpatient Treatment in clinic settings serves more individuals in Medicaid than any other behavioral health service, and is a vital component of the system of care.
- The vast majority of care provided in outpatient behavioral health clinics is “usual care”, and most is not evidence based (including implementation with all the supports that would be necessary to achieve and sustain fidelity).
- Usual care is associated with a high rate of dropout and poorer outcomes than what is believed attainable at this level of care (see supporting evidence beginning on page 43).
- The most common strategy to improve the quality and outcomes of mental health outpatient care has been the dissemination/implementation of EBPs.
- Efforts to increase the dissemination of evidence based practice in outpatient settings has been slow, and hampered by numerous obstacles and barriers.
- Evidence based practices cost more to install and sustain, and yet rates of pay for EBPs are typically comparable to “usual care” within fee-for-service systems.
- A major barrier has been the lack of incentives and funding for providers to implement evidence based practices.
- A particular challenge of delivering EBPs in outpatient settings is the need to offer a wide array of services that match the needs of the majority that seeks care.
- Simultaneous Implementation of multiple EBPs in outpatient settings may be beyond the capacity of most clinics and systems.

The foregoing analysis indicates the need for an alternative paradigm for improving the quality and outcomes of outpatient clinic treatment beyond the selection, implementation, and sustainment of individual EBPs. One such alternative paradigm is measurement based care. In its simplest form, measurement based care refers to the use of data, collected regularly and fed back to clinicians and clients throughout treatment, to guide the delivery of care. In a review of the current status of measurement based care as an alternative to EBPs, Barth (2011) argues that, “The field is at a crossroads and we must make choices about how to invest our efforts to improve outcomes.” However, the strategy advocated in this clinical study is more “both-and” than “either-or”. We believe measurement based care can operate in conjunction with efforts to disseminate discrete, evidence based programs. The approach described here builds upon several empirically validated approaches to improving behavioral health services including: **Measurement Based Care** (Harding, et al., 2011), **Implementation Science** (Fixsen, 2005), **Common Elements** Approaches (Barth et al, 2011), combined with **pay-for-performance**. Each of these core components is defined immediately below and explored further in the following pages.

Core Components

Measurement Based Care (MBC) – an approach to improving outcomes and client experience by collecting standardized assessment information continuously throughout the course of treatment and regularly feeding back that information to clinicians as a clinical decision-support tool, and to clients as feedback on progress and motivation for change.

Common Elements – the discrete, psychotherapeutic practices/skills that are common across multiple evidence based treatments. These factors include practices such as psycho-education, relaxation exercises, exposure, use of rewards to promote behavior change, positive reframing, parent training, genogram development, reframing of family conflict, and others.

Implementation Science - the scientific study of methods to promote the effective implementation and sustainability of evidence based practices when applied in real-world practice settings. Core components of effective implementation include standardized training and coaching, data systems and monitoring tools to promote fidelity and track outcomes, quality improvement activities, leadership and organizational readiness/capacity, facilitative administration, and systems intervention.

Pay-for-performance – health care or business payment models that offer financial rewards to individuals or organizations that achieve or exceed specified process or outcome benchmarks.

Measurement Based Care (An example of a clinical practice that could be considered for incentivized payments)

The ongoing use of measurement in the treatment of disease has long been a staple of medical care. Only recently has the use of routine, ongoing measurement been introduced as a component in the treatment of behavioral health disorders. In medicine, tests such as cholesterol levels indicating degree of cardiac risk or blood sugar levels in relation to diabetes are commonly used to determine the nature of the illness to be treated, as well as progress in recovery from disease. Tests provide information and can function as clinical decision support tools in treating illness. Feedback from tests can

confirm that the proper treatment has been selected, provide guidance in selecting a further treatment course, and indicate when treatment is complete and whether or not it has been successful. Feedback also provides the practitioner and the client with encouragement and motivation following measured improvement in health status.

The application of screening and ongoing measurement throughout the course of care has been referred to in the literature as **Measurement Based Care** (MBC) (Harding et al., 2011), **Measurement Feedback Systems** (Garland, et al., 2013), **Feedback Informed Treatment** (Miller & Bargmann, 2011), **Contextualized Feedback** (Higa-McMillan, 2011), **Continuous Outcomes Assessment** (Reese, et al., 2009), and **Patient Reported Outcome Measures** (PROMs; Wolpert, 2013). All approaches share a common strategy of improving outcomes and client experience by collecting standardized assessment information continuously throughout the course of treatment and regularly feeding back that information to clinicians as clinical decision- support tools and to clients as feedback on progress and motivation for change. Approaches may differ in the type (e.g. client engagement, level of symptoms, general well-being) and source (e.g., self-report, clinician assessment) of information collected and fed back, the target population (e.g. adults vs. children), the frequency of assessment (e.g. every session, monthly), the method (e.g. paper and pencil, electronic dashboard) and frequency of feedback, and the broader use of the information collected for outcome evaluation of clinicians, programs or systems.

Harding and colleagues (Harding et al., 2011) have promoted a policy framework for incorporating measurement into psychiatric practice. They argue that “Systematic rating scales help measure outcomes, clarify treatment aims, and track patient progress

over-time. A diligent step-by-step approach to assessing, treating, and revising treatment produces better outcomes, at potentially lower cost, than usual care.” Their framework speaks to the need to address the following key elements of measurement based care (MBC):

- Specific, not global (measuring level of functioning or symptoms, not general well-being)
- Targeted to a specific issue (related to the primary complaint or complaints)
- Tailored to the individual (matching the person’s primary goals)
- Psychometrically and conceptually sound (based on reliable and valid measures that are conceptually related to the underlying problem, e.g., factors in depression including social activity, engagement in pleasurable activities, sleep patterns, etc.)
- Brief (too many screens or items become burdensome and interfere with practice)
- Inexpensive (ideally they are free or very inexpensive to administer, otherwise cost becomes a barrier)

Key policy recommendations for promoting MBC include: Create an MBC toolkit, build information systems into practice, establish the infrastructure for MBC, enhance connectivity among information technology systems, alter financial incentives, and engage consumers and their families as active partners.

Lyon and colleagues (Lyon et al., 2015) explored the literature regarding the use of standardized assessment measures as part of a common elements psychotherapy training program and evaluated the application of standardized assessment with a cohort of 498 clinicians across 53 agencies. Based on their review and experience, “the use of standardized assessment tools for evaluation and progress monitoring is regarded as an

evidence based clinical competency in the provision of psychotherapy.” The approach of incorporating structured assessment and client feedback into treatment has been integrated into several evidence based practices, including Reinforcement Based Therapy (RBT, Tuten et al., 2012), the Modular Approach to Treatment of Children (MATCH, Weisz et al., 2012) the Partnership for Change Outcome Management System (PCOMS, Duncan, 2012), and the OQ-45 Outcomes Management System (Slade, et al., 2008). What Lyon and colleagues learned was that “knowledge or skill enhancements may not translate into long-term practice changes” without “strategies at the organizational level that incentivize, support, or require baseline and ongoing standardized assessment as part of routine practice.” They found that once supports for use of standardized assessments were removed, actual use returned to baseline levels within a month.

The United Kingdom has been implementing mandatory Patient Reported Outcome Measures (PROMs, Wolpert, 2013) for several years. This provides an opportunity to learn from their experience with MBC. This project has emphasized:

- The need to train practitioners in the proper administration of PROMs.
- The importance of providing timely feedback to practitioners, and in a format that is easily used and can be shared with clients.
- Providing some degree of flexibility or capacity for clinical judgment while monitoring the regular use of instruments.
- The need for other clinician-rated data on symptoms and functioning to complement patient reports.

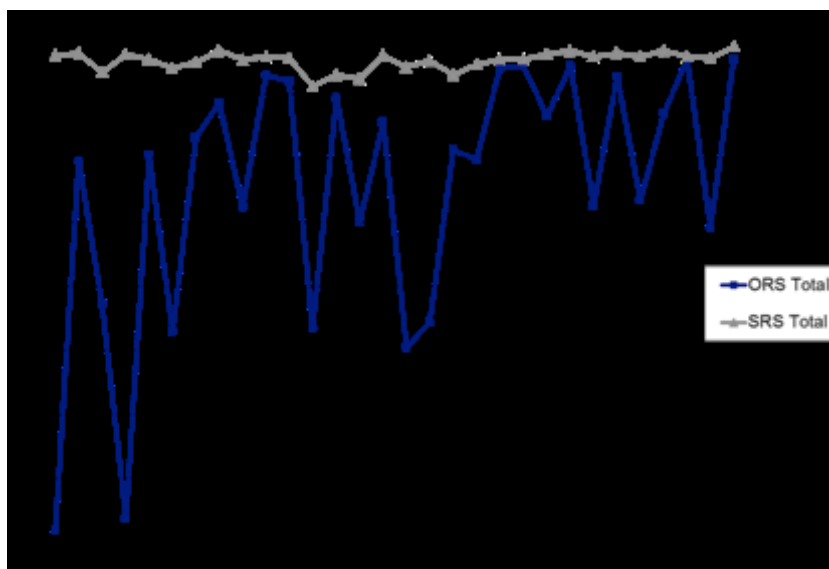
Further recommendations regarding the use of MBC are provided by Garland et al. (2013). They recommend the implementation of measurement feedback systems as a core component of evidence based practice and suggest that financial incentives, such as pay for performance, may be required to implement them effectively. They also warn that satisfaction data are not strong indicators of clinical effectiveness, and although extremely valuable, should not be substituted for other measures such as client health status, problem severity, and functioning. They suggest an approach that initially focuses on process measures such as whether or not MBC is being effectively implemented, rather than on outcomes. This recommendation for an initial focus on process was also conveyed through personal communication with the managers from the Department of Behavioral Health and Intellectual disAbility Services for the City of Philadelphia who are currently engaged in an implementation of MBC (November, 2014). Outcome measures can be phased in, once a program of MBC is fully implemented.

The understanding and utilization of MBC is accelerating, and several measurement feedback systems have been packaged for dissemination over the last several years. These include Miller and Duncan's Feedback Informed Treatment, now disseminated as the Partners in Change Outcomes Management System (PCOMS,), Lambert's OQ-45 Outcomes Management System (Slade, et al., 2008), Bickman's Contextualized Feedback System (Bickman, Kelley, & Athay, 2012) and the measurement feedback component of the Child System and Treatment Enhancement Projects (Child STEPs) - Modular Approach to Therapy with Children (MATCH) – Anxiety, Depression, Trauma, & Conduct (ADTC, Weisz, et al., 2012).

PCOMS (originally developed as Feedback Informed Therapy or FIT) is the brainchild of Scott D. Miller of the International Center for Clinical Excellence and Barry L. Duncan of the Heart and Soul of Change Process. Their approach was developed in response to the fact that, although psychotherapy is generally effective, dropout is high, near 50% (Duncan, 2012). One approach to addressing dropout was to evaluate systematically the client's response to treatment and intervene immediately if there were signs of concern. Duncan identified Lambert and colleagues as pioneers in their work to develop the first feedback system, known as the Outcome Questionnaire 45 (OQ-45). In 2010, Reese, et al., conducted a meta-analysis of 6 studies using the OQ and found that clients who received feedback were less than half as likely to experience deterioration of symptoms during care and 2.6 times more likely to improve reliably. Duncan and Miller began using the OQ, but found that its length was a barrier to regular use by clinicians. This led Duncan and Miller to develop the Outcome Rating Scale (ORS) and the Session Rating Scale (SRS) for adults and children.

Those instruments form the foundation of the PCOMS system. Each scale is brief (4 items) and designed to be administered regularly throughout the course of treatment, ideally at each session. The ORS measures individual well-being, quality of interpersonal relationships, social functioning, and general well-being. The SRS focuses on the client's satisfaction with each session regarding the relationship (did the client feel respected/understood by the therapist), the focus of goals and topics (did the client feel that they talked about or worked on things that were important to him/her), the approach taken in the session (was it a good fit for the client), and the overall session (it was right or something was missing). The scales have demonstrated strong reliability, internal

consistency, and sensitivity to change. In subsequent work, the Child Sessions Rating Scale (CSRS), Relationship Rating Scale (RRS for Peer Services), and group session rating scales for adults and children (GSRS & CGSRS) also have been developed. These scales are not tied to any theory and can be applied with any type of usual care or EBP. The use of the PCOMS scales involves tracking client progress over time, noting when there is deterioration or lack of progress, and engaging in a discussion with the client about changes in the plan or approach that may be needed to get treatment back on track. The two primary elements are the scales, themselves, and a dashboard system for providing feedback (see below).



PCOMS is recognized on SAMHSA's NREPP website as an EBP. According to the NREPP entry, PCOMS has been implemented in all 50 states and 20 countries, and reaches 100,000 clients annually. Four studies evaluating the effectiveness of PCOMS were rated as 3.0 on a 0-4 scale. The readiness for dissemination rating of 3.3 out of 4 included a 2.8 for implementation materials, 3.3 for training and support resources, and

4.0 for quality assurance procedures. The NREPP summary of PCOMS is provided as Appendix 1.

Several implementations of PCOMS in public behavioral health are referenced in the Duncan (2012) article, including in a child and family agency, a community health and counseling agency, and a large non-profit with over 500 staff. Significant positive effects on LOS and rates of dropout were noted. Numerous tools, QA processes, training curricula, and fidelity scales are available to assist in implementation and sustainability. The rating scales, dashboards, and other tools are available via a web-based application or as a system installed within an organization's computer network.

In a 2009 evaluation of PCOMS in outpatient treatment, Reese et al. (2009) concluded that continuous outcome assessment can contribute to increased effectiveness, particularly for clients who are not progressing in treatment. They found that clients who received therapy with PCOMS had more improvement in fewer sessions, and nearly twice as much reliable change than those who received therapy without PCOMS. They identified the value of PCOMS as the ability to identify those who were not progressing or were deteriorating (and thus at risk for dropout) and provide opportunities for altering the approach to treatment and/or improving the therapeutic relationship.

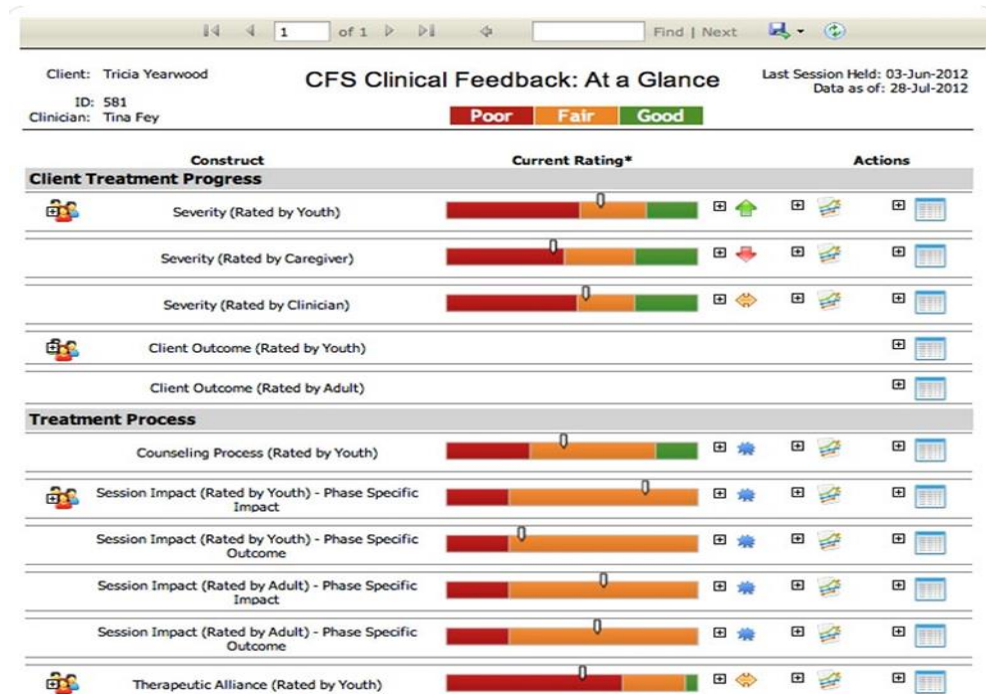
The Outcome Questionnaire – 45 (OQ-45) is a self-report measure of psychological dysfunction developed by Lambert and colleagues (Crits-Christoph, et al., 2012) that is designed for administration before every treatment session. The OQ-45 was the first MBC system developed and was the inspiration for the PCOMS. The 45 items assess subjective discomfort (e.g., feeling blue, anxiety), interpersonal relationships (e.g.,

lonely), and social role performance (e.g., work, school). When combined with an electronic clinical support tool (CST) to provide feedback to clients and clinicians, significant improvements in psychotherapy outcome have been attained. For example, those receiving the OQ-45 with CST experienced less likelihood of deterioration (4.8%) and greater likelihood of reliable clinical improvement (63.9%) than did those in the control condition (21.3% and 21%, respectively, on deterioration and reliable clinical improvement).

The OQ-45 is listed on NREPP as an EBP for the treatment of disorders related to Alcohol, Drugs, Mental Health, and social functioning. It has been validated as effective for adults, but also includes outcome tools for youth and for group applications. It has been used with over 300,000 clients across the world in 11 countries, including the US. The ratings of research quality and strength of evidence are higher for mental health than substance abuse. The scale has well documented reliability and validity. At 45 items, the scale is long for use at each session, but shorter versions have been developed. Ratings on readiness for dissemination were 3.9 on a 4 point scale, indicating a high level of dissemination readiness. The OQ-45 does not require extensive training and quality improvement, but use of three scales is priced at \$250 per clinician per year, which could be cost prohibitive for large system implementation.

The Contextualized Feedback System™ (CFS) developed by Bickman and colleagues (Bickman, Kelley, and Athay, 2012) is a measurement based feedback system for use with children and families receiving psychotherapy. Bickman cites the 2006 American Psychological Association Presidential Task Force on Evidence Based Practice in emphasizing the importance of using monitoring and feedback to improve practice.

The approach uses goal theory, cognitive dissonance theory, attribution theory, strength-based self-efficacy theory and Common Factors research to explain the impact of feedback on behavior change. Measurement based feedback systems are portrayed as a form of technology, such as computers, software, text messaging, etc., that can be used to improve practice. The use of computer systems to implement MBC is seen as offering several advantages including ease of collection, improved ability to utilize results, and enhanced capacity to aggregate results for administrative, quality improvement, or supervisory purposes. The two essential components of such measurement systems are the scales to be administered/collected and the method of feeding back the information to clients, clinicians and administrators. Information entered into an MBC system is used for data-informed clinical decision making throughout all aspects of the clinical workflow, with the goal of changing clinician behavior for the benefit of the clients they serve. The CFS system is web-based and draws from a compendium of brief validated measures included in the Peabody Treatment Progress Battery (PTPB). Measures were designed to collect maximum information in five minutes at the end of each session. The ability to enter data through computer, iPad, smartphone or other electronic device is provided. The program has been under development over 12 years and is currently available as version 3.0. A sophisticated electronic dashboard is available immediately upon data entry and includes measures of clinician adherence, as well as client progress (see below from Bickman, 2012).



A randomized control trial (RCT) completed in 2012 showed that individuals assigned to the feedback condition improved faster, as indicated by clinician, youth, and parent ratings. Higher clinician utilization of feedback was associated with better outcomes.

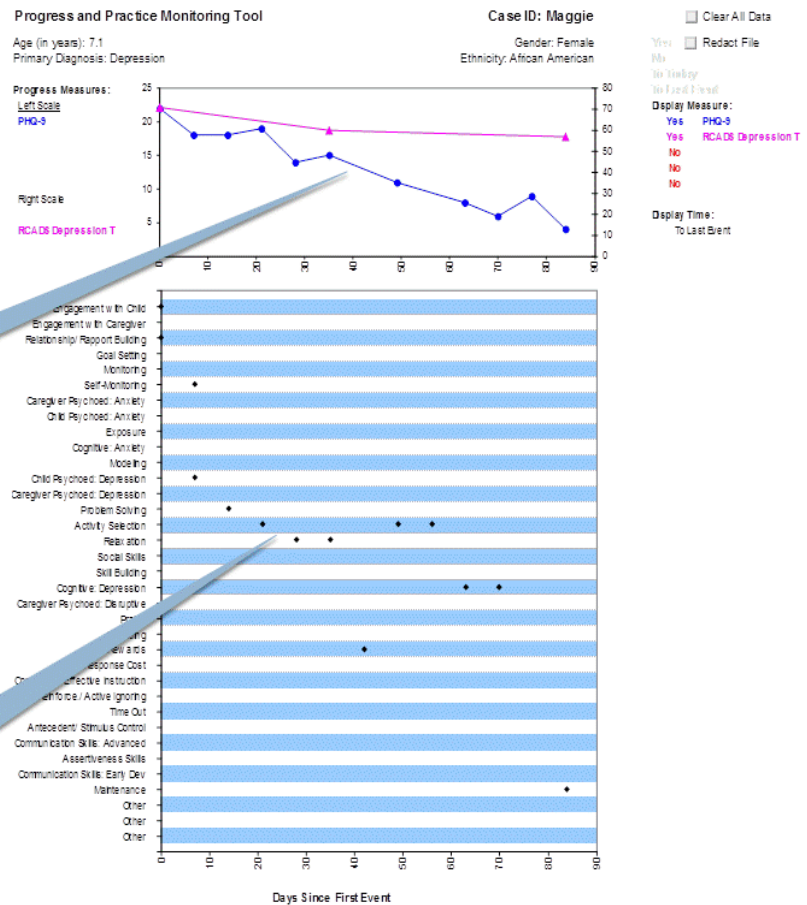
The CFS system provides consultation to those intending to implement CFS prior, during, and following early implementation. On-line operations support, quality improvement processes, and training/consultation support are provided through learning collaborative methodologies and other methods. Because the program does not endorse any particular model of therapy, it is applicable in concert with any usual care or EB therapy. Key issues in the success of the program include the quality of implementation and follow-up, and the need for incentives for systems, clinics, and clinicians to adopt the program.

The Modular Approach to Therapy with Children (MATCH) employs measurement based care combined with a Common Elements approach incorporating skills and techniques derived from four EBPs for treating childhood depression, anxiety, trauma, and conduct problems (Weisz, et al., 2012). The approach was developed to address the multiple comorbidities commonly found among children presenting for outpatient treatment (e.g. depression and conduct problems, or anxiety and depression), and to streamline the implementation of EBPs in outpatient clinics. The MBC component of the MATCH intervention uses the Brief Problem Checklist and the Top Problems Assessment measures to collect client functioning and progress indicators throughout treatment. A key feature of the system is the simultaneous collection of data from the parent, the child, and the clinician. Data is also collected regarding the clinical interventions utilized by the clinician in each session. In this way, the client's response can be tracked against clinician activity to assess more directly what is, and what is not, working in treatment. Feedback on these measures is provided weekly in an electronic dashboard (see below downloaded from Practicewise, www.practicewise.com) to the client and the clinician, and that feedback forms the basis of clinical decision making. Decision points include whether to proceed with a default care plan based on the most relevant EBP, or adapt the plan, based on factors that may represent "interference" with the standard protocol. Interference may include a change in diagnostic presentation (e.g. a client who initially presented as depressed but begins showing symptoms of a conduct problem), child/family preferences, or lack of response to the current plan. The ability to apply clinical micro-skills flexibly from each of the three EBPs is a highlight of the approach. A sample of a clinician dashboard used with MATCH, is provided below.

Sample Clinical Dashboard

Progress Ratings

Practice History



A randomized control trial (RCT) of MATCH (Weisz, et al. 2012) conducted with 174 youth and their families seeking care in a number of outpatient clinic settings was reported in 2012. The project compared MATCH to 3 individual EBPs (CBT for Anxiety, CBT for Depression, and behavioral parent training for conduct problems) and usual care. Results indicated the superiority of MATCH over usual care and individual EBPs with regards to the rate and degree of improvement, and reduction in the number of diagnoses evident at discharge.

The specific feedback systems described above share certain common features, but also differ in important ways that may have implications for applicability to the

Connecticut system of care. An alternative is the development of a custom system that could be imbedded more easily within current infrastructure. Customization would allow the system to be less costly, more flexible, and thus less burdensome to the provider system. Such a system could be developed with state and provider input, and consultation from local intermediary organizations and academic partners (e.g. Yale, UCONN).

Based on the foregoing review, each of the MBC systems is evaluated by the authors in relation to ten factors that are likely to impact implementation and success of the project. The ten factors and their descriptors are listed in the table below. Each feature was rated on a 0-4 scale yielding a potential total score of 40. The analysis contributing to each rating is also described.

COMPARISON OF MBC SYSTEMS ACROSS TEN PROGRAM FEATURES

FEATURE	DESCRIPTION	ANALYSIS	PTS.
ADULT	Is appropriate for use with an adult population	PCOMS and OQ-45 receive 4's and the MATCH and CFS receive 0's, given the intended target populations. The Custom System can be developed with separate adult and child components or a combined set of measures.	4
CHILD	Is appropriate for use with a child population	PCOMS and OQ-45 receive 3's and the MATCH and CFS receive 4's, given the intended target populations and experience. The Custom System can be developed with separate adult and child components or a combined set of measures.	4
+ SA	Is appropriate for use with a substance abuse population as well as Mental Health	PCOMS (3) was not developed/validated for a SA population, but the program has been used successfully with co-occurring and SA pops. OQ-45 (4) recently has been rated as EB for serving SA populations. CFS reports applicability with EBPs and usual care but has not been tested with SA Population (2). MATCH does not address SA. The Custom system (3) can be designed to include ongoing measures of abstinence, strength of craving, etc.	4
SYMPT. & FUNCT.	Includes measures of symptoms and functioning	PCOMS measures general well-being and engagement (0). The OQ-45(4), CFS (4) and MATCH (4) programs include symptom and functioning measures, and the Custom system (3) can be developed to include them.	4
EB	Has an evidence base for impacting outcomes	PCOMS (3), OQ-45 (3), and CFS (3) have relatively strong research evidence. MATCH (2) has strong support, but the research did not isolate the feedback from the other components of the intervention. The Custom program would have no research support to begin, but reliability and validity of measures could be established.	4
GROUP	Can or has been used with group therapy modalities	PCOMS (4) and OQ-45 (3) have a group measure and the Custom System (3) could be developed to include one. The OQ-45 has not been validated with groups. Neither the CFS (0) nor the MATCH (0) programs were developed for group treatment.	4
MANY REPORTS	Incorporates the ratings/viewpoints of multiple reporters (e.g. Client, Clinician, Parent, Child)	PCOMS (0) and the OQ-45 (0) only include client feedback. MATCH (4) and CFS (4) include multiple reporters and the Custom System (3) can be designed to include such measures.	4
IT SYSTEM INTEGRATION	Can be embedded within existing data systems to reduce provider burden and improve efficiency and utility.	The PCOMS (0), OQ-45 (0), MATCH (0), and CFS (0) have proprietary web-based or legacy systems that would need to stand alone, outside of existing data systems. The Custom System (3) could be built into existing authorization systems to reduce redundancy.	4
LOW COST	Costs associated with implementation and sustainability over time	PCOMS (2), CFS (2), OQ-45 (1), and MATCH (1) all have fees associated with implementation and use of the instruments. MATCH expenses are higher because there is more to the implementation than just the feedback system. OQ-45 has a \$250 per clinician annual licensing fee. A Custom System (3) would have up front and implementation costs but would not require ongoing fees/licenses.	4

COMMON ELEMENTS	Is, or could be, integrated with a common elements training program	MATCH (4) is already implemented with a Common Elements model. PCOMS (2), OQ-45 (2) and CFS (2) are consistent with such an approach. The Custom System (2) would be designed with a planned application of common elements in a latter phase.	4
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The summary table of scores is provided below.

COMPARISON OF MEASUREMENT BASED CARE SYSTEMS											
MBC SYSTEM	ADULT	CHILD	+ SA	SYMPT. & FUNCT.	EB	GROUP	MANY REPORTS	IT SYSTEM INTE-GRATION	LOW COST	COMMON ELEMENTS	Total
PCOMS	4	3	3	0	3	4	0	1	2	2	22/40
OQ-45	4	3	4	4	3	3	2	1	1	2	27/40
CFS	0	4	2	4	3	0	4	1	2	2	22/40
MATCH	0	4	1	4	2	0	4	1	1	4	21/40
CUSTOM	3	3	3	3	0	3	3	3	3	2	26/40

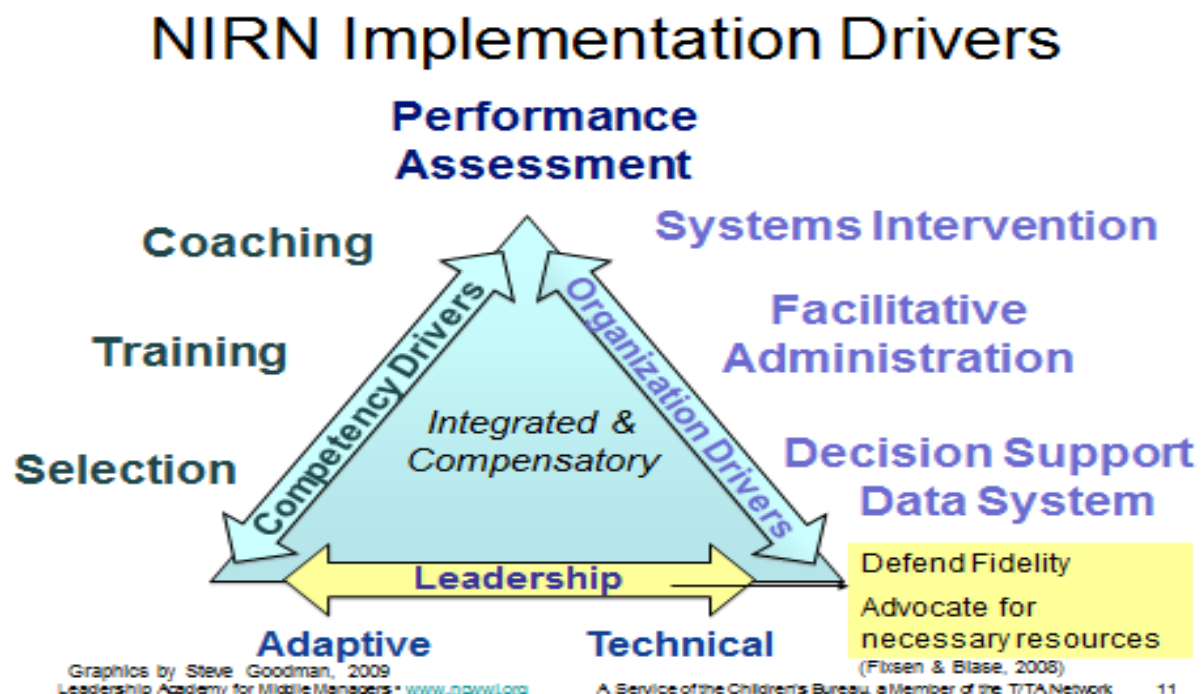
0 = does not meet standard or N/A, 1= minimally meets standard, 2 =partially meets standard, 3=substantially meets standard, 4=fully meets standard

The preceding analysis and rating of the MBC options did not weight some features more heavily than others. For example, long-term costs and the ease of IT integration are likely to be particularly important, given the current and foreseeable budget situation in Connecticut, as is the movement to integrate care through enhanced data integration. The relative importance of these factors favors a customized, Connecticut-specific solution. On the other hand, a tested and proven approach offers advantages over a customized but unproven system. The distinction between applications to child or adult systems appears to be less important; there are enough differences between adult and child services to warrant separate and

parallel systems. A custom system would allow for stakeholder input in development. If embedded within current authorization or State data systems, a custom application would also reduce provider burden significantly, particularly if the required MBC data is substituted for data that is currently collected, but that does not make a significant contribution to improvements in clinical practice.

Implementation Science (How to insure that practice improvements occur and are sustained)

There is growing awareness that the success of EBPs and best practices in real world settings is as dependent on the quality of the implementation as the quality of the program or intervention being implemented (Aarons, Hurlburt, and Horowitz, 2011, Fixsen, 2005).” Even the best program, if implemented poorly, is likely to fail. In his landmark 2005 monograph, Fixsen (2005) outlined the key drivers of successful implementation (see graphic below adapted from Fixsen and Blasé, 2008).



Staff competency drivers include:

- selection of the right staff with the training, skills, and characteristics that match the model of care.
- standardized training in the key components of the model.
- coaching/consultation and supervision to translate training into real world application.

Organizational drivers include:

- organizational readiness and commitment
- facilitative administrative supports (e.g. caseloads that match the model of care, time for model driven paperwork, supervision, consultation, etc.), and
- data systems that support model-driven clinical decision making and model fidelity.

Leadership drivers include:

- leader's ability to address systems issues that may impact success of the program (e.g. historical referral patterns to residential care vs. use of an alternative, home-based model)
- defend against compromises to fidelity (e.g. serving only those for which the model was intended)
- securing necessary infrastructure supports (e.g. use of model-specific data systems that are outside of the EHR).

One of the most common and widespread errors in practice implementation is the withdrawal of implementation supports once a program has been introduced and established. There is considerable evidence that withdrawal of implementation supports leads to significant declines in fidelity and deterioration of effectiveness, due to high levels of staff turnover and natural tendencies towards program drift. The learning collaborative methodology may be an effective practice for installing a new program, but consistent high level implementation will fade without sustained support of each of the implementation drivers outlined above, for as long as the program is in operation.

Evidence based practices then will cease to be delivered with fidelity. For this reason, a full complement of continuous implementation supports will be required to implement MBC successfully.

In their analysis of EBP implementation in public service systems, Aarons, Hurlburt, and Horowitz (2011) stress the importance of implementation strategies in the installation of EBPs in the public system. They also argued that equal attention must be paid to the stage of implementation and the strategies necessary to sustain long lasting impact. Four stages were identified: 1) **Exploration** – identifying a problem to be solved or opportunity to improve practice and identifying alternative approaches, 2) **Adoption Decision/Preparation Phase** – where evidence is reviewed regarding various practices that may provide a solution or hold promise for practice improvement, 3) **Implementation** – an active phase involving organizational commitment, infrastructure development, training, coaching, utilization of implementation tools, and 4) **Sustainment** – involving the need for continued leadership and organizational commitment, funding, policy that supports implementation, and continued fidelity monitoring, coaching and training.

Whatever program or strategy that is selected for implementation will require funding to support implementation and sustainment, and incentives to insure widespread application. Incentives may be in the form of bonus payments associated with implementation, differential rates, etc.

Common Elements

Common Elements are defined as the discrete psychotherapeutic practices that are common across multiple evidence based treatments. These elements include practices such as psycho-education, relaxation exercises, in vivo or imaginal exposure,

use of rewards to promote behavior change, positive reframing, parent training, etc. A common elements approach can be utilized in the treatment of a specific diagnosis type, such as panic disorder, or a diagnostic class, such as eating (Fairburn, et al., 2009) or anxiety disorders (Farchione, et al., 2012). Such an approach is developed by listing, cross-referencing, and then combining the unique individual skills from multiple EBPs. More recently, the common elements approach has been utilized to develop so-called Transdiagnostic Treatments (Wilamowska, et al., 2010) where elements from EBPs for a variety of disorders, such as depression, anxiety, traumatic stress, and alcohol abuse are combined into a single, but broadly focused, Common Elements Treatment Approach (CETA, Murray, et al., 2013).

Proponents of CETA cite multiple advantages of using a common elements vs. a diagnosis specific framework. First, the majority of individuals seeking treatment demonstrate significant comorbidity (Farchione & Bullis, 2014) that is not accounted for in most diagnostic-specific EBPs. Second, it is difficult for a single practitioner or clinic to master multiple EBPs, and overly expensive and complicated to provide training, coaching, and sustainability for several models of care. Third, practitioners generally prefer a common elements approach vs. disorder specific EBPs (Borntrager, Chorpita, Higa-McMillan, & Weisz, 2009). And fourth, with a shortage of mental health professionals available to treat all those in need of therapy, CETA can be used as a “task shifting strategy”, packaging training in common elements approaches for non-professional lay people. What differentiates a common elements approach from “eclecticism” is that the selection, order, and utilization of specific skills are guided by data and decision rules

based on research evidence, rather than solely based on clinician “instinct”, familiarity, or preference.

Project MATCH (described above) is an example of a combination of measurement based care and a common elements approach that has been organized into an Evidence Based Practice for the treatment of childhood behavioral health disorders. Similarly, Barlow’s Unified Protocol for Transdiagnostic Treatment of Emotional Disorders treats adult anxiety and mood disorders using CETA. Their approach draws primarily from cognitive behavioral therapies and focuses on restructuring maladaptive thoughts, changing negative behavior patterns, preventing emotion avoidance, and using emotion exposure procedures. A wait-list, randomized control-designed study demonstrated statistically significant positive outcomes for both principal and comorbid disorders, and across multiple diagnoses, including generalized anxiety disorder, obsessive compulsive disorder, social anxiety disorder, and panic disorder with agoraphobia (Farchione et al., 2012).

In an effort to address the dire need for effective mental health treatments in middle and low income countries experiencing shortages of mental health professionals, Murray and colleagues (Murray, et al., 2013) developed a CETA-based treatment program targeting depression, anxiety, trauma, and alcohol abuse, and tested its application in two pilot studies in Iraq & Thailand. The ten components in the model included: engagement, psychoeducation, anxiety management, behavioral activation, cognitive coping, imaginal exposure, in vivo exposure, Suicide/Homicide assessment & planning, and screening and brief intervention for alcohol. The model also utilized a 12-item brief symptom checklist as an MBC component of the intervention. Although the pilot study was without

randomization procedures, a pre-post assessment on standardized instruments demonstrated that 100% of the clients in Iraq and 81% of those in Thailand showed significant improvement.

A common elements or CETA-based training and treatment program could be pursued as the primary focus of practice improvement or as a natural follow-up to an implementation of MBC. When combined with MBC, the common elements provide the options for intervention based on the MBC feedback received. While feedback alone will improve outcomes, feedback plus common elements may advance quality and outcomes even further.

V. Measurement (How the amount of payment will be determined)

Measurement can be used to assess quality of care, to determine how payment should be distributed, and to shape clinical practice. Ideally, a particular measure can be used for more than one purpose. Implementation of a system of MBC offers the opportunity to fulfill all three purposes with a single approach.

Within the category of quality measurement, there are at least three types of quality measures (Donabadien, 1996): 1] **Process Measures** (the use of particular practices or completion of specific tasks), 2] **Outcome Measures** (the results of care including clients health status and client experience), and 3) **Structural Measures** (resources, including facilities, personnel, etc.). Most payment reform and practice improvement projects incorporate process and outcome measures, with less use of structural measures. Each measurement type has particular advantages and disadvantages (Rubin, Pronovost, & Diette, 2001).

Process measures offer the advantage of face validity, particularly when there is a demonstrated empirical relationship between a designated practice or process, and an improved client experience, health outcome, or cost savings. For example, routine screening of cholesterol levels in patients with coronary artery disease reduces the risk of heart attack, and makes sense from a clinical outcome and cost-effectiveness point of view. Knowing how often a best practice is occurring in a particular setting is useful information. Process measures do not require risk stratification, as is often the case with outcome measures, thereby reducing costs associated with risk-profile analyses and the need for larger sample sizes when using such risk tools. Feedback from process measures are very actionable, clearly directing the provider to do more or less of a particular practice (e.g. screening for depression, or avoiding the prescription of multiple anti-psychotics).

Understanding and positively influencing how an individual's health or well-being has been impacted by health care delivery (i.e. outcomes) is arguably the definitive goal of healthcare quality systems. Although achieving outcomes may be the ultimate quality benchmark, outcomes assessment is not without issues and challenges. There are at least three significant issues with current efforts to measure outcome of outpatient clinic care, including: attrition in the measurement sample, case-mix, and the potential for “gaming” to obscure true outcomes.

Most assessments of the outcomes of outpatient care utilize a pre-post methodology. Clients are assessed at intake and at discharge on one or more outcome measures, and these scores are compared to determine if there was no change, positive change, or negative change. However, in practice, many episodes of care lack discharge

measures due to unplanned or premature termination. As a result, many clients served are left out of the analysis. One potential solution to this type of measurement attrition is to collect measures continuously throughout the course of care, such as through an MBC system.

Another challenge of outcomes management is that some outcomes may be due to factors beyond the provider's control, namely the health status and social determinants of health of the individuals presenting for care. If all programs/providers are evaluated on the same metric, differences in the case-mix of clients served can obscure actual performance. Risk-adjustment algorithms can be developed and applied to compensate for initial differences in case mix, but doing so requires extensive analysis and testing over time, and separate algorithms for each outcome to be assessed. Without case mix adjustment, there is a risk that paying for outcomes may be inequitable to those providers serving clients with the poorest health status or highest risk for deterioration. Another challenge of case-risk adjustment is the need for larger sample sizes given the multi-factorial nature of most risk adjustment algorithms (Rubin, Provnost, & Diette, 2001).

When providers are paid for specific outcomes, there is always the risk of social influence, exclusive focus on the particular measure, to the detriment of other important healthcare processes, and gaming to insure better outcomes. In measurement based systems, clients often fill out measures in the presence of their clinician. There is a risk that results will be impacted by social influence of the clinician, or social desirability effects on the client. For example, if clinical progress is the only outcome measured, staff may pay less attention to other important outcomes, such as employment, housing, or social functioning. Finally, to the extent that staff are responsible for making ratings of client

progress, and are aware of being evaluated/compensated for achieving certain outcomes, their ratings may be influenced in a way that obscures the “true” outcome.

Incorporating process measures that relate empirically to outcome in practice improvement and payment reform programs is one method of addressing some of the limitations of outcome-based measures. In the case of measurement based care, assessing how often measures are administered, fed back to clinicians and clients, discussed in therapy, used for case planning, and incorporated in supervision, is a valid strategy. Since these measures also can be used to assess outcome, it may be best to exclude outcome benchmarks from initial payment reform efforts, focusing initially on process measures associated with MBC, and phasing in outcome measures after several years. Outcome measures can be assessed throughout but it may be wise to not tie them to payment until a program has had an opportunity to mature.

The success of measurement systems also depends upon the nature and characteristics of the selected measures and how they are organized, tracked, and incentivized. The following have been identified as critical considerations;

- Reliability – will the measure produce similar results across variations in time or circumstances of administration?
- Validity – does the item or scale actually measure what it proposes to measure?
- Sensitivity – is the measure sensitive enough to detect meaningful changes in client status reflective of improvement or deterioration in condition?
- Brevity – any measure must be practical for implementation in a real world clinical setting. If intended to be administered multiple times throughout the course of an episode of care, brevity is particularly important.

- Cost-effectiveness – instruments must be free or of nominal expense in order to be used widely, and must not incur an unreasonable burden upon clients or providers.
- Accessibility – must be embedded within a data architecture that allows for timely feedback to clinicians and clients, can be aggregated, and can be presented in a format that is easily understood/applied.
- Breadth – ideally, a measure set includes client perspectives, symptom severity, and functioning. Achieving breadth and brevity in the same measure or measure set is challenging.
- Face Validity – must appear on its face to be relevant to clinicians and clients, and usable without extensive training.
- Non-duplicative – should not duplicate other information collected elsewhere.
- Acceptability – should not be overly intrusive, and should come with a reasonable rationale for its use.
- Efficient – Measures must be relatively easy to collect and aggregate. Otherwise, the process of monitoring and analyzing may become cost prohibitive. Measures that require extensive site review, a high level of effort to audit, or significant resources to monitor, may undercut any savings achievable through improved outcomes.
- Clinically Utility – should be seen as integral to better practice, rather than an add-on or adjunct.

In selecting measures, it is also important to understand the difference between screening measures versus outcome and process measures. Screening for specific

disorders or problems, such as co-occurring substance abuse, is a best-practice that is a step in the direction of achieving co-occurring competence. However, screening instruments are typically designed for identification of disorders, and not necessarily for tracking outcomes or client progress. Screening measures may lack the sensitivity needed to assess change over time. On the other hand, tracking the regularity with which screening measures are utilized can be an effective quality measure.

Whatever measurement or MBC system is selected, there will need to be consideration of how it works with adult vs. child populations, and substance abuse vs. mental health populations. It is likely that separate measures/systems may be required for adult vs. youth. Substance abuse and mental health measures may share a common core, but include adaptations that reflect the specific goals of each system (e.g. # of days abstinent in the last 30 days before discharge for SA, or reliable change in main problem score for MH). Very few children or adolescents are diagnosed and treated for substance abuse in outpatient clinics for children (see above) and DCF currently funds 6 SA clinics that are utilizing the ACRA – ACC model and collecting metrics related to that EBP. A specific SA MBC measure for children/youth may not be advisable, at least initially.

Connecticut has incorporated several screening instruments and some outcome measurement in their management of state-funded clinics (e.g., the DMHAS DDAP system includes the MH Screening Form III, Modified Mini Mental Status, and, for substance abuse, the SSI Alcohol and Drug Screening Scale and the CAGE – AID, as well as the National Outcome Measures (NOMS); DCF uses the GAIN SS and the OHIO Scales, as well as the YSS-F). Components of these measures may be adaptable for use moving forward. The ECC initiative measures emergent, urgent, and routine access

to care, as well as indicators of co-occurring screening and referral, and coordination with primary care.

VI. Payment Reform (How payments are structured)

Included among the many goals of the Affordable Care Act are increasing the quality and reducing the costs of health care. To accomplish these goals, the Act established a variety of programs that have provided grants to providers and provider networks to coordinate and integrate care for their patients. Many of these programs encourage experimentation with innovative payment structures.

Much of healthcare service provision, including Medicaid BH clinic services in CT, is funded under a fee-for-service payment arrangement. Under fee-for-service, providers are generally motivated to increase utilization (assuming they can break even or profit with each service delivered). Under value-based payment arrangements, providers are paid for the value they produce through enhanced practice or improved outcomes. It is argued that pure fee-for-service payment arrangements include little to no incentive for improving quality or outcomes that are critical to the ultimate goal of enhancing health in a cost-efficient manner. This section will review the current status of payment reforms in healthcare, issues to consider in structuring payment mechanisms, the range of alternative payment methods, and examples of various healthcare payment and performance systems implemented in other states across the country.

In designing payment reforms, it is helpful to understand the current practice around the country. The National Scorecard on Payment reform reports that the use of value-oriented payments is growing. According to the Scorecard, 40% of all commercial in-network payments are value oriented. Of that 40%, 53% of payment mechanisms hold

providers at-risk, although nearly 50% percent of this at-risk group has only upside risk. Further analysis reveals that 38% of all hospital payments, 10% of all outpatient payments, and 24% of all outpatient primary care physician payments are value oriented. With regards to fee-for-service systems, 12.8% include some type of pay-for-performance, and a further 2% include some means of shared savings. It is also notable that, of all outpatient payments for care, 71% go to specialty providers and 29% to primary care physicians. The National Scorecard does not report data on value-based payment in the public sector, although it is clear that many initiatives in the public sector that are funded or encouraged under the ACA include some degree of payment reform.

In a review of pay-for-performance and other payment incentive programs, James (et al., 2012) reported that many programs include very small rewards (less than 1% of total payment) that may not be sufficient to motivate behavior change. They also report that the AMA has issued principles of pay-for-performance recommending that the programs should be voluntary, include procedures for physician (provider) review, and use new funding as a positive incentive for participation.

Behavioral economics can be thought of as the study of psychology as it relates to the economic decision making processes of individuals and institutions. One area of study within behavioral economics is concerned with how payments can be structured to maximize motivation, performance and goal attainment. The principles of such practice are relevant to the design of payment reform. In an analysis of the application of behavioral economics to payment reform in healthcare (Mehrotra, et al., 2010), the authors describe 7 recommended changes to the design of typical pay-for-performance programs in healthcare. First, they note that a series of small incentives are better than

one large incentive, even when the total compensation may be the same. Smaller, more frequent rewards produce better outcomes. One downside is that administrative burden is increased when rewards need to be calculated and distributed more frequently. One way to retain some of the value of more frequent incentives, while reducing administrative burden, is to provide “symbolic” rewards quarterly (e.g. via email notice of potential dollars earned), while providing actual payments annually.

A series of tiered, defined thresholds is better than one defined threshold. For example, the current ECC model uses a single, all-or-nothing threshold, rather than scaling incentives to the degree of goal attainment. Research indicates a program that allows for partial goal attainment will produce greater change in behavior than one that is all or nothing.

Reducing the time lag between performing a desired behavior (conducting a screening) and actually receiving a reward, also increases performance. Although it is difficult to structure such programs with immediate rewards, reducing the period of time between the behavior and receipt of some type of reward is likely to help.

Research demonstrates that people weigh downside risk more heavily than upside risk. Incentives, structured as avoiding a potential loss, will generally have a greater impact than the same incentives offered as the potential to earn a bonus. While this argues for using withholds or penalties more than offering bonuses, there are also potential negative, psychological consequences to penalties. Individuals often view penalties as unfair, and such a negative psychological reaction can undermine the goals of a performance program.

It is also recommended that incentive plans work better when they are relatively simple vs. overly complex. Shared savings plans are an example of a complex incentive where the receipt of the reward is uncertain and the calculations of the reward are complicated. Absolute thresholds, communicated in advance, increase certainty and reduce complexity.

Finally, the authors indicate that in-kind rewards, such as travel or dining, may have greater impact than incentives that have the same monetary value but are structured as cash rewards. Although there may be practical and political constraints on adapting such a strategy for public system healthcare payment, there may be other, more creative ways to compensate programs/providers with rewards other than cash.

Lynch, Baron, & Wolfson (2013) have included a motivational analysis in their review of payment reform in healthcare. They note the distinction between intrinsic motivation – the drive to do good work for its own sake and in accord with a sense of professionalism that motivates many healthcare professionals – and extrinsic motivation where the primary goal is the receipt of some reward that is external to the activity itself, such as money, or avoidance of negative consequences. A significant body of research has demonstrated that use of extrinsic rewards can undermine motivation for activities that are intrinsically motivated. One method of mitigating these undermining effects is to structure rewards as information or feedback regarding competence, rather than stressing the receipt of the extrinsic reward. Other factors relevant to promoting change in provider behavior is recognizing that 1) education or information, on its own, seldom leads to change, 2) like all people, healthcare professionals value the opinion of their peers, 3) within the work environment, healthcare professionals and others are poor decision

makers when given too many options, 4) people are generally loss averse, “over-valuing what we have and undervaluing what we might gain from change.” (Lynch, Baron & Wolfson, 2013). Based on these findings, also from behavioral economics, they propose some of the same strategies as Mehrotra et al., (2010), as well as the following:

- Produce and distribute more reports comparing programs/providers to their peers to take advantage of competitiveness;
- Make it easier to do the right thing: Structure care protocols with built-in nudges and defaults, from which real effort is required to deviate;
- Prioritize provider buy-in and leadership in quality and cost control efforts;
- Guide practitioners through needed transitions, such as through consultants who can provide step-by step assistance and stories of relevant successful improvement efforts.

There are many different models and structures for the management and funding of Healthcare. These include various forms of managed care, capitated risk-based contracts, health maintenance organizations (HMOs), preferred provider organizations (PPOs), independent practice associations (IPAs), accountable care organizations (ACOs), health homes, health neighborhoods, etc. Connecticut has selected the Administrative Service Organization (ASO) as the method of managing healthcare delivered under Medicaid. Behavioral Health, Dental, and Medical Transportation have been carved out from general healthcare to create 4 ASOs to manage each sector. Each ASO is responsible for managing the utilization and quality of healthcare services under Medicaid. The ASO contracts are structured such that there is no incentive to restrict care simply to enhance profits. Instead, the State Partners and/or DSS establish

performance targets for each ASO in an effort to align ASO goals and incentives with the broader interests of Medicaid members and the State.

Within these broader financial and management models, there are also specific payment strategies that are being used in systems across the country. As part of the Outpatient Study, one goal is to determine which type of payment structure will most effectively pay providers a reasonable and sustainable rate for their services and incentivize practice transformation to achieve better care and outcomes for members.

Per Member Per Month (PMPM) payments for care coordination

Many pilot programs across the country are providing incentives to providers to coordinate with other providers treating the same patient. Generally, one provider is identified as being responsible for care coordination and is paid a monthly fee for each individual for whom that provider coordinates care. The fee is paid every month, whether or not the patient receives any care during the month.

Episode of Care/Case Rate

The case rate is a predetermined, bundled payment paid to a provider for all services needed to achieve a specified outcome for a defined episode of care. It is a composite rate based upon an average cost of all services provided, taking into account the case mix, service utilization, clinician licensure, and visit frequency and duration. Providers assume some level of risk in this model.

Fee-for-Service Payments

Outpatient providers in Connecticut are currently paid for services on a fee-for-service basis; they receive a fee for each service that they perform. These payments do

not recognize the complexity of the member's illness, nor do they motivate providers to focus on outcomes. Instead, they motivate providers to continue providing services and to provide services at a high volume. Fee-for-service rates do not allocate any risk to the provider. The State has expressed a desire to move from volume-based purchasing to value-based purchasing.

Global Payments

Global payments are payments made to a group of providers to cover all services that are provided for a member over a specific period of time. The provider group may include primary care, hospitals, pharmacists and specialty practices. Since this study deals only with one level of care, this payment model may not be applicable.

Shared Savings Payments

The shared savings payment model allows providers to share in cost savings that are realized by implementing high quality, outcome-focused practices. Such models have received much attention recently, and are being implemented in various pilot programs around the country. There is not much data, however, that indicates how successful such programs have been.

There are also significant challenges in determining how to calculate shared savings and how to distribute them equitably among providers. Additionally, it is possible that when reforms are implemented in one level of care, the savings may be realized in another level of care. For this initiative, therefore, which deals only with providers at one level of care, it may be difficult to determine the extent to which practice transformation may be related to savings realized in another level of care. For these reasons, this payment model is may not be a good option in this case.

Advance Payments to Assist Providers to Adapt Best Practices

In some programs, providers receive an advance payment to assist them in implementing new practices and techniques. For example, in some cases, providers have received up-front payments to help them purchase electronic health record systems, train staff to utilize the system and convert their paper records into electronic ones. These payments require a significant investment of state funds.

What Other States Have Done

Models that have been implemented in other states include those that offer enhanced rates or incentive bonuses to providers who meet certain benchmarks, provide a per member/per month payment for care coordination and management, and evaluate and incentivize improving the quality and effectiveness of behavioral health services. Overviews of six (6) programs that are representative of these initiatives are provided below. These programs are grouped based on the degree of focus on behavioral health care vs. primary care. Some programs focus exclusively on behavioral health services, while others are primarily focused on primary care with the inclusion of some behavioral health measures/outcomes.

Programs focused on Behavioral Health

Oklahoma Enhanced Tier Payment System (ETPS – Fields & Kelly, 2012)

The Oklahoma Department of Mental Health and Substance Abuse Services (ODMHSAS) designed a performance outcomes payment plan, the *Enhanced Tier Payment System (ETPS)*, with an overarching goal to proactively increase the recovery of Oklahomans from mental illness and substance abuse. Two primary objectives are:

- 1) To improve outcomes/access; and

2) To creatively pay for outcomes with no additional state funds

ODMHSAS initially developed six measures that guide positive outcomes for consumer recovery. The ETPS was approved by the Center for Medicare and Medicaid Services (CMS) which allowed Oklahoma to receive federally-matched funds for the project. For every state dollar contributed to the outcome measures, the federal government contributes \$1.93. The federal government, therefore, pays 65.9% of the cost. With federally matched funds, they were able to turn roughly \$2,000,000 into \$6,000,000 and return that to communities to provide data-driven, research-based recovery outcomes to improve the lives of Oklahomans. Six additional measures were added six months later, resulting in a total of 12 measures that focus on access, engagement, and clinical outcomes.

1. Outpatient crisis service follow-up within 8 days
2. Inpatient/crisis unit follow-up within 7 days
3. Four services within 45 days of admission (engagement)
4. Medication visit within 14 days of admission
5. Reduction in drug use
6. Access to treatment (adults)
7. Improvement in CAR score: Interpersonal domain
8. Improvement in CAR score: Medical/physical domain
9. Improvement in CAR score: Self-care/basic needs domain
10. Inpatient/crisis unit community tenure of 180 days
11. % of clients who receive a peer support service
12. Access to treatment (children)

Benchmarks were established for the measures, based on data from a previous six-month time period and knowledge of best practices. The "Access to Treatment" measure is determined through "secret shopper" phone calls made to the facilities.

Performance payment is based on the number of members attributed to the provider and agency performance on each measure (meaning providers can earn a bonus for individual measures as opposed to "all or nothing"). Facilities are divided into four tiers based upon their relative performance. Those in the lowest tier earn zero incentive dollars; those in the next lowest tier earn 50% of their allotment; those in the next tier earn 100% of their allotment; and, those in the highest tier earn 150% of their allotment.

Data on the impact that this program has had upon spending is not yet available.

Comments: This initiative was designed specifically for mental health providers, and therefore is more readily adaptable to the current study than some of the other models reviewed herein. The tiered payment structure allows providers to be rewarded if they have made progress towards their goals, even if the benchmark itself has not been met. Bonus payments are awarded based upon individual measures and the number of members served, recognizing the difference between small and large practices.

Philadelphia Pay for Performance Program (Laughlin, 2013)

Philadelphia's Community Behavioral Health (PCBH) has had a pay-for-performance system in place for several years. There is a base rate for providers at each level of care. Inpatient hospital providers, for example, receive a fixed per-diem rate, regardless of what services are provided.

In addition, providers may qualify for incentive payments if they meet benchmarks related to patient outcomes. The benchmarks are established in collaboration with

providers by comparing Philadelphia providers with similar providers in the region and throughout the nation. There are 60 different evaluation metrics, but PCBH selects a subset of measures that will be used for each provider, based upon the provider's practice.

Incentive payments are distributed annually. The payments are proportional to the provider's revenue and scaled to their individual performance with respect to the benchmarks.

PCBH claims that the program is yielding good results. They cite a reduction in 30-day readmission rates from 15 percent to 11 percent for adult inpatient members. For inpatient substance abuse members, they have achieved a 10 percent increase in the number of members who are contacted by a case manager within 2 days of admission. PCBH has not been able to document at this point whether the program has resulted in actual cost savings.

Comments: This program was designed for behavioral health providers, so is more readily adaptable to the current study than some of the other models described herein. The benchmarks are customized for each provider, incentivizing performance improvement where it is needed. That means that providers are not competing against each other, potentially allowing for more collaborative relationships among providers. Bonus payments are proportional to provider revenue.

Programs Focused on Primary Care with Inclusion of BH Measures/Outcomes

Oregon Coordinated Care Organizations (Kardis, 2013)

Care for 90% of the Medicaid members in Oregon is provided by 15 Coordinated Care Organizations (CCOs), which are partnerships between primary care doctors,

hospitals and specialty providers charged with coordinating care for their members. Oregon pays each CCO a monthly fee for each enrolled Medicaid member, whether or not the member accesses services.

The State withholds a percentage of the monthly fee until the end of the year and the CCO may earn back the withheld portion of the fee if it meets specified targets. For 2013, 11 of the 15 CCOs earned 100% of their withheld performance pay, and some are eligible for an additional payment related to achieving targets such as enrolling members in a primary-care home and controlling blood sugar level in diabetic members. All 15 CCOs earned bonuses, with amounts ranging from \$748,417 to \$4,987,244.

Oregon has 17 bonus incentive measures (Oregon Health Authority, 2014)

- Access to Care
- Alcohol or other substance misuse screening
- Ambulatory care: ED utilization
- Controlling high blood pressure
- Developmental screening in first 36 months
- Early elective delivery
- Electronic health record
- Follow-up after hospitalization for mental illness
- Mental and physical health assessment within 60 days for children in DHS custody
- Patient-centered primary care home enrollment
- Satisfaction with care (CAHPS)
- Screening for clinical depression and follow-up plan
- Timeliness of pre-natal care

- Adolescent Well-Care visits
- Follow-up care for children prescribed ADHD medication
- Colorectal cancer screening
- Diabetic care hemoglobin A 1 c control

Oregon's goal is to decrease overall spending for Medicaid by two percent per year for 5 years. They reported that in 2013, ED visits decreased by 17% and the hospitalization rate decreased by 32% from 2011 levels. Spending on ED services simultaneously decreased by 19%. The percentage of children who were screened for risk of developmental, behavioral and social delays increased from 21% to 33%, an increase of 58%. During this period, spending for primary care increased by 11% and for preventive services increased by 20%.

Comments: This model encompasses numerous levels of care and is therefore inapplicable to the current study. Considering the favorable results, and numerous innovations, it is probably worth further study in considering broader changes to the Medicaid Program in Connecticut.

Arkansas Payment Improvement Initiative (Thompson, et al., 2014 #1)

The Arkansas Payment Improvement Initiative focuses on payments for “episodes of care” related to specific procedures or conditions. The initiative was launched in 2012, with the following defined episodes of care: pregnancy, attention deficit/hyperactivity disorder, hip and knee replacement, congestive heart failure and upper respiratory infections. Colonoscopy, cholecystectomy, tonsillectomy and oppositional defiance disorder were added in 2013.

For each procedure or condition, one provider is identified as the Principal Accountable Provider (PAP), based upon which provider best will be able to impact the quality of care. The PAP is accountable for all the care associated with an episode over a given period of time. A standard spending target is established for each episode. During the episode, fee-for-service payments are made, with a reconciliation of payments at the end of the episode based upon the actual spending and the target.

As an incentive for managing care efficiently during the episode, PAPs may qualify for risk-sharing payments, which may be positive or negative. There are 2 risk-sharing thresholds against which provider performance is measured: acceptable and commendable. If a PAP's average costs are above the acceptable level, they are assessed a penalty (negative risk-sharing). If a PAP's average costs are between the acceptable and commendable thresholds, they will receive neither a positive nor a negative risk-sharing adjustment. If average costs are below the commendable level, the PAP will be eligible for a positive risk-sharing payment, if they also meet associated quality standards. For each defined episode, the State also identified exclusion criteria, so that providers are not penalized for significant outliers.

For the first full year, 489 providers were potentially eligible for payments, and 278 providers were penalized. Although there were more "winners" than "losers" those providers who were penalized will pay out approximately \$200,000 more than the "winners" will receive.

The program also recorded the following changes in practice patterns: 19% decrease in antibiotic prescriptions for upper respiratory infections; an increase in guideline-concordant care for ADHD with a dramatic reduction in therapy visits; increased

recognition of additional co-morbidities; and increased screening of pregnant women for Hepatitis B, HIV and diabetes.

Comments: This model implements an episode of care payment model. The program deals effectively with outliers so that they do not impact the data significantly. This model also includes negative risk-sharing which penalizes poor performers.

Iowa Medical Home Bonus Program (Dempsey, 2014; Iowa Department of Human Services, 2014).

The Iowa Medical Home Bonus Program, which began January 1, 2014, allows Iowa Wellness Plan providers under contract with the Iowa Department of Human Services to qualify for bonuses if they meet certain standards related to quality and efficiency. Medicaid members are attributed to providers; providers must have at least 19 attributed members to qualify for the program.

Providers are paid on a fee-for-service basis. In addition, for members attributed to a provider, the provider performs patient management and care coordination services for which they are paid \$4.00 per member per month. They also may qualify for a wellness exam incentive payment of \$10.00 per member if a specified percentage of members receive wellness exams.

In addition, the state analyzes 3 years of Medicaid claims data by provider, and uses this information to place providers in quintiles based upon their performance. Baseline rates and target improvement goals are set for each provider in the following categories:

1. Screening services for early detection of disease (HEDIS measure) including well-visits for children, mammograms and screening for colorectal cancer;
2. Potentially preventable hospital admissions and Emergency Department visits;

3. Disease progression, measured by increases in the number of chronic conditions and the severity of those conditions;
4. Follow-up care, including potentially preventable hospital readmissions, percentage of members who visit a physician within 30 days of hospital discharge and percentage of members with chronic disease who have 3 or more physician visits;
5. Care coordination, as measured by the continuity of care score, percentage of members that visit a primary care provider and percentage of members that visit a physician within the year; and
6. Efficiency, as measured by the number of potentially preventable services and the prescriber's rate of prescribing generic drugs.

At the end of each quarter, provider performance on these measures is evaluated to see if they have met their individual goals. Providers will receive a bonus payment of up to \$4.00 per member per month if they meet their goals. In addition, providers in the second through fifth quintiles may receive a partial bonus (50% of the maximum bonus amount) if they do not achieve the goal but their quarterly score is greater than the midpoint between the baseline and the goal.

Comments: This program includes per member per month payments for care coordination. The bonus payments are structured to recognize provider improvement, even if specific targets are not met.

MaineCare Primary Care Provider Incentive Program (Maine Department of Human Services)

Maine has implemented the Primary Care Provider Incentive Program which rewards providers who provide high quality care to their Medicaid patients. The goals of the program are:

1. Reduce disincentives to serving Medicaid members;

2. Reduce inappropriate ED utilization; and
3. Increase utilization of preventive and quality services.

Primary care providers are paid on a fee-for-service basis and are ranked every six months on performance measures related to access, utilization and quality and prevention. Those who rank in the top 80 percent receive a bonus payment.

The total amount available for bonus payments is split into two pools, one for adults and one for children, based upon the number of adult and child members. Each pool is split further, with 40% of the funds allocated to access measures, 30% to ED utilization and 30% to quality.

Access is measured by the number of unduplicated Medicaid members served by the provider. A provider must serve at least 20 members to be eligible for the program. ED utilization is measured by the average number of ED visits per member during the reporting period. These two measures account for 70% of the bonus funding.

The majority of the performance measures deal with quality and prevention. They are as follows:

- Children's EPSDT
- Well-Child visits in first 15 months
- Well-Child visits in years 3, 4, 5 and 6
- Children and adolescent access to primary care provider
- Adolescent Well-Care visits
- Lead screening in year 1
- Lead screening in year 2
- Use of appropriate medication for children with asthma

- Follow-up care for children prescribed ADHD medication
- Adult's EPSDT
- Adult access to preventive/ambulatory health care
- Cervical cancer screening
- Chlamydia screening
- Colorectal cancer screening
- Breast cancer screening
- Diabetic care hemoglobin A 1 c test
- Diabetic eye exam
- LDL measured in previous 24 months

Program results are not yet available.

Comments: A major focus of this program is to provide incentives for accepting Medicaid members. Forty percent of the bonus funds are related to the access measure. It is unclear if structuring the bonus payments so that 80% of the providers receive bonuses offers sufficient incentive for providers to improve their performance.

BARRIERS TO SYSTEM CHANGE

As with any effort to make systems changes, there are often barriers that can limit or undermine such endeavors. These include the upper payment limit, changes that will be required to provider business practices, the need for additional data, funding to pay for implementation supports, the adequacy of available incentives to produce real change, the need to select/develop the appropriate measures, and provider anxiety about new requirements and/or payment structures.

The Upper Payment Limit for a particular service is equal to the Medicare rate for the same service. Upper Payment Limits are assigned across the full range of codes in a category, such as “Clinic Services,” and the total amount paid for those services cannot exceed what Medicare would pay for the range of services. Since Medicaid rates for a given service are often less than Medicare rates, states have been able to enhance payments to Medicaid providers who meet specified quality measures or achieve targeted patient outcomes. In these cases, the regular Medicaid rate plus the supplemental rate, together, may not exceed the maximum allowable rate. To access the additional funds, the state must submit the plan to CMS and receive approval.

The State, with appropriate approvals, could apply the difference between Medicare’s rate and the Medicaid rates to supplemental payments, as noted above. At this point it is not known how much funding may be available for this purpose, since other service types would be included in the calculation. (So, for example, if the individual therapy code was reimbursed at a higher rate than Medicare allows, that difference would offset the savings shown above.) It also is not known whether such funding would be a sufficient incentive for providers to make required practice improvements.

Restructuring payments as a method of securing funds for bonus incentive payments will not be without a number of challenges. First, it is not clear if such restructuring will produce sufficient incentive funds to motivate providers to embrace the recommended best practices suggested in this paper. A new payment structure may also require providers to take a new approach to service delivery. For example, if episode of care payments were implemented, providers would have to manage the transition from fee-for-service payments to the episode based alternative which would impact the timing

and amount of revenue they receive. Providers may be required to report additional data that will be used to determine if performance standards have been met, and may be incentivized to implement a system of measurement based care. All of these changes would require development of new processes and procedures, involving significant staff training and investment in new tools and systems. The State must ensure that any new payment structure adequately addresses these new requirements.

Developing new access, quality, process, and outcome measures will also present a challenge. To the extent possible, new measures should utilize data that is readily available. Alternatively, other data requirements that do not contribute to meaningful improvements in care, may need to be relaxed or eliminated so that additional data burden is minimized. In addition, there must be consensus that the new measures are accurate and meaningful.

Efforts should be made to fully inform and consult with providers, and other stakeholders such as service recipients, family members and advocates at each step in the process of developing and implementing reforms to ensure stakeholder buy-in. Changes should also be phased in where possible to allow for planning, adjustment, and accommodation by the provider network and feedback from stakeholders.

As noted above, the ECC has had a significant impact on access to care, but needs to go further to have a significant impact on quality. A major limitation of the program is that only a minority of outpatient clinics are eligible to participate under the current structure. There is value in some of the components within the ECC and the challenge lies in supplementing and/or modifying the current measures and criteria while allowing the full array of clinics to participate.

VII. Summary

The goal of this report is to explore methods of braiding clinical practice, measurement of success, and payment methodology into a seamless structure that promotes excellent mental health and substance abuse outpatient care. For the greatest likelihood of success, it will be important to incorporate best practices in each of the areas reviewed. The potential benefits are substantial. Outpatient care is the point of entry for most individuals served in the mental health and substance abuse systems. Successful early intervention can significantly alter life trajectories away from illness, poverty, and early death and towards a full and productive life in the community. Lower utilization of higher levels of care, particularly emergency department use, inpatient psychiatric hospitalization, and inpatient detoxification should accrue from improved quality and outcomes of outpatient treatment.

A review of current practices shows that there is significant room for improvement in the delivery of outpatient treatment, and that ultimately implementing multiple EBPs in such settings may not be practical or cost-effective. A more effective approach may be to support each clinic with a flexible, but rigorously applied, alternative evidence-based approach. Such an approach could be built on measurement based care systems (MBC) and/or a common elements transdiagnostic approach (CETA). Rewarding providers that produce evidence of effective implementation of these approaches is likely to be more fruitful than simply setting outcomes benchmarks and expecting providers to figure out how to reach them. Providers are most in control of their own practice, and structuring rewards around their effectiveness in delivering MBC and CETA would tie incentives most closely to actual behavior. As the prior review noted, the provider system will need

consultation on best practices to deliver excellent care consistently. That consultation must be consistent with the principles of implementation science, and sustained for as long as any practice improvement effort is in operation.

Over the last 10-15 years, best practice information about MBC systems is emerging, based on the work of Lambert (Slade, et al., 2008), Duncan (Reese et al., 2013), Bickman (2012), Weisz (2012), and others. If MBC is selected for implementation, in order to be responsive to Connecticut's needs, the system selected must be able to serve clients receiving mental health, substance abuse, and co-occurring disorders and, at least within the adult service system, should be applicable in a group therapy format, given the predominance of group therapy in substance abuse outpatient treatment. The selected approach either must be applicable to both children and adults, or separate programs must be selected for these two systems. Separate systems for children and adults may be the better approach because of the significant differences in the way treatment is delivered in each system. Some MBC systems incorporate the point of view of clients, clinicians, and family, and there are many advantages to having these multiple points of view. The PCOMS and OQ-45 systems are limited to client self-report, but could be supplemented with additional clinician ratings. The type of information and feedback should include general measures of well-being and the quality of the therapeutic alliance, but also incorporate measures of symptoms and functioning. More practical considerations are that the measures need to be brief, free or low cost, and easily integrated into the daily workflow. Accomplishing all of the above while maintaining brevity will require significant discipline and compromise. Similarly, balancing the desire for existing empirical support of the selected MBC system against the need to keep costs

manageable for a large scale implementation will also require compromise. Other very important practical considerations are how and where data is collected, and the platform on which it is fed back. It would be preferable to build the system into one that is already used by providers (e.g. PSDCRS, DDAP, or ProviderConnect), rather than introducing another web-based data system. A universal EHR or system that allows for interoperability of current systems would be preferred, but such a system appears to be many years away.

A training program built on a Common Elements Transdiagnostic Approach is another option, either as an alternative to MBC or as a follow-up enhancement if an MBC System is implemented. There are only a few CETA programs available and since this is an emerging best practice, it may be best to develop a custom program for Connecticut application. A core set of practice elements could be selected based on the characteristics of the Connecticut Medicaid population of outpatient utilizers. It could incorporate interventions that are commonly utilized in current practice, such as motivational interviewing for engagement, or brief screening and intervention for alcohol abuse.

The second component of a comprehensive approach is to determine what should be measured to determine what providers can earn. It may be most advisable is to build off of the current ECC standards, but expand access to all clinics that serve an established minimum number of clients. It may be wise to assess/reassess current ECC access standards to determine if they should be revised or remain as they are currently designed. It may be wise to re-evaluate each of the ECC measures. The promotion of integrated medical and behavioral health may be addressed better through other initiatives,

however, such as the Behavioral Health Home, Health Neighborhoods, or other initiatives aimed particularly at healthcare integration. Whatever is selected as the basic ECC measure set could be supplemented with indicators of provider effectiveness in the delivery of MBC. Other outcome measures may be considered, if an MBC system is developed. These measures could include reliable change (e.g. change beyond the standard error of measurement) from baseline to discharge on the MBC measures themselves, indicators of school and work functioning, ED utilization during treatment (using claims data) and post discharge, level of family engagement in treatment, reductions in main problem scores and/or other measures selected by stakeholders. Selected outcome measures may require risk adjustment, given expected differences in populations served across various clinics and sectors. While there may be other valid and appropriate measures, it will be important to keep the measure set manageable to reduce both provider and administrative burden. If MBC is adopted, measures could include, but not be limited to, the following;

- The percentage of direct care staff that have completed certified MBC training.
- The percentage of supervisory staff that have completed certified MBC training.
- The percentage of MBC measures completed for each client at each session.
- The percentage of MBC measures completed and entered timely (within 48 hours).
- Level of program/staff participation in MBC Learning Collaborative Activities
- Evidence that MBC feedback is reviewed with the client during sessions.
- Evidence of supervisory sessions in which the results of MBC feedback is reviewed with a supervisor.

- Evidence that treatment plans contain reference to data from the MBC.
- Evidence that discharge summaries contain reference to MBC feedback in discharge decisions.
- Other indicators of MBC implementation as developed or included in the Model of MBC selected

In finalizing a measure set, it also will be important to recognize the administrative burden for providers and for the entity conducting the reviews of these measures. To the extent possible, measures that can be audited electronically, vs. requiring a site visit, are preferred.

Payment reform likely will require several planned steps. Global payments are the overall best option for incentivizing quality care, but such systems require implementation over multiple levels of care. This project is focused only on outpatient treatment. Case rates built around a modal, “ideal” episode of care are also a reasonable option, but potentially could destabilize an already economically fragile outpatient treatment system. Case rates may be more feasible as a long-term option to be considered, once further study has been completed and stakeholder input is attained.

One promising model is a tiered bonus payment system layered on top of the current, or potentially updated, outpatient fee-for-service payment structure. A shared savings arrangement might be feasible, but would require specification of where savings are anticipated (e.g. inpatient and ED utilization), and allow time for practice improvements to be implemented. A downside of a shared payment arrangement is that payments are contingent on accruing savings, and thus are unreliable. This unreliability

may undermine provider motivation to invest when the outcome is uncertain. Also, shared savings may not be large enough to provide a sufficient incentive.

The structure that is most likely to produce the best performance across a range of outpatient providers is a fixed bonus pool that is sufficient to produce a high level of provider motivation and be economically feasible over both the short and longer terms. Separate pools could be established for the adult and child systems. A provider's potential share of bonus payments could be based on their historical billing volume and their performance on the metrics finalized from the options laid out above. Payment could be structured for each measure or set of measures, and with multiple tiers to avoid all-or-nothing scenarios and allow for partial payment of bonuses (shown to be more motivating). Four Tiers or quartiles may be the best structure where the top tier would earn 100% of the available bonus. The second tier would earn 50% of the available bonus. The third tier would earn no bonus. The bottom tier would face a penalty during the second year of implementation and each subsequent year of operation. Alternatively, if the stakeholders prefer upside risk only, the tiers could be structured as 100%, 75%, 50%, 0%. Tiers initially would be established based on the relative performance of the entire network, but would be shifted to fixed benchmarks, once the program was operational for several years. Multiple stakeholders would be engaged throughout the process of review, evaluation, and selection of the practice improvement, performance metrics, and payment structure. The entire process would likely take 5 years to complete. An example of a possible implementation schedule is laid out in the table on the following page for illustrative purposes. A budget for implementation supports for practice improvements would also be required but initial funding could be sought from federal

grants. Ongoing funding would need to come from state funds or cost savings (once established). Social Impact Bonds might be another alternative payment structure.

The table on the following page outlines a 5-year hypothetical implementation plan for clinical practice improvements (MBC & CETA), quality measures, and payment reforms based on the best practice review conducted in this study. Decisions regarding other practice improvements, MBC or CETA implementation, quality measures, and particulars of the bonus payment structures will require stakeholder input.

Year	Primary Activity	Clinical Practice Improvement Activity	Measure Development/Utilization	Payment Method
1	Planning	<ul style="list-style-type: none"> Planning Workgroup(s) Established Review/Evaluation/Selection of MBC System Begin Organizational Readiness Assessment for MBC 	<ul style="list-style-type: none"> Review/Evaluate/Select – Measure Set for MBC Develop agreement for measure development or contracting with MBC vendor Review/Evaluate/Select the IT solution including, software, data storage, etc. 	<ul style="list-style-type: none"> Establish funding parameters Review/Evaluate/Select parameters of P4P program including incentives, thresholds, amounts, frequency, etc. for MBC measures Begin seeking regulatory approval, if necessary
If a Custom MBC program is selected for implementation, an additional year of measure development and software build would be required. The first two years would be needed for this development, and early implementation/training would begin in year 3.				
2	Training/Early Implementation	<ul style="list-style-type: none"> Learning Collaborative on MBC Provided Planning Begins for Phase 2 – CETA Enhancement 	<ul style="list-style-type: none"> Infrastructure for MBC measure collection and reporting established Review/Evaluate/Select measure set for CETA Identify CETA disseminator 	<ul style="list-style-type: none"> Finalization and testing of selected payment parameters for MBC Review/Evaluate/Select parameters of P4P program including incentives, thresholds, amounts, frequency, etc. for CETA measures
3	Full Implementation of MBC	<ul style="list-style-type: none"> Continued MBC Learning Collaboratives MBC fully implemented across all clinics seeking PFP incentives Begin Organizational Readiness Assessment for CETA 	<ul style="list-style-type: none"> 1st year of MBC Measure Collection Outcomes tracking using MBC measures begins Infrastructure for CETA measure collection & reporting established 	<ul style="list-style-type: none"> 1st Payments Made for Successful MBC Implementation Finalization and testing of selected payment parameter for CETA Evaluation of overall program performance
4	Addition of Common Elements	<ul style="list-style-type: none"> Learning Collaborative on CETA provided and Combined with MBC 	<ul style="list-style-type: none"> 2nd year of MBC Measure Collection Outcomes tracking/reporting re: use of MBC Measures continues 	<ul style="list-style-type: none"> Financial Penalties for sub-threshold performance on MBC are implemented 2nd year of MBC Payments Made Evaluation of overall program performance
5	Implementation with Evaluation & Adjustment as Necessary	<ul style="list-style-type: none"> 2nd Combined MBC and CETA Learning Collaborative Provided Full Implementation of CETA 	<ul style="list-style-type: none"> 1st year of CETA measurement collection Outcomes tracking/reporting re: use of MBC Measures continues 	<ul style="list-style-type: none"> 3rd year of MBC Payment Made 1st Payments Made for Successful CETA Implementation

VIII. RECOMMENDED BEST PRACTICE

The foregoing research and analysis have informed the best practice recommendations presented below. These recommendations address the State's desire to maximize the impact of its healthcare dollars by implementing value-based purchasing for mental health outpatient services. The goal is to produce better outcomes for Medicaid members and impact the overall growth of mental health service system expenses.

Savings in outpatient expenditures are not expected. A major issue is that too many individuals fail to obtain treatment and, of those that do, too many drop out early. Successfully addressing this issue likely will result in higher overall utilization at this level of care, but reduced utilization at higher levels of care, such as emergency department and hospital inpatient. These recommendations were developed to promote practice improvement through a new payment structure for outpatient services that will provide improved care for Medicaid members, increase accountability in the delivery of Medicaid-funded services, and provide incentives for providers to meet access, quality and outcome standards.

Successful pursuit of these goals will likely require the following:

- A commitment by state leaders at the highest levels to pursuing meaningful improvements in the delivery of outpatient mental health services;
- A collaborative process to engage outpatient providers, consumers, state agencies, advocates, and other stakeholders in designing and implementing effective, meaningful and accurate performance measures and standards;

- A collaborative process to engage outpatient providers and other stakeholders in developing a fair and consistent methodology for calculating supplemental bonus payment amounts;
- Ability of the State to seek/secure funding for the practice improvement and implementation supports necessary for the program to be successful;
- Ability of the State to seek supplemental payments that are sufficient to create an incentive for providers to transform their practices; and,
- An effort by the State to minimize for providers the burden of implementing practice improvement by reducing, where possible, other data and performance burdens currently in the system.

Other specific best practice recommendations are organized according to the following headings:

- Registration/Authorization for Outpatient Services
- Other Supplemental Payment
- Grant Funded Services
- Clinical Practice Improvements
- Quality Measures
- Payment Structure
- Overall Project Considerations

It is anticipated that the recommendations, if adopted, would be implemented over a 3-6 year period.

Registration/Authorization for Outpatient Services

1. Consider minimizing or eliminating the requirement for outpatient authorization in lieu of accountability to recommended practice improvements.
2. Consider efforts to reduce the amount of information collected at registration to “make room” for continuous reporting of MBC or other practice improvement measures.
3. Consider increasing the amount of care-management units available at initial registration for children and introducing the availability of care-management units for adults
4. Consider tying re-authorization to required practice improvements

Other Supplemental Payments

5. Consider a withhold that providers can earn back by meeting performance standards, if there are limited funds for bonus payments. (See Oregon’s program.)

Grant-Funded Services

6. As Medicaid assumes a greater proportion of clinic funding, consider aligning the scope of grant funded contracts with the planned improvements to outpatient clinics
7. Consider building similar performance and accountability standards, as finalized following stakeholder participation, into the scope of service contracts for grant funded clinics.

Clinical Practice Improvements

8. Consider utilizing a MBC System in outpatient clinics.

9. Consider developing separate MBC systems, one for the child and youth clinics and one for adult clinics
10. Consider one system for both SA and MH, with some system specific measures for each.
11. Consider developing a custom MBC system for Connecticut rather than utilizing one of the 4 models available on the market. Such a custom system may better meet local needs, reduce costs of implementation, reduce data burden, and reduce redundancy with current electronic systems.
12. Consider the advantages of building in both global (e.g. general well-being) and specific (e.g. level of depression, rating of primary problem) measures into any MBC system.
13. Consider including client self-report, clinician ratings, and, at least with children and families, family reports as sources of measurement.
14. Seek brevity and low cost in measures.
15. Consider eliminating other measures currently collected but not used, in order to reduce provider and administrative burden.
16. Consider using the principles of implementation science to insure that practices are adopted and sustained.
17. Consider the need to continue implementation supports for as long as desired practice change is to be continued.
18. Consider providing some degree of clinical judgment regarding the appropriateness of measures, but also track and reward measure use.

19. Consider the need to accommodate application in a group setting for MBC use, particularly for adult SA systems.
20. Consider the need for a data management and feedback system that can provide timely feedback in a usable format.
21. Consider implementing a CETA as a follow-up or alternative to MBC.

Quality Measures

22. Consider beginning with a focus on process measures of MBC/CETA implementation.
23. Consider tracking outcomes on these measures throughout the program, but phase-in their inclusion as pay-for-performance measures over time.
24. Consider using reliable change (e.g. change greater than the standard error) as an initial benchmark.
25. Consider establishing initial relative benchmarks based on the performance of the network, but working toward fixed benchmarks over time.
26. Consider building in case-mix adjustment for some or all outcome measures incorporated in the performance system.
27. Consider Incorporating the principles and standards of measurement best practice listed on pages 60 & 61.
28. Consider the inclusion of existing measures within DDAP, PSDCRS and/or the VO Connect System to reduce redundancy in measures.

Payment Reform

29. Consider development of a tiered pay-for-performance payment system on top of existing fee-for-service funding.
30. Consider outpatient case rates or global payments as a subsequent step in payment reforms implemented system wide.
31. Consider incorporating/modifying selected ECC measures but expand with indicators of practice improvement (e.g. MBC and CETA implementation) and additional outcome measures.
32. Consider incorporating principles of Behavioral Economics into payment systems to maximize impact.
33. Consider making payments annually, but provide interim “symbolic” rewards to boost motivation.
34. Consider allowing for multiple thresholds to earn bonuses, rather than an all-or-nothing, single threshold.
35. Consider the pros/cons of a payment methodology that includes a “withhold”
36. Consider the importance of keeping the entire practice change, quality measure, and payment reform system relatively simple.
37. Consider structuring the program to maximize competence feedback vs. control by reward.
38. Consider the importance of providing incentives that are large enough to produce motivation for change.
39. Consider the importance of simplicity and transparency in designing a payment system.

- 40. Consider publishing provider results to promote provider comparisons.
- 41. Consider reviewing/reconsidering the ECC Initiative in relation to newly established payment reforms.
- 42. Consider expanding the eligibility for participation and maximizing involvement of as many clinics as possible in any new payment system or quality initiative. Consider inclusion of all clinics in good standing that have a sufficient volume of service and/or meet other participation requirements.

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Weisz, John R., et al. "Testing standard and modular designs for psychotherapy treating depression, anxiety, and conduct problems in youth: A randomized effectiveness trial." *Archives of General Psychiatry* 69.3 (2012): 274-282.

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X. **APPENDIX 1 – OQ ANALYST NREPP SUMMARY**

OQ-Analyst

The OQ-Analyst (OQ-A) is a computer-based feedback and progress tracking system designed to help increase psychotherapy treatment effectiveness. OQ-A assesses the attainment of expected progress during therapy and provides feedback to therapists on whether patients are staying on track toward positive treatment outcomes. This information may be shared with the patient at the therapist's discretion, either verbally or using a computer-generated patient report. The OQ-A system also supports clinical decisionmaking via the included clinical support tool (CST). The CST provides information on the quality of the therapeutic alliance, the patient's motivation, social supports, and negative life events, and the possible need for medication referral.

Data for the OQ-A are collected from the patient immediately before each treatment session using the Outcome Questionnaire 45 (OQ-45), a self-report instrument that takes about 5-7 minutes to complete. The OQ-45 can be administered on paper or electronically using a computer terminal or handheld PDA (personal digital assistant). The OQ-A software automatically scores the responses and generates a report for use by the therapist before or during the session. The report tells the therapist whether the patient is improving, worsening, or showing no change and recommends general next steps such as continuing the current treatment course, considering discharge, reviewing the treatment plan, or providing intensive and immediate intervention.

The OQ-A is designed to detect treatment effectiveness regardless of treatment modality, diagnosis, or discipline of the treating professional. It is suitable for use in inpatient and outpatient settings.

Descriptive Information

Areas of Interest	Mental health treatment Substance abuse treatment
Outcomes	Review Date: January 2014 1: Psychosocial dysfunction 2: Substance use Review Date: August 2008 1: Psychological dysfunction
Outcome Categories	Alcohol Drugs Mental health Social functioning
Ages	18-25 (Young adult) 26-55 (Adult) 55+ (Older adult)
Genders	Male Female
Races/Ethnicities	American Indian or Alaska Native Asian Black or African American Hispanic or Latino Native Hawaiian or other Pacific Islander White Race/ethnicity unspecified
Settings	Outpatient
Geographic	Urban

Locations	Suburban
Implementation History	The OQ-A was first used in 2001 by a managed behavioral health care company. Hundreds of sites have used the OQ-A system with more than 300,000 clients. Outside the United States, it has been used in Australia, Canada, England, Germany, the Netherlands, Norway, the Republic of Singapore, Scotland, Sweden, and Switzerland.
NIH Funding/CER Studies	Partially/fully funded by National Institutes of Health: No Evaluated in comparative effectiveness research studies: Yes
Adaptations	The OQ-A system has been translated into Arabic, Chinese, Dutch, French, German, Hebrew, Norwegian, and Spanish.
Adverse Effects	No adverse effects, concerns, or unintended consequences were identified by the developer.
IOM Prevention Categories	IOM prevention categories are not applicable.

Quality of Research

Review Date: January 2014

Documents Reviewed

The documents below were reviewed for Quality of Research. The research point of contact can provide information regarding the studies reviewed and the availability of additional materials, including those from more recent studies that may have been conducted.

Study 1

[Slade, K., Lambert, M. J., Harmon, S. C., Smart, D. W., & Bailey, R. \(2008\). Improving psychotherapy outcome: The use of immediate electronic feedback and revised clinical support tools. *Clinical Psychology and Psychotherapy*, 15\(5\), 287-303. !\[\]\(c694a3ff3b077d76910920a6a1593ab4_img.jpg\)](#)

Study 2

[Crits-Christoph, P., Ring-Kurtz, S., Hamilton, J., Lambert, M. J., Gallop, R., McClure, B., et al. \(2012\). Preliminary study of the effects of individual patient-level feedback in outpatient substance abuse treatment programs. *Journal of Substance Abuse Treatment*, 42\(3\), 301-309. !\[\]\(05be7c7a8995decd503647c99211f7c2_img.jpg\)](#)

Study 3

[Simon, W., Lambert, M. J., Busath, G., Vazquez, A., Berkeljon, A., Hyer, K., et al. \(2013\). Effects of providing patient progress feedback and clinical support tools to psychotherapists in an inpatient eating disorders treatment program: A randomized controlled study. *Psychotherapy Research*, 23\(3\), 287-300. !\[\]\(dd161862f9164df98f62b726e9846241_img.jpg\)](#)

Supplementary Materials

Lambert, M. J. (2012). Outcome Questionnaire: Annotated references.

[Shimokawa, K., Lambert, M. J., & Smart, D. W. \(2010\). Enhancing treatment outcome of patients at risk of treatment failure: Meta-analytic and mega-analytic review of a psychotherapy quality assurance system. *Journal of Consulting and Clinical Psychology*, 78\(3\), 298-311. !\[\]\(626ce8ac21792b9405bfddfea8e0c96a_img.jpg\)](#)

Spielmans, G. I., Masters, K. S., & Lambert, M. J. (2006). A comparison of rational versus empirical methods in the prediction of psychotherapy outcome. *Clinical Psychology and Psychotherapy*, 13, 202-214.

Outcomes

Outcome 1: Psychosocial dysfunction

Description of Measures

Psychological dysfunction was assessed using the OQ-45, a 45-item self-report instrument. The OQ-45 is administered immediately before each treatment session for up to 12 sessions or 6 months. The instrument monitors client progress in three dimensions: (a) subjective discomfort (e.g., anxiety and depression: "I feel blue"), (b) interpersonal relationships (e.g., "I feel lonely"), and (c) social role performance (e.g., "I have too many disagreements at work/school"). The OQ-45 is scored using a 5-point scale (0 = never, 1 = rarely, 2 = sometimes, 3 = frequently, 4 = almost always), yielding a total score between 0 and 180. The total score serves as a global assessment of client psychosocial functioning, with higher scores reflecting more severe distress.

Key Findings	<p>In one study, patients with mental health disorders seeking treatment at a large university counseling center were randomly assigned to one of two intervention groups. For one intervention group, feedback reports were provided to both the therapist and the patient; for the other group, feedback reports were provided to the therapist only. For a control condition, the study used an archival sample of patients who had completed OQ-45 assessments at each session without feedback being provided to either the patient or therapist. At each session, mathematical modeling of OQ-45 results was used to determine if the patient's progress in therapy was on track or off track. Off-track patients were subsequently randomly assigned to two conditions, one in which the therapist had access to OQ-45 decision support tools (CST), and one in which the therapist did not have access to CST. Before treatment, there were no statistically significant differences between the three study groups in OQ-45 scores. OQ-45 scores decreased (showing improvement in symptoms) for all groups from pretreatment to posttreatment, but the decrease was significantly greater among the treatment groups than among the no-feedback control group ($p < .001$). Because the therapist-only and patient-therapist feedback groups did not differ significantly in the change in OQ-45 scores, further analyses were conducted to compare a combined feedback group (therapist-only and patient-therapist) with the no-feedback archival sample and the feedback plus CST group. These analyses showed significant group differences in OQ-45 scores at posttreatment ($p < .001$). Specifically, the feedback plus CST group had fewer patients with deterioration in psychosocial dysfunction (4.8%) compared with the feedback group (9.5%) and no-feedback archival group (21.3%). In addition, 63.9% of patients in the feedback plus CST group had reliable clinical improvement or recovery from their psychosocial dysfunction, compared with 37.3% of patients in the feedback group and 21% of patients in the no-feedback archival group.</p> <p>In a second study, patients seeking treatment for alcohol or drug use problems in outpatient substance abuse clinics were randomly assigned to an intervention or control group. All participants were administered the OQ-45 before each treatment session for up to 12 sessions. Counselors for intervention group patients received OQ-45 feedback reports, while counselors for control group patients received no feedback. At each session, mathematical modeling of OQ-45 results was used to determine if the patient's progress in therapy was on track or off track. Patients who were off-track were administered a questionnaire that was used as a second feedback report for counselors. Among off-track patients, from the off-track point to session 12, those in the intervention group showed significant improvement in symptoms of psychosocial dysfunction compared with those in the control group ($p = .013$).</p> <p>In a third study, patients seeking outpatient psychotherapy services at a hospital-based outpatient clinic were randomly assigned to an intervention or treatment-as-usual control group. OQ-45 feedback reports were provided to intervention group patients and their therapists; therapists of patients in the intervention group also had access to OQ-45 clinical decision support tools (CST). In this study, intervention group patients had two times the improvement in symptoms of psychosocial dysfunction compared with patients who received treatment as usual ($p = .04$). This finding had a very small effect size (Cohen's $d = 0.12$).</p>
Studies Measuring Outcome	Study 1, Study 2, Study 3
Study Designs	Experimental, Quasi-experimental
Quality of Research Rating	3.0 (0.0-4.0 scale)

Outcome 2: Substance use

Description of Measures	<p>Substance use was assessed using a modified version of the OQ-45, a 45-item self-report instrument. The OQ-45 is administered immediately before each treatment session for up to 12 sessions or 6 months. The instrument monitors client progress in three dimensions: (a) subjective discomfort (e.g., anxiety and depression: "I feel blue"), (b) interpersonal relationships (e.g., "I feel lonely"), and (c) social role performance (e.g., "I have too many disagreements at work/school"). The primary modification made to the OQ-45 was to add two items measuring the number of days in the past week that the patients used (a) alcohol and (b) drugs. The scores on the individual alcohol and drug use items were used for this outcome.</p>
Key Findings	<p>Patients seeking treatment for alcohol or drug use problems in outpatient substance abuse clinics were randomly assigned to an intervention or control group. All participants were administered the OQ-45 before each treatment session. Counselors for intervention group patients received OQ-45 feedback reports, while counselors for control group patients received no feedback. At each session, mathematical modeling of OQ-45 results was used to determine if the patient's progress in therapy was on track or off track. Patients who were off-track were administered a questionnaire</p>

	that was used as a second feedback report for counselors. Over 12 sessions, off-track patients in the intervention group had significantly greater reductions in alcohol use compared with off-track patients in the control group ($p = .023$); no significant difference was found for drug use. However, analyses looking only at the time period from the off-track point to session 12 found that intervention group patients had a significantly greater reduction in drug use compared with the control group ($p = .04$) but not for alcohol use.
Studies Measuring Outcome	Study 2
Study Designs	Quasi-experimental
Quality of Research Rating	2.4 (0.0-4.0 scale)

Study Populations

The following populations were identified in the studies reviewed for Quality of Research.

Study	Age	Gender	Race/Ethnicity
Study 1	26-55 (Adult)	61% Female 39% Male	86% White 6% Hispanic or Latino 2.5% Race/ethnicity unspecified 2% Asian 1.5% Native Hawaiian or other Pacific Islander 1% American Indian or Alaska Native 1% Black or African American
Study 2	26-55 (Adult)	60% Male 40% Female	44% Black or African American 36% White 13% Hispanic or Latino 7% Race/ethnicity unspecified
Study 3	26-55 (Adult)	65% Female 35% Male	92.7% White 2.4% Hispanic or Latino 1.9% Asian 1.9% Black or African American 1.6% Native Hawaiian or other Pacific Islander

Quality of Research Ratings by Criteria (0.0-4.0 scale)

External reviewers independently evaluate the Quality of Research for an intervention's reported results using six criteria:

1. Reliability of measures
2. Validity of measures
3. Intervention fidelity
4. Missing data and attrition
5. Potential confounding variables
6. Appropriateness of analysis

For more information about these criteria and the meaning of the ratings, see [Quality of Research](#).

Outcome	Reliability of Measures	Validity of Measures	Fidelity	Missing Data/Attrition	Confounding Variables	Data Analysis	Overall Rating
1: Psychosocial dysfunction	3.4	3.4	2.8	2.4	2.4	3.4	3.0
2: Substance use	2.3	2.3	2.9	2.3	1.9	3.1	2.4

Study Strengths

The version of the OQ-45 instrument that was used to assess psychosocial dysfunction has well-researched and well-documented reliability and validity. Therapists received an orientation and training on the use of the OQ-45 feedback. The first study used the "last observation carried forward" approach for missing data. All three studies used appropriate analyses.

Study Weaknesses

No psychometric information was presented for the items added to the OQ-45 to measure substance use, although the items appear to have face and content validity. No quantitative data were reported on the results of fidelity monitoring. Two of the three studies reviewed did not discuss the impact of attrition and how missing data were addressed in the analyses. All three studies may have been considerably impacted by confounding variables such as therapist use of feedback and the number and spacing of therapy sessions. None of the studies monitored whether therapists used the feedback data from the OQ-45 to alter their treatment approach or to increase the number of sessions they conducted.

Review Date: August 2008

Documents Reviewed

The documents below were reviewed for Quality of Research. The research point of contact can provide information regarding the studies reviewed and the availability of additional materials, including those from more recent studies that may have been conducted.

Study 1

Hawkins, E. J., Lambert, M. J., Vermeersch, D. A., Slade, K. L., & Tuttle, K. C. (2004). The therapeutic effects of providing patient progress information to therapists and patients. *Psychotherapy Research*, 14(3), 308-327.

Study 2

Harmon, S. C., Lambert, M. J., Smart, D. W., Hawkins, E. J., Nielsen, S. L., Slade, K., & Lutz, W. (2007). Enhancing outcome for potential treatment failures: Therapist-client feedback and clinical support tools. *Psychotherapy Research*, 17(4), 379-392.

Supplementary Materials

Lambert, M. J., Whipple, J. L., Bishop, M. J., Vermeersch, D. A., Gray, G. V., & Finch, A. E. (2002). Comparison of empirically-derived and rationally-derived methods for identifying patients at risk for treatment failure. *Clinical Psychology and Psychotherapy*, 9, 149-164.

Vermeersch, D. A., Whipple, J. L., Lambert, M. J., Hawkins, E. J., Burchfield, C. M., & Okiishi, J. C. (2004). Outcome questionnaire: Is it sensitive to changes in counseling center clients? *Journal of Counseling Psychology*, 51, 38-49.

Outcomes

Outcome 1: Psychological dysfunction

Description of Measures

Psychological dysfunction was assessed using the OQ-45, a 45-item self-report instrument designed to measure client progress repeatedly throughout the course of therapy. Client progress is monitored along three dimensions: subjective discomfort, interpersonal relationships, and social role performance. Possible scores range from 0 to 180; higher scores reflect more severe distress. The OQ-45 total score, a global assessment of client functioning, was used in the reviewed studies.

Key Findings

In one study, participants were randomly assigned to one of three groups: feedback provided to patients and therapists, feedback provided to therapists only, or no feedback/usual care. Patients' progress in therapy was categorized as on track or not on track based on OQ-A assessments of the trajectory of recovery. This study found that:

- The patient/therapist feedback group showed the most improvements, while the usual care group showed the least improvements.
- The difference between the patient/therapist feedback group and the usual care group was significant ($p < .05$) with a small effect size (eta-squared = 0.04).
- The difference between the feedback groups (both patient/therapist and therapist-only) and the usual care group was significant ($p < .05$) with a small effect size (eta-squared = 0.02).
- The difference between the patient/therapist and therapist-only feedback groups was significant ($p < .05$) with a small effect size (eta-squared = 0.02).
- Among not-on-track clients, there were no significant differences between the feedback groups and the usual care group, nor between the two feedback groups.

In another study, participants were randomly assigned to one of two groups: feedback provided to therapists and patients, or feedback provided to therapists only. For a comparison condition, the study used an archival group that received no feedback. Patients' progress in therapy was categorized as on track or not on track based on OQ-A assessments of the trajectory of recovery. This study found that:

- The feedback groups showed greater improvements than the archival comparison group ($p < .001$). There were no significant differences between the two feedback groups.
- Among on-track patients, both feedback groups showed greater improvements than the archival comparison group ($p < .001$). Similarly, among not-on-track patients, both feedback groups showed greater improvements than the archival comparison group ($p < .001$).

Studies Measuring Outcome	Study 1, Study 2
Study Designs	Experimental, Quasi-experimental
Quality of Research Rating	3.3 (0.0-4.0 scale)

Study Populations

The following populations were identified in the studies reviewed for Quality of Research.

Study	Age	Gender	Race/Ethnicity
Study 1	18-25 (Young adult) 26-55 (Adult)	68.2% Female 31.8% Male	94.5% White 1.5% Black or African American 1.5% Hispanic or Latino 1.5% Native Hawaiian or other Pacific Islander 1% Asian
Study 2	18-25 (Young adult) 26-55 (Adult) 55+ (Older adult)	64% Female 36% Male	88% White 5% Hispanic or Latino 2% Native Hawaiian or other Pacific Islander 2% Race/ethnicity unspecified 1% American Indian or Alaska Native 1% Asian 1% Black or African American

Quality of Research Ratings by Criteria (0.0-4.0 scale)

External reviewers independently evaluate the Quality of Research for an intervention's reported results using six criteria:

1. Reliability of measures
2. Validity of measures
3. Intervention fidelity
4. Missing data and attrition
5. Potential confounding variables
6. Appropriateness of analysis

For more information about these criteria and the meaning of the ratings, see [Quality of Research](#).

Outcome	Reliability of Measures	Validity of Measures	Fidelity	Missing Data/Attrition	Confounding Variables	Data Analysis	Overall Rating
1: Psychological dysfunction	3.5	3.5	3.0	3.1	3.0	3.4	3.3

Study Strengths

The OQ-45 is a reliable and valid measure. Both studies were well controlled and randomized. The sample sizes were sufficient. The analyses were appropriate for the data and questions posed.

Study Weaknesses

Although the investigators had control over the presentation of the feedback therapists gave to the clients, there were no measures described that specifically examined the fidelity of the intervention.

Readiness for Dissemination

Review Date: August 2008

Materials Reviewed

The materials below were reviewed for Readiness for Dissemination. The implementation point of contact can provide information regarding implementation of the intervention and the availability of additional, updated, or new materials.

Burlingame, G. M., Wells, M. G., Cox, J. C., Lambert, M. J., & Latkowski, M. (2005). Administration and scoring manual for the Y-OQ

(youth outcome questionnaire). Salt Lake City, UT: OQ Measures.

Lambert, M. J., Morton, J. J., Hatfield, D., Harmon, C., Hamilton, S., Reid, R. C., et al. (2004). Administration and scoring manual for the OQ-45.2 (outcome questionnaire). Salt Lake City, UT: OQ Measures.

OQ-Analyst Demo Web site, <https://demo.oqanalyst.com>

OQ Measures. (2005). OQ-Analyst user's guide v 3.05.01. Salt Lake City, UT: Author.

OQ Measures. (2005). Orientation and training [DVD]. Salt Lake City, UT: Author.

OQ Measures. (2006). OQ Analyst Web demonstration instructions. Salt Lake City, UT: Author.

OQ Measures. (n.d.). Implementation guidelines for the OQ-Analyst (OQ-A). Salt Lake City, UT: Author.

OQ Measures. (n.d.). OQ Analyst system overview. Salt Lake City, UT: Author.

OQ Measures. (n.d.). Step x step training on OQ-A for clinical staff [PowerPoint slides]. Salt Lake City, UT: Author.

OQ Measures. (n.d.). Step x step training on OQ-A for support staff [PowerPoint slides]. Salt Lake City, UT: Author.

Readiness for Dissemination Ratings by Criteria (0.0-4.0 scale)

External reviewers independently evaluate the intervention's Readiness for Dissemination using three criteria:

1. Availability of implementation materials
2. Availability of training and support resources
3. Availability of quality assurance procedures

For more information about these criteria and the meaning of the ratings, see [Readiness for Dissemination](#).

Implementation Materials	Training and Support Resources	Quality Assurance Procedures	Overall Rating
4.0	3.8	4.0	3.9

Dissemination Strengths

Implementation and user guides are detailed and logically organized. Clear, step-by-step instructions are provided for installing software, administering the questionnaire, and interpreting reports. Specialized on-site or teleconferenced training is available for multiple staff roles. The questionnaire itself serves as a quality assurance instrument to track client progress and assess clinician skills.

Dissemination Weaknesses

The mix of extensive research data with implementer information in some materials can be difficult to follow. No standardized training curriculum is provided to trainees to supplement the implementation materials.

Costs

The cost information below was provided by the developer. Although this cost information may have been updated by the developer since the time of review, it may not reflect the current costs or availability of items (including newly developed or discontinued items). The implementation point of contact can provide current information and discuss implementation requirements.

Item Description	Cost	Required by Developer
OQ-A software system, user manuals, and documentation	\$250 per clinician (full-time equivalent) per year for three measures	Yes
Additional measures	\$40 per clinician (full-time equivalent) per year for additional measures	No
Technical manuals for additional measures	\$25 each	No
Training and orientation video	Free	No
Webinars and other training videos	Varies depending on site needs	No

Half-day to 1-day, on-site initial and follow-up trainings	Varies depending on site needs	No
Technical assistance and installation support	\$150 per site	Yes

Additional Information

Replications

Selected citations are presented below. An asterisk indicates that the document was reviewed for Quality of Research.

[de Jong, K., van Sluis, P., Nugter, A., Heiser, W. J., & Spinhoven, P. \(2012\). Understanding the differential impact of outcome monitoring: Therapist variables that moderate feedback effects in a randomized clinical trial. *Psychotherapy Research*, 22\(4\), 464-474. !\[\]\(0f848bbd71cef6b345273b16f905912a_img.jpg\)](#)

Lambert, M. J., Whipple, J. L., Vermeersch, D. A., Smart, D. W., Hawkins, E. J., Nielsen, S. L., et al. (2002). Enhancing psychotherapy outcomes via providing feedback on client progress: A replication. *Clinical Psychology and Psychotherapy*, 9, 91-103.

[Shimokawa, K., Lambert, M. J., & Smart, D. W. \(2010\). Enhancing treatment outcome of patients at risk of treatment failure: Meta-analytic and mega-analytic review of a psychotherapy quality assurance system. *Journal of Consulting & Clinical Psychology*, 78\(3\), 298-311. !\[\]\(a870788d6ed9b8fd294b7654a8c8526b_img.jpg\)](#)

[Simon, W., Lambert, M. J., Harris, M. W., Busath, G., & Vazquez, A. \(2012\). Providing patient progress information and clinical support tools to therapists: Effects on patients at risk for treatment failure. *Psychotherapy Research*, 22\(6\), 638-647. !\[\]\(de95854c7ee024cfadc48187bbb781b2_img.jpg\)](#)

* [Slade, K., Lambert, M. J., Harmon, S. C., Smart, D. W., & Bailey, R. \(2008\). Improving psychotherapy outcome: The use of immediate electronic feedback and revised clinical support tools. *Clinical Psychology & Psychotherapy*, 15\(5\), 287-303. !\[\]\(3211b5d1d968fc1665909b34f9f16010_img.jpg\)](#)

Contact Information

To learn more about implementation, contact:

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To learn more about research, contact:

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Consider these [Questions to Ask](#) (PDF, 54KB) as you explore the possible use of this intervention.

Web Site(s):

- <http://www.oqmeasures.com>

This PDF was generated from <http://nrepp.samhsa.gov/ViewIntervention.aspx?id=370> on 1/20/2015

XI. APPENDIX 2 – PCOMS NREPP SUMMARY

Partners for Change Outcome Management System (PCOMS): International Center for Clinical Excellence

The Partners for Change Outcome Management System (PCOMS) is a client feedback program for improving the treatment outcomes of adults and children participating in a behavioral health care intervention. PCOMS is designed to improve the retention of participants in treatment and to assist them in reaching reliable and clinically significant change. The program can be implemented by behavioral health care therapists as part of any behavioral health care intervention.

PCOMS, which is integrated into each treatment session, consists of two brief scales that measure robust predictors of therapeutic success:

- The Outcome Rating Scale (ORS), which assesses the client's therapeutic progress (through ratings of psychological functioning and distress) and the client's perceived benefit of treatment
- The Session Rating Scale (SRS), which assesses the client's perception of the client-therapist alliance (i.e., the quality of the relational bond with the therapist and whether the therapist shares his or her therapeutic objective)

The therapist administers the ORS at the beginning of the treatment session, and the SRS is administered toward the end of the session. Client ratings for both measures are discussed on a session-by-session basis to maintain the client's engagement in treatment, optimize the client-therapist alliance, and provide a means for transitioning into the treatment session by focusing on client-identified concerns. If client ratings are very low, the therapist may choose to modify the type and amount of treatment.

PCOMS is disseminated through the International Center for Clinical Excellence (ICCE) and the Heart and Soul of Change Project. (The Readiness for Dissemination of each version was reviewed separately by NREPP.) ICCE integrates PCOMS into clinical practice through feedback-informed treatment (FIT), which involves the routine solicitation of feedback from clients regarding the therapeutic alliance and outcome of care and the use of this feedback by the therapist to inform the delivery of services to the client.

Descriptive Information

Areas of Interest	Mental health treatment
Outcomes	Review Date: January 2012 1: Therapeutic progress 2: Marital status
Outcome Categories	Family/relationships Mental health Treatment/recovery
Ages	18-25 (Young adult) 26-55 (Adult) 55+ (Older adult)
Genders	Male Female
Races/Ethnicities	Asian Black or African American Hispanic or Latino White Race/ethnicity unspecified Non-U.S. population
Settings	Outpatient Workplace

Geographic Locations	Urban Suburban Rural and/or frontier
Implementation History	PCOMS was first implemented in 2000, and in 2011, ICCE was founded to disseminate PCOMS. PCOMS has been used by hundreds of organizations and by thousands of behavioral health care professionals in all 50 States and the District of Columbia and, internationally, in 20 countries on five continents. It is estimated that PCOMS is implemented with approximately 100,000 clients each year.
NIH Funding/CER Studies	Partially/fully funded by National Institutes of Health: No Evaluated in comparative effectiveness research studies: No
Adaptations	The PCOMS scales (ORS and SRS) have been translated into 23 languages: Afrikaans, Bulgarian, Chinese, Croatian, Danish, Dutch, Finnish, French, German, Greek, Hebrew, Italian, Japanese, Maori, Norwegian, Polish, Romanian, Russian, Slovak, Spanish, Swedish, Welsh, and Yiddish.
Adverse Effects	No adverse effects, concerns, or unintended consequences were identified by the developer.
IOM Prevention Categories	IOM prevention categories are not applicable.

Quality of Research

Review Date: January 2012

Documents Reviewed

The documents below were reviewed for Quality of Research. The research point of contact can provide information regarding the studies reviewed and the availability of additional materials, including those from more recent studies that may have been conducted.

Study 1

Anker, M. G., Duncan, B. L., & Sparks, J. A. (2009). Using client feedback to improve couple therapy outcomes: A randomized clinical trial in a naturalistic setting. *Journal of Consulting and Clinical Psychology*, 77(4), 693-704. [PubMed](#)

Study 2

Reese, R. J., Norsworthy, L. A., & Rowlands, S. R. (2009). Does a continuous feedback system improve psychotherapy outcome? *Psychotherapy: Theory, Research, Practice, Training*, 46(4), 418-431. [PubMed](#)

Study 3

Miller, S. D., Duncan, B. L., Brown, J., Sorrell, R., & Chalk, M. B. (2006). Using formal client feedback to improve retention and outcome: Making ongoing, real-time assessment feasible. *Journal of Brief Therapy*, 5(1), 5-22.

Study 4

Reese, R. J., Toland, M. D., Slone, N. C., & Norsworthy, L. A. (2010). Effect of client feedback on couple psychotherapy outcomes. *Psychotherapy: Theory, Research, Practice, Training*, 47(4), 616-630. [PubMed](#)

Supplementary Materials

Campbell, A., & Hemsley, S. (2009). Outcome Rating Scale and Session Rating Scale in psychological practice: Clinical utility of ultra-brief measures. *Clinical Psychologist*, 13(1), 1-9.

Miller, S. D., Duncan, B. L., Brown, J., Sparks, J. A., & Claud, D. A. (2003). The Outcome Rating Scale: A preliminary study of the reliability, validity, and feasibility of a brief visual analog measure. *Journal of Brief Therapy*, 2(2), 91-100.

Outcomes

Outcome 1: Therapeutic progress

Description of Measures

Therapeutic progress was assessed using the Outcome Rating Scale. The ORS is a 4-item self-report scale that measures a participant's psychological functioning and distress by asking how the participant is doing individually (personal well-being), interpersonally (family, close relationships), socially (work, school, friendships), and overall (general sense of well-being). Depending on the method of ORS administration, participants rate each item either by marking a line to reflect the strength of their opinions or by stating the appropriate ratings. Scores for each item range from 1 to 10, with a total score ranging from 0 to 40. Lower scores indicate more severe distress, and a

Key Findings	<p>comparison of the change in scores over time indicates the trajectory of therapeutic progress.</p> <p>In one study, participating couples were randomly assigned to the intervention group, which received couple therapy with PCOMS, or the comparison group, which received couple therapy only. Couples in the intervention group had higher ORS scores than those in the comparison group at posttreatment ($p < .001$) and 6-month follow-up ($p < .01$), even after adjusting for pretreatment ORS score and therapist.</p> <p>In another study, participants were randomly assigned to the intervention group, which received individual therapy with PCOMS, or the comparison group, which received individual therapy only. Half of the participants received services from faculty members or practicum students at a university counseling center, and half received services from practicum students at a graduate training clinic. Among participants who received services at a university counseling center, from pre- to posttest, those in the intervention group had a greater increase in ORS scores than those in the comparison group ($p < .05$). Among participants who received services at a graduate training clinic, from pre- to posttest, those in the intervention group had a greater increase in ORS scores than those in the comparison group ($p < .01$), even after adjusting for pretest ORS scores.</p> <p>In a third study, participants in an employee assistance program received at least two phone-based counseling sessions that included PCOMS. The study had multiple phases, including a 6-month baseline period, when PCOMS was administered during the counseling sessions; a subsequent 6-month period, when a computer program was introduced to aid therapists in administering PCOMS and interpreting a participant's ORS and SRS scores during counseling sessions; and a 12-month period, after use of the computer program had been fully integrated into the counseling sessions. The average change in participants' ORS scores between counseling sessions was compared over these three phases. The mean increase in participants' ORS scores was larger for the subsequent 6-month period ($p < .001$) and 12-month period ($p < .001$) than it was for the baseline period.</p> <p>In a fourth study, participating couples were randomly assigned to the intervention group, which received couple therapy with PCOMS, or the comparison group, which received couple therapy only. From pre- to posttest, couples in the intervention group had a greater increase in ORS scores than those in the comparison group ($p < .05$).</p>
Studies Measuring Outcome	Study 1, Study 2, Study 3, Study 4
Study Designs	Experimental, Preexperimental
Quality of Research Rating	3.1 (0.0-4.0 scale)

Outcome 2: Marital status	
Description of Measures	Marital status was assessed by client self-report. Couples were categorized as intact (i.e., not divorced or separated) or not intact.
Key Findings	Couples participating in the study were randomly assigned to the intervention group, which received couple therapy with PCOMS, or the comparison group, which received couple therapy only. At the 6-month follow-up, a greater proportion of couples in the intervention group were intact relative to couples in the comparison group ($p = .014$).
Studies Measuring Outcome	Study 1
Study Designs	Experimental
Quality of Research Rating	3.0 (0.0-4.0 scale)

Study Populations

The following populations were identified in the studies reviewed for Quality of Research.

Study	Age	Gender	Race/Ethnicity
Study 1	18-25 (Young adult) 26-55 (Adult) 55+ (Older adult)	50% Female 50% Male	100% Non-U.S. population

Study 2	18-25 (Young adult) 26-55 (Adult) 55+ (Older adult)	70.3% Female 26.4% Male	79.1% White 10.8% Hispanic or Latino 5.4% Race/ethnicity unspecified 3.4% Black or African American 1.4% Asian
Study 3	18-25 (Young adult) 26-55 (Adult)	66.7% Female 33.3% Male	Data not reported/available
Study 4	18-25 (Young adult) 26-55 (Adult) 55+ (Older adult)	50% Female 50% Male	73.9% White 16.3% Hispanic or Latino 5.4% Race/ethnicity unspecified 4.3% Black or African American

Quality of Research Ratings by Criteria (0.0-4.0 scale)

External reviewers independently evaluate the Quality of Research for an intervention's reported results using six criteria:

1. Reliability of measures
2. Validity of measures
3. Intervention fidelity
4. Missing data and attrition
5. Potential confounding variables
6. Appropriateness of analysis

For more information about these criteria and the meaning of the ratings, see [Quality of Research](#).

Outcome	Reliability of Measures	Validity of Measures	Fidelity	Missing Data/Attrition	Confounding Variables	Data Analysis	Overall Rating
1: Therapeutic progress	4.0	3.5	2.5	2.3	3.0	3.3	3.1
2: Marital status	3.5	3.5	2.5	1.5	3.0	4.0	3.0

Study Strengths

The reliability and validity of the ORS are well supported. The studies were undertaken in a variety of real-world settings and included therapists with a variety of professional qualifications. Three of the four studies included random assignment, which helped mitigate the effect of potential confounds. The use of advanced analytical techniques in the same three studies produced strong and dependable findings.

Study Weaknesses

Although all studies appear to have used mechanisms to ensure intervention fidelity, there was no formal assessment of whether or to what extent the intervention was delivered as intended. Attrition was substantial in three of the four studies and difficult to assess in the fourth. Issues arising from the use of the ORS both as part of the intervention and as the outcome measure are not addressed.

Readiness for Dissemination

Review Date: January 2012

Materials Reviewed

The materials below were reviewed for Readiness for Dissemination. The implementation point of contact can provide information regarding implementation of the intervention and the availability of additional, updated, or new materials.

Implementation materials:

- Bargmann, S., & Robinson, B. (2011). International Center for Clinical Excellence manuals on feedback-informed treatment (FIT): Manual 2--Feedback-informed clinical work: The basics. Chicago, IL: International Center for Clinical Excellence.
- Bertolino, B., & Babbins-Wagner, R. (2011). International Center for Clinical Excellence manuals on feedback-informed treatment (FIT): Manual 6--Implementing feedback-informed work in agencies and systems of care. Chicago, IL: International Center for Clinical Excellence.
- Bertolino, B., Bargmann, S., & Miller, S. (2011). International Center for Clinical Excellence manuals on feedback-informed treatment (FIT): Manual 1--What works in therapy: A primer. Chicago, IL: International Center for Clinical Excellence.
- Duncan, B., & Miller, S. (2007). Group Session Rating Scale (GSRS).
- Duncan, B., Miller, S., Huggins, A., & Sparks, J. (2003). Young Child Outcome Rating Scale (YCORS).

- Duncan, B., Miller, S., Huggins, A., & Sparks, J. (2003). Young Child Session Rating Scale (YCSRS).
- Duncan, B., Miller, S., & Sparks, J. (2003). Child Outcome Rating Scale (CORS).
- Duncan, B., Miller, S., & Sparks, J. (2003). Child Session Rating Scale (CSRS).
- Duncan, B., Miller, S., Sparks, J., & Murphy, J. (2011). Child Group Session Rating Scale (CGSRS).
- International Center for Clinical Excellence. (2011). Overview of ICCE training & treatment manuals. Chicago, IL: Author.
- International Center for Clinical Excellence. (2011). The FIT implementation process. Chicago, IL: Author.
- Maeschalck, C., & Babbins-Wagner, R. (2011). International Center for Clinical Excellence manuals on feedback-informed treatment (FIT): Manual 5--Feedback-informed clinical work: Advanced applications. Chicago, IL: International Center for Clinical Excellence.
- Maeschalck, C., & Miller, S. (2011). International Center for Clinical Excellence manuals on feedback-informed treatment (FIT): Manual 3--Feedback-informed supervision. Chicago, IL: International Center for Clinical Excellence.
- Miller, S. (2010). Workshop and consultation packet.
- Miller, S. (2011). Psychometrics of the SRS and ORS: Results from meta-analyses of routine outcome monitoring and feedback: The available evidence [PowerPoint slides].
- Miller, S., & Duncan, B. (2000). Outcome Rating Scale (ORS).
- Miller, S., & Duncan, B. (2004). The Outcome and Session Rating Scales: Administration and scoring manual. Chicago, IL: Institute for the Study of Therapeutic Change.
- Miller, S., Duncan, B., & Johnson, L. (2002). Session Rating Scale (SRS v.3.0).
- Seidel, J., & Miller, S. (2011). International Center for Clinical Excellence manuals on feedback-informed treatment (FIT): Manual 4--Documenting change: A primer on measurement, analysis and reporting. Chicago, IL: International Center for Clinical Excellence.

Training materials:

- Advanced FIT Training materials:
 - Advanced intensive jeopardy game [PowerPoint slides]
 - International Center for Clinical Excellence. (2010). Curriculum for the advanced 4-day in feedback-informed treatment. Chicago, IL: Author.
 - International Center for Clinical Excellence. (2011). ICCE core competency exam: Version A. Chicago, IL: Author.
 - Miller, S. (2011). Transforming behavioral health care: Integrating feedback-informed services into behavioral healthcare [PowerPoint slides].
 - Miller, S., & Bargmann, S. (2011). Advanced intensive: Day 2 [PowerPoint slides and handouts]. Chicago, IL: International Center for Clinical Excellence.
 - Miller, S., & Bargmann, S. (2011). Feedback informed treatment: The advanced intensive [PowerPoint slides and handouts]. Chicago, IL: International Center for Clinical Excellence.
 - Miller, S., & Bargmann, S. (2011). Putting data to work: Applying research concepts to the management of outcome in treatment [PowerPoint slides and handouts]. Chicago, IL: International Center for Clinical Excellence.
 - Miller, S., Maeschalck, C., Axsen, R., & Seidel, J. (2011). Core competencies for the ICCE clinician. Chicago, IL: International Center for Clinical Excellence.
 - Mindset questionnaire
- Basic FIT Training Workshop materials:
 - Axsen, R., & Maeschalck, C. (2011). Feedback informed treatment in practice: A summary. Chicago, IL: International Center for Clinical Excellence.
 - Axsen, R., & Maeschalck, C. (2011). Feedback informed treatment: Reading list. Chicago, IL: International Center for Clinical Excellence.
 - Axsen, R., & Maeschalck, C. (2011). Key research underpinnings for feedback informed work. Chicago, IL: International Center for Clinical Excellence.
 - Axsen, R., & Maeschalck, C. (2011). Training evaluation form. Chicago, IL: International Center for Clinical Excellence.
 - International Center for Clinical Excellence. (n.d.). Feedback-informed treatment (FIT): Improving effectiveness by doing what counts [PowerPoint slides]. Chicago, IL: Author.
 - Maeschalck, C., & Axsen, R. (2011). Feedback-informed treatment (FIT): Curriculum for one day basic training. Chicago, IL: International Center for Clinical Excellence.
 - Miller, S. (n.d.). Feedback-Informed treatment: Making services FIT consumers.
- FIT Supervision Training materials:
 - Axsen, R., & Maeschalck, C. (2011). Key tasks for FIT supervisors: A primer. Chicago, IL: International Center for Clinical Excellence.
 - Axsen, R., & Maeschalck, C. (2011). Practical application of FIT in clinical supervision. Chicago, IL: International Center for Clinical Excellence.
 - Axsen, R., & Maeschalck, C. (2011). Supervision tips for cases of concern. Chicago, IL: International Center for Clinical Excellence.
 - International Center for Clinical Excellence. (n.d.). Feedback informed treatment (FIT): Clinical supervision [PowerPoint presentation]. Chicago, IL: Author.
 - Maeschalck, C., & Axsen, R. (2011). Feedback-informed supervision training curriculum. Chicago, IL: International Center for Clinical Excellence.
 - Maeschalck, C., & Axsen, R. (2011). Foundations and principles of FIT supervision. Chicago, IL: International Center for Clinical Excellence.
 - Maeschalck, C., & Axsen, R. (2011). Targeting cases for supervision. Chicago, IL: International Center for Clinical Excellence.
 - Maeschalck, C., & Axsen, R. (2011). The skills of feedback informed treatment (FIT). Chicago, IL: International Center for Clinical Excellence.
- FIT Training of Trainers Workshop materials:
 - Miller, S., Maeschalck, C., & Axsen, R. (2010). Agency implementation. Chicago, IL: International Center for Clinical Excellence.
 - Miller, S., Maeschalck, C., & Axsen, R. (2010). Assessing agency readiness. Chicago, IL: International Center for Clinical

Excellence.

- Miller, S., Maeschalck, C., & Aksen, R. (2010). FIT training of trainers: Core curriculum. Chicago, IL: International Center for Clinical Excellence.
- Miller, S., Maeschalck, C., & Aksen, R. (2010). Integrating FIT practices into clinical supervision. Chicago, IL: International Center for Clinical Excellence.
- Miller, S., Maeschalck, C., & Aksen, R. (2010). Key content for training supervisors. Chicago, IL: International Center for Clinical Excellence.
- Miller, S., Maeschalck, C., & Aksen, R. (2010). One day FIT training: Sample outline. Chicago, IL: International Center for Clinical Excellence.
- Miller, S., Maeschalck, C., & Aksen, R. (2010). Preparation tips for successful training events. Chicago, IL: International Center for Clinical Excellence.
- Miller, S., Maeschalck, C., & Aksen, R. (2010). Tips for trainers. Chicago, IL: International Center for Clinical Excellence.
- Miller, S., Maeschalck, C., & Aksen, R. (2010). 2010 training of trainers: Official agenda. Chicago, IL: International Center for Clinical Excellence.
- Miller, S., Maeschalck, C., & Aksen, R. (n.d.). Training of trainers [PowerPoint slides]. Chicago, IL: International Center for Clinical Excellence.

• Other training and support materials:

- International Center for Clinical Excellence. (2011). FIT training resources. Chicago, IL: Author.
- International Center for Clinical Excellence. (2011). ICCE support resources. Chicago, IL: Author.
- Miller, S. D. (2005). Client-directed outcome-focused psychotherapy [DVD]. In J. Carlson (Host), Series 1--Systems of psychotherapy. Washington, DC: American Psychological Association.
- Miller, S. (n.d.). Brief therapy inside out: Client-directed interaction: Adjusting the therapy not the person [DVD]. Phoenix, AZ: Zeig, Tucker, & Theisen.
- Miller, S. (n.d.). Outcome informed clinical work [CD-ROM]. Chicago, IL: Institute for the Study of Therapeutic Change.
- Miller, S. (n.d.). Therapeutic alliance: What works in therapy [CD-ROM]. Chicago, IL: Institute for the Study of Therapeutic Change.
- Miller, S., & Tilsen, J. (n.d.). Feedback informed treatment [DVD]. Hanover, MA: Microtraining and Multicultural Development.
- Miller, S., & Wyatt, R. (2009). What works in psychotherapy: Instructor's manual. San Francisco, CA: Psychotherapy.net.
- Miller, S., & Wyatt, R. (n.d.). What works in psychotherapy [Institutional and instructor's version DVD]. San Francisco, CA: Psychotherapy.net.

Quality assurance materials:

- Feedback Readiness Index and Fidelity Measure (FRIFM). (2005).
- International Center for Clinical Excellence. (2011). Feedback-informed concurrent service delivery agreement. Chicago, IL: Author.
- International Center for Clinical Excellence. (2011). Feedback-informed progress note. Chicago, IL: Author.
- International Center for Clinical Excellence. (2011). Feedback Readiness Index and Fidelity Measure instructions. Chicago, IL: Author.
- International Center for Clinical Excellence. (2011). FIT quality assurance procedures. Chicago, IL: Author.
- International Center for Clinical Excellence. (2011). Instructions for using the FIT service delivery plan & progress note. Chicago, IL: Author.
- Maeschalck, C., & Aksen, R. (2011). MyOutcomes data management system: User guide. Chicago, IL: International Center for Clinical Excellence.

Program Web site, <http://www.centerforclinicalexcellence.com>

Readiness for Dissemination Ratings by Criteria (0.0-4.0 scale)

External reviewers independently evaluate the intervention's Readiness for Dissemination using three criteria:

1. Availability of implementation materials
2. Availability of training and support resources
3. Availability of quality assurance procedures

For more information about these criteria and the meaning of the ratings, see [Readiness for Dissemination](#).

Implementation Materials	Training and Support Resources	Quality Assurance Procedures	Overall Rating
4.0	4.0	4.0	4.0

Dissemination Strengths

ICCE, an initiative to integrate PCOMS into clinical practice through FIT, has an array of comprehensive, well-organized, and high-quality materials to support the implementation of PCOMS. The steps for successful implementation are clear and accompanied by tools and guidance to support the entire process, from the determination of organizational readiness through evaluation. Key intervention tools are easily accessible through the program Web site. Training manuals address core clinical competencies and assist clinicians in using the intervention. Many training and consultation opportunities are available to support all stages of the implementation process, and the process for accessing these services is clear. A Web forum provides clinicians with opportunities to share program news and discuss

successes and obstacles. Cost and staff burden are considered to encourage the use of quality assurance materials and procedures. Along with the ORS and SRS for outcome monitoring, client process monitoring tools and fidelity checklists are provided to support quality assurance. Measures are accompanied by clear guidance for administration and use.

Dissemination Weaknesses

No weaknesses were identified by reviewers.

Costs

The cost information below was provided by the developer. Although this cost information may have been updated by the developer since the time of review, it may not reflect the current costs or availability of items (including newly developed or discontinued items). The implementation point of contact can provide current information and discuss implementation requirements.

Item Description	Cost	Required by Developer
License for use of the following scales: <ul style="list-style-type: none"> • Child Group Session Rating Scale • Child Outcome Rating Scale • Child Session Rating Scale • Group Session Rating Scale • Outcome Rating Scale • Session Rating Scale (v.3.0) • Young Child Outcome Rating Scale • Young Child Session Rating Scale 	<ul style="list-style-type: none"> • For individual use: free • For agencies with 2-10 providers: \$99.95 • For agencies with 11-25 providers: \$199.95 • For agencies with 26-50 providers: \$399.95 • For agencies with 51-100 providers: \$995.95 • For agencies with more than 100 providers: contact the developer 	Yes
PCOMS Administration and Scoring Manual	\$39.95 for individual use; \$399.95 for agency use	Yes
International Center for Clinical Excellence Feedback-Informed Treatment manuals (set of 6)	\$119 per set; 50% discount when 10 or more sets are purchased	No
Feedback Informed Treatment (training DVD, with multiuser license)	\$179 each	No
What Works in Psychotherapy (DVD)	\$49.95 for individual use; \$149.95 for agency use	No
Series 1--Systems of Psychotherapy: Client-Directed Outcome-Focused Psychotherapy (DVD)	\$99.95 each; \$69.95 each for members of the American Psychological Association	No
Brief Therapy Inside Out: Client-Directed Interaction: Adjusting the Therapy Not the Person (DVD)	\$74.95 each	No
Outcome Informed Clinical Work (CD-ROM)	\$9.95 each	No
Therapeutic Alliance: What Works in Therapy (CD-ROM)	\$9.95 each	No
1- to 2-day, on-site Basic FIT Training	\$4,000 per day per group (no maximum number of participants), plus travel expenses	No
4-day, off-site Advanced FIT Intensive Training	\$1,100 per person (maximum of 35 participants)	No
4-day, off-site FIT Training of Trainers Workshop	\$1,400 per person (maximum of 35 participants)	No
3-day, off-site FIT Supervision Training	\$895 per person (maximum of 35 participants)	No
WebEx, Skype, or phone consultation	\$350 per hour	No
International Center for Clinical Excellence online support community	Free	No

Quality assurance documents (includes Feedback-Informed Progress Note, Feedback-Informed Concurrent Service Delivery Agreement, and Feedback Readiness Index and Fidelity Measure)	Free	No
1-year subscription to MyOutcomes.com	<ul style="list-style-type: none"> For 1-5 practitioners: \$24.95 per month per practitioner For groups of 5 or more practitioners: visit Web site for cost quote 	No

Additional Information

Not all agencies or systems of care require the same type of training or support when implementing PCOMS. In some instances, downloading the ORS and SRS, scoring and administration manual, and free support materials is sufficient. Depending on their size, most agencies find that basic training with follow-up consultation via WebEx, Skype, or phone is sufficient to begin the implementation process, and many systems of care send participants to advanced training at some later point; however, no training is required for implementation. Electronic licenses and a Web service (MyOutcomes.com) are available for purchase for users who want to integrate the tools with an electronic health record.

Replications

Selected citations are presented below. An asterisk indicates that the document was reviewed for Quality of Research.

Bringhurst, D. L., Watson, C. W., Miller, S. D., & Duncan, B. L. (2006). The reliability and validity of the Outcome Rating Scale: A replication study of a brief clinical measure. *Journal of Brief Therapy*, 5(1), 23-30.

Campbell, A., & Hemsley, S. (2009). Outcome Rating Scale and Session Rating Scale in psychological practice: Clinical utility of ultra-brief measures. *Clinical Psychologist*, 13(1), 1-9.

Contact Information

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Consider these [Questions to Ask](#) (PDF, 54KB) as you explore the possible use of this intervention.

Web Site(s):

- <http://www.centerforclinicalexcellence.com/site.php?page=measures.php>

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