2011 Allegheny County Community Treatment Teams: Fidelity and Outcomes Report

Executive Summary

Community Treatment Teams (CTTs) have been providing Assertive Community Treatment (ACT) services to people with serious mental illness in Allegheny County since 2001. In 2011, nine CTTs served approximately 800 people in the County. As an evidence-based practice, ACT's value is well-established, and monitoring the provision of ACT to assure services follow the evidence-based practice and meet outcome expectations is a critical responsibility for funders.

Key aspects of ACT include:

- ACT services are provided primarily in the community by a team of trans-disciplinary staff, including a team leader, psychiatrist(s), registered nurses, dual diagnosis specialists, vocational specialists, peer specialists, mental health professionals, and other general staff.
- ACT is fully responsible for a variety of services, including case management, psychiatric services, medication management, counseling, housing support, substance abuse treatment, peer support, crisis and diversion services, employment and rehabilitation services, assistance in management of personal finances, and hospital and criminal justice liaison services.
- ACT staff sees people frequently according to both their short and long-term goals and their immediate needs. ACT teams are expected to base services on the belief that people can recover from serious mental illness and substance abuse. Staff works with consumers as partners, and focuses on helping people achieve their life goals.

Based on a 2009 cost and fidelity review in Pennsylvania, Mercer Consulting recommended to the Office of Mental Health and Substance Abuse Services (OMHSAS) that ongoing ACT fidelity review, training, and technical assistance are a worthwhile investment. Since 2001, Allegheny HealthChoices, Inc. (AHCI), the Allegheny County Office of Behavioral Health (OBH), and Community Care Behavioral Health have been leading the way in Pennsylvania, working together in assessing fidelity to the ACT model for Allegheny County CTTs, measuring outcomes, and engaging in training and quality improvement (QI) efforts with the local providers. This report summarizes fidelity assessment results and key team outcomes in 2011, as well as related QI and training initiatives.

The current fidelity assessment for ACT – the Tool for the Measurement of Assertive Community Treatment (TMACT) – assesses fidelity across six subscales and is an expansion of earlier ACT fidelity assessments. For subscales related to the operations, structure, and core practices of ACT – the subscales from the original fidelity assessment – all CTTs demonstrated high fidelity to the ACT model. For subscales related to the implementation of evidence-based approaches to supported employment, integrated dual disorders treatment, rehabilitation and wellness services, and person centered practices within ACT – subscales that are newer to the fidelity process – CTTs varied in their fidelity scores.

Technical assistance during 2011 focused on three fidelity areas needing improvement: person centered treatment planning, integrated dual disorders treatment, and supported employment.

Team outcomes are correlated with fidelity, and as training and technical assistance is implemented, fidelity is expected to increase and ultimately improve team outcomes. This report summarizes five primary outcomes for ACT: psychiatric hospitalizations, incarcerations, substance use, housing, and employment. Key findings include:

- On average, 33% of consumers on each CTT had one or more hospitalizations in 2011; CTTs ranged from a low of 20% to a high of 53% with one or more hospitalizations. Teams averaged 20.3 inpatient days per person on their caseload.
- On average, 12% of consumers on each CTT had one or more incarcerations; CTTs ranged from a low of 6% to a high of 20% of their caseload with one or more incarcerations.
- While the great majority of individuals receiving CTT services were not hospitalized or incarcerated during 2011 and published benchmarks for these two outcomes do not exist, this data and consensus among the funders indicates teams have further opportunity to improve these outcomes.
- On average, 50% of consumers on each CTT were living independently or with family at the end of 2011; CTTs ranged from a low of 32% to a high of 62% in the proportion of individuals living independently or with family and nearly all CTTs improved this outcome in 2011. The ACT fidelity assessment indicates 75% of a CTT's caseload can ultimately live in independent settings.
- As a result of training and technical assistance during 2011, more individuals who needed or could benefit from supported employment and substance use treatment began receiving these services. Tracking of substance use outcomes expanded in 2011 for improved outcomes tracking.
- Employment outcomes remain low, indicating improved service delivery has not yet led to better outcomes. On average, 6% of consumers on each CTT were competitively employed at the end of 2011; CTTs ranged from a low of 3% to a high of 11% in the proportion of individuals working. The ACT fidelity assessment indicates 40% of a CTT's caseload can work competitively, an outcome teams across the country struggle to meet.

Late in 2011, OMHSAS began licensing ACT teams, and the two Allegheny County CTTs who have been reviewed were granted a license. In 2012, it is expected that the remaining seven CTTs will be licensed. While licensing is one indicator of the quality of services, local efforts to further improve the fidelity results and the effectiveness of CTTs will continue in 2012. Planned initiatives include testing an incentive payment arrangement with two providers to impact hospitalizations and employment rates, technical assistance to improve clinical skills in the treatment of co-occurring substance use and mental illness, and technical assistance to increase the proportion of people living independently and working competitively. Adding other important outcomes – including consumer perspectives on their wellness and developing natural supports – will provide a more comprehensive assessment of the effectiveness of ACT services.

Introduction

Community Treatment Teams (CTTs) in Allegheny County provide comprehensive, community based services to people with serious mental illness who have very complex needs. In Allegheny County, CTTs follow the Assertive Community Treatment (ACT) model.[1] Assertive Community Treatment (ACT) is an evidence-based practice with widely demonstrated success in helping people with serious mental illness who have not benefited from traditional outpatient services live in the community and move towards recovery. Key aspects of ACT include:

- ACT services are provided primarily in the community by a team of trans-disciplinary staff, including a team leader, psychiatrist(s), registered nurses, dual diagnosis specialists, vocational specialists, peer specialists, mental health professionals, and other general staff.
- ACT is fully responsible for a variety of services, including case management, psychiatric services, medication management, counseling, housing support, substance abuse treatment, peer support, crisis and diversion services, employment and rehabilitation services, assistance in management of personal finances, and hospital and criminal justice liaison services.
- ACT staff sees people frequently according to both their short and long-term goals and their immediate needs. ACT teams are expected to base services on the belief that people can recover from serious mental illness and substance abuse. Staff works with consumers as partners, and focuses on helping people achieve their life goals.

There is consensus in the behavioral health field that the ACT model is an effective service for people with serious mental illness and should be more widely available.[2] ACT will only be effective if it is provided according to the expectations outlined in the evidence-based practice, and ACT services should be monitored to make sure they are providing the expected value to consumers and to payers. When evaluating CTTs, it is important to assess how well CTTs are following the structure and processes of the ACT model as well as the team outcomes.

Allegheny County CTTs receive oversight as well as training and technical assistance from Allegheny HealthChoices, Inc. (AHCI), in collaboration with the Allegheny County Office of Behavioral Health (OBH) and Community Care Behavioral Health (Community Care). Every one to two years, AHCI, OBH and Community Care perform fidelity assessments to evaluate the fidelity of CTT services compared to the ACT model, and outcomes are measured on an ongoing basis through provider-reported data to AHCI. Key outcomes assessed for the Allegheny County CTTs include decreased psychiatric hospitalizations, incarcerations, and substance use, increased stability and independence in housing, and increased employment. The perspectives and experiences of people receiving CTT services, some of

[1] Visit the Substance Abuse and Mental Health Services' Administration website on evidence-based practices at http://store.samhsa.gov/list/series?name=Evidence-Based-Practices-KITs for more information.

[2] The Schizophrenia Patient Outcomes Research Team (PORT) identified assertive community treatment as one of the most effective options for people with schizophrenia. As a result, one of the National Alliance on Mental Illness' (NAMI) goals is to educate people on the benefits of, and expand access to, ACT services. See http://www.nami.org/Template.cfm?Section=ACT-TA_Center.

which are included on the next page, are also important to consider.

AHCI, OBH, and Community Care, in collaboration with the providers, use the outcomes data and the fidelity reviews to identify quality improvement areas and needs for training and technical assistance. This report summarizes 2011 fidelity assessment results and key team-level outcomes as well as related training and technical assistance projects. Because ACT has been implemented in multiple states, often for several decades, some standards within the model provide comparison points for the Allegheny County CTTs, and are incorporated where available into this report.[3]

[3] This report does not address costs of CTT services or other services that some CTT consumers may receive. While research findings differ depending on what costs are tracked, the timeframes used, and the population receiving ACT services, the evidence suggests ACT is cost-effective when it is delivered according to the model with people who are high users of other services. See NAMI's Fact Sheet at http://www.nami.org/Template.cfm?Section=ACT-TA_Center&template=/ContentManagement/ContentDisplay.cfm&ContentID=52382 for more information.

Stories from the field

Listening to people who have benefited from CTT services, and to the staff who work with great dedication, is an important way to really understand how CTTs help people. The following stories are examples from 2011 of how four different CTTs made an impact.*

Richard

Perennially, Richard was one of the highest users of crisis services and hospitalizations, and needed daily interventions to make sure he took his medications.

Over a 20 month period with his CTT, the vocational specialist, along with the entire team, helped him to find meaningful activities to reduce his boredom and improve his self-esteem, leading to fewer crisis calls and increased trust with the CTT.

Substance use was a huge barrier to his wellness and independent living. The CTT began by taking a harm reduction approach with Richard, and now has moved to providing more long term abstinence-based interventions.

Richard has gotten a job, has his own apartment, and established a schedule for the CTT to visit three times a week to work on his treatment plan goals. He no longer relies on crisis services and takes his medication independently.

Bob

In 2008, Bob lived at a personal care home and traveled from housing spot to housing spot with little sense of having a home. He now has an apartment with the assistance of Transitional Services, Inc. (a local non-profit) and is exploring local coffee shops and businesses. He has made efforts to reunite with his family, and his increased stability has enabled him to visit family out of state. Although a goal of living with family did not work out as he had hoped, he now has his own apartment and wants to keep it.

With the assistance of CTT, Bob has developed a Wellness Recovery Action Plan (WRAP), which includes meaningful activities and other harm reduction strategies that he is able to identify and in which he takes pride. He has an interest in working and has had several opportunities to volunteer at a local food bank. He is involved in community support groups to maintain his sobriety, and invites the CTT to attend meetings with him weekly.

Bob has mixed feelings about his involvement with CTT. He is fiercely independent and while he acknowledges that he has achieved a lot with CTT's assistance, he looks forward to the day when he no longer needs services at all.

Marty

A year ago, much of Marty's day was occupied by the battle he waged with his feelings of depression, anxiety, and hopelessness. These feelings prevented him from pursuing the independent activities in which he wished to participate. In fact, it could be said that Marty did not "drive his car." Marty's anxiety was firmly in the driver's seat, and often took him down the wrong road.

In the last year, Marty has experienced many significant changes. Through collaboration with his psychiatrist, strong engagement in therapy and homework assignments, and focusing on recovery, he has discovered a new world of opportunity. He has overcome the panic attacks which made it difficult to ride the bus and to go into the community. Additionally, he has focused on improving his self-esteem and confidence, and is reaching out to build a support network outside of his treatment team.

Today Marty is a busy and productive member of his community. His biggest success is returning to the world of competitive employment. Not only has he maintained a job at the local dry cleaners, he has been asked to work additional hours because he excels at his tasks and he is now seeking a better job.

Marty takes the bus to and from work, and has managed to keep his anxiety attacks in check using proactive preventative measures and working hard to use his coping skills when they are needed. He regularly attends church services and weekly bible studies at his church, takes walks into the community with friends, and completes all of his shopping independently. Perhaps most importantly to Marty, this year has allowed him to take control of his social life, and he has been able to date. Who knows where Marty will drive next?

John

John has a long history of substance and alcohol abuse, homelessness, psychiatric inpatient hospitalizations and incarcerations. The CTT has used their skills in motivational interviewing and harm reduction to engage him in treatment where other services have failed in the past. After starting CTT services in January 2010, the team worked diligently to locate and support John in stable housing, supported his compliance with probation, and assisted him in getting needed dental and medical care, resulting in decreased hospital admissions as well as incarcerations.

** These stories are one way to understand how people using CTT services value CTTs and benefit from the services. Satisfaction with CTT services is an important part of understanding the quality of services. In Allegheny County, the Consumer Action and Response Team (CART) measures consumer satisfaction with CTT and other behavioral services (see http://www.namiswpa.org/content/cart/cart.php). The ACT fidelity assessments also gather consumer feedback on key aspects of services.*

Diagnostic Characteristics of People Using CTT Services in 2011

Allegheny County has nine CTTs, eight teams for adults and one team for transition-age youth (ages 16-25). Four teams have been in operation since 2001. Two teams began providing services in 2006-2007 to provide capacity for community services for people being discharged from Mayview State Hospital as part of its closure. Three additional CTTs began providing services late in 2008. While CTTs may vary in the number of people with recent state hospital stays (depending on when they started), all CTTs are expected to provide the same range of services in accordance with the ACT model.

In 2011, 805 people received CTT services; 101 people (13%) were new admissions to CTT, and 41 people (5%) were discharged from CTT services. Of those discharged, 57% were voluntary, 22% were deaths, and 22% were moves out of county. Because of the complicated and chronic nature of the serious mental illnesses (and often co-occurring substance use and physical health conditions) experienced by people on CTT, many individuals are expected to need services for multiple years. A 5% discharge rate within a year is within the expectations of the ACT model.

Of the 805 people receiving CTT services in 2011, 43% were female, and 57% were male; 41% were black and 51% were white. The average age for the eight adult teams was 47 years, and 23 years for the transition-age team. Table 1 includes the primary diagnoses and presence of a co-occurring substance use disorder for people using CTTs at the end of 2011.

Table 1

Primary Diagnosis and Co-Occurring Substance Use Diagnoses for People Using CTT Services, 2011

Primary diagnosis	Team average	Team range
Schizophrenia	68%	31% - 89%
Bipolar disorder	10%	5% - 19%
Major depression	7%	0% - 15%
Other primary diagnosis	14%	6% - 35%
Co-occurring substance use disorder	34%	17% - 50%

On the eight adult CTTs, the most common primary diagnosis is schizophrenia. The CTT serving transition-age youth has a higher proportion of people with other diagnoses, like conduct disorder diagnoses, which are more common for this age group. Co-occurring substance use disorders are also very common; on average, 34% of each team's caseload has an active co-occurring substance use disorder. The transition-age team has a lower proportion of individuals with a co-occurring substance use disorder.

Based on this data, CTTs are serving the population – people with serious mental illness – suitable for the ACT model. (*For more information on treatment histories for people served by CTTs, see AHCI's 2010 report on long-term outcomes for people on CTT, available at www.ahci.org.*)

2011 Fidelity Assessment Results

Background

With the release of the September 2008 ACT Bulletin, the Office of Mental Health and Substance Abuse Services (OMHSAS) began requiring annual fidelity assessments for ACT/CTT. Allegheny County had been conducting fidelity assessments since 2003, and has been a testing site for new versions of the fidelity assessment tools. Allegheny County is considered an expert by the developers of the TMACT in the administration of the tool and in using the results of the tool in quality improvement.

Allegheny County CTTs have generally been considered high-fidelity ACT services. On behalf of OMHSAS, Mercer Consulting conducted a cost and fidelity review of ACT/CTT in 2009. At that point, five CTTs were operating in Allegheny County. Mercer identified that four of the five Allegheny County CTTs were high fidelity, and one CTT was in the middle range of fidelity. Mercer also concluded that high fidelity ACT/CTT services were more cost-effective than low fidelity ACT/CTT services, and that ongoing ACT fidelity review, training, and technical assistance were a worthwhile investment.

The Tool for Measurement of Assertive Community Treatment (TMACT) is the most current, comprehensive tool available for measuring fidelity to the ACT model. The version used in 2011 included 46 items measured across six subscales. Each item receives a score of 1 to 5, with 5 representing the highest level of fidelity, and each score has clearly defined criteria to help assure consistency in scoring. Multiple data sources are used to assess items, including interviews with staff and consumers, program observation, chart reviews, and review of other documentation. The six subscales of the TMACT are:

- Operations and structure (12 items): Includes items like consumer to staff ratio, team approach, program size, priority population, admission and retention rates, transition to less intensive services, and frequency and quality of the daily team meeting.
- Core team staff and roles (7 items): Includes items related to the team leader, psychiatric provider, and nurse staffing levels and roles.
- Specialist team staff and roles (8 items): Includes items related to substance abuse specialists, vocational specialists, and peer specialists staffing levels and roles.
- Core practices (8 items): Includes items related to the provision of services in the community, assertive engagement practices, frequency and intensity of services, contact with natural supports, provision of crisis services, and responsibility for psychiatric and rehabilitation services.
- Evidence-based practices (7 items): includes items measuring whether the team adheres to several evidence-based practices in the treatment they provide, specifically integrated dual disorders treatment (IDDT), supported employment (SE), wellness management, psychotherapy, and engagement and psycho-education with natural supports. This subscale also measures the proportion of consumers who need these services and are receiving them.
- Person-centered planning and practices (4 items): includes whether strengths inform treatment planning, the extent to which treatment planning is person centered, whether interventions target a broad range of life domains, and whether the team promotes consumer self-determination and independence.

Earlier fidelity tools included at most 30 items, and evaluated partially (or not at all) several critical areas of clinical care, including roles of specific staff members, implementation of evidence-based approaches to supported employment, integrated dual disorders treatment, rehabilitation and wellness services, and person centered planning and practices.

OMHSAS began licensing ACT/CTT providers in Pennsylvania during 2011. Part of the licensing process involves reviewing the most recent fidelity assessment. Both Allegheny CTTs who have been reviewed thus far were granted a license. In 2012, it is expected that the remaining seven CTTs will be licensed.

Results

When evaluating fidelity scores, it is important to examine both item-level scores and subscale scores. Total fidelity scores mask important differences at the item or subscale level and make it difficult to identify strengths and improvement areas. Table 2 summarizes the average score and range across teams for each TMACT subscale. The counts of CTTs in the high, average, and low fidelity range are also reported. The TMACT version used in 2009-2010 and 2011 were very similar so current scores were compared to the last TMACT conducted as part of this analysis. Overall scores to earlier fidelity assessments are not comparable because the tool has evolved substantially.

Table 2

Tool for the Measurement of Assertive Community Treatment (TMACT) Fidelity Results, 2011

	Team Average (out of 5)	Team Range	Number of CTTs with high fidelity (avg. score > 4)	Number of CTTs with avg. fidelity (avg. score = 3)	Number of CTTs with low fidelity (avg. score <3)
Operations and structure	4.6	3.9 – 5	8	1	0
Core team staff and roles	4.5	4.1 – 5	9	0	0
Specialist team staff and roles	3.8	3.1 – 4.3	4	5	0
Core practices	4.1	3.9 – 4.9	4	5	0
Evidence-based practices	3.3	2 – 4.3	1	6	2
Person-centered planning and practices	3.3	1.8 – 4.8	2	5	2

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For subscales related to the operations, structure, and core practices of ACT – the subscales from the original fidelity assessment – nearly all CTTs demonstrated high fidelity to the ACT model. For subscales related to the staffing and implementation of evidence-based

approaches to supported employment, integrated dual disorders treatment, rehabilitation and wellness services, and person centered practices within ACT – subscales that are newer to the fidelity process – CTTs varied in their fidelity scores. Across all subscales, more CTTs maintained or improved their scores in 2011 than decreased their scores, compared to their last fidelity assessment conducted in either 2009 or 2010.

2011 Interventions and 2012 Plans

After each fidelity assessment, teams receive a full report documenting the scores for each item, and a summary of strengths and areas of concern. The report also includes detailed expectations that provide the team with concrete steps to address the areas of concern and to improve their services. The reports are reviewed with the CTTs, and individualized technical assistance is provided by AHCI as necessary.

Follow-up site visits are scheduled with each CTT, generally three months after the assessment. During these site visits, TMACT items with low scores are re-assessed to determine if progress has been made. The reviewers also discuss progress and recommendations with the entire team. Teams report this follow-up process and continued face-to-face dialogue is very helpful. It has helped keep issues on progress towards fidelity at the forefront of CTTs' attention.

Training and technical assistance during 2011 focused on three fidelity areas needing improvement: person centered treatment planning, integrated dual disorders treatment (IDDT), and supported employment (SE). The person-centered planning training appears to have had an impact; six out of nine CTTs improved their fidelity scores on the person-centered planning process item. Technical assistance related to IDDT and SE are discussed later in this report.

Outcome 1: Reduction in Psychiatric Hospitalizations

Background

The evidence supporting ACT outcomes is strongest in the reduction in hospitalizations. Other analyses conducted by AHCI based on how long consumers receive CTT services have demonstrated a large decrease in hospital use compared to the year before CTT services (for more information, see AHCI's 2010 report on long-term outcomes for people on CTT, available at *www.ahci.org*).

This report examines hospitalizations at the team level in 2011 compared to 2010. While there is consensus in the field that ACT reduces hospitalizations, no benchmark for team performance on hospital utilization exists. AHCI consulted with several national experts in research and implementation on ACT, and they agreed that inpatient utilization is highly related to local factors, including availability of hospital beds, and that no fair benchmark exists. For example, ACT in Kalamazoo, MI has a goal of fewer than 10 hospital days per person per year, and their two teams routinely exceed this benchmark. In comparison, five regions in New York State with ACT teams report a caseload average of over 20% having

two or more hospitalizations in a six month period.[4] Therefore, results in this report are interpreted based on consensus among OBH, Community Care, and AHCI after taking into consideration outpatient utilization in several other systems.

Results

Table 3 summarizes psychiatric hospitalization use across CTTs in 2011. Using the percent of consumers with one or more inpatient stays and the average inpatient days per person on CTT as measures takes into account differences in the sizes of CTTs (The three newer teams have fewer people receiving services, as CTTs are expected to take referrals gradually.) On average, 33% of consumers on a team had an inpatient stay in 2011, and the average inpatient days per person was 20.3 days. The number of inpatient admissions per team ranged from 33 to 93 admissions.

Table 3

2011 Psychiatric Hospitalization Use for CTTs

	Team Average	Team Range
Percent of consumers with 1 or more inpatient stay	33%	20% - 53%
Number of inpatient stays in 2011	56	33 – 93
Average number of inpatient days per person on CTT (total inpatient days for all consumers on team in 2011/total count of people on team during 2011)	20.3	10.4 – 46.1

Table 3 also illustrates that CTTs vary considerably in their hospitalization outcomes. The CTT with the highest percent of consumers with inpatient use (53%) and average inpatient days (46.1) was one of the newer teams. Often, CTT services begin during a person's inpatient stay, and CTTs need to engage individuals while they are still in inpatient treatment.

None of the nine CTTs reduced the average inpatient days per person more than 10% from 2010 to 2011. Five CTTs had similar days per person in 2011 compared to 2010, and the other four CTTs had increases of 10% or more in average inpatient days per person.

In order to understand the consumer level patterns driving this team outcome, further analyses were conducted. Of people with at least one discharge in 2011:

- 63% had only one hospital discharge, 32% had two to four hospital discharges, and only 6% had five or more discharges.
- 9% of people receiving CTT services in 2011 accounted for 66% of inpatient days.
- This indicates that reducing inpatient utilization may largely be achieved through decreasing lengths of stay.

[4] Kalamazoo, MI data provided through email correspondence with a provider. New York State data is available at http://bi.omh.ny.gov/act/outcomes.

In addition, 23% of people receiving CTT services approximately two years or longer had a hospitalization during 2011, compared to 44% of people receiving services for less than two years. As it may take months or even years to engage an individual in CTT services, continued inpatient use during an individual's first year or two with CTT is not uncommon, and, as stated previously, many individuals begin services while they are in an inpatient setting.

In addition to inpatient hospitalizations, on average, 7% of people on each CTT used inpatient extended acute services, 2% of each team on average used community extended acute services, and 3% on average used the residential treatment facility for adults (RTF-A) in 2011. Many of these stays involve new referrals to CTT, where CTTs begin working with people while they are in these facilities. Further analysis comparing use of these services This pattern is similar to 2009 and 2010.

2011 Interventions and 2012 Plans

Inpatient utilization remains a significant concern, as the frequency and length of hospitalizations remains high and CTTs did not demonstrate improvement from 2010. In 2011, training and quality improvement efforts did not directly target inpatient utilization as an outcome. However, training and technical assistance on following the ACT model and improving treatment planning processes should result in improvements in this outcome. If CTTs are proactively providing comprehensive services to individuals, this should reduce the need for inpatient utilization; lengths of stay can be reduced through CTTs increasing their involvement in discharge planning and improving how they start to engage people in treatment while hospitalized.

In 2012, these efforts will continue. Ongoing reporting that distinguishes between readmissions for people who have received CTT services in the community and stays that began before CTT became involved can provide better feedback on how CTTs are impacting hospitalizations. Similarly, further analyses of the use of extended acute and RTF-A services that distinguish between new referrals and people receiving CTT services for a specific length of time can provide more insight into utilization of these services. Also, Community Care, OBH, and two CTT providers have begun discussing an incentive payment arrangement to increase community tenure by reducing inpatient utilization.

Outcome 2: Reduction in Incarcerations

Background

The evidence supporting ACT outcomes related to a reduction in incarcerations (stays of one or more days in jail) is less clear from the research in comparison to hospitalizations outcomes. Each CTT in Allegheny County employs a part-time forensics specialist who works with the criminal justice system and with consumers on meeting court expectations and preventing arrests and incarcerations. Preventing and reducing incarcerations is a priority for the Allegheny County CTTs. As no published benchmarks exist for this outcome, results in this report are interpreted based on consensus among OBH, Community Care, and AHCI.

Results

Table 4 summarizes incarcerations for CTTs in 2011. While CTT incarceration rates are much lower than hospitalization rates, this outcome remains an important area for monitoring and improvement.

On average, 12% of consumers on a team had an incarceration in 2011, and the average number of incarcerations per person was 0.2 (or 20 incarcerations per 100 consumers).[5] The number of incarcerations per team ranged from 9 to 29.

Table 4

2011 Incarcerations Rates for CTTs		
	Team Average	Team Range
Percent of consumers with 1 or more incarcerations	12%	6% - 20%
Number of incarcerations in 2011	16.6	9 – 29
Average number of incarcerations per person on CTT (number incarcerations/count of people on CTT in 2011)	0.2	0.1 – 0.3

Two CTTs reduced the average number of incarcerations per person from 2010 to 2011, and two had similar rates in 2010 and 2011. Five CTTs had some increase in the number of incarcerations per person; because incarcerations occur less frequently, the actual increase in incarcerations is small for most teams (an additional two to four events).

In order to understand the consumer level patterns driving this team outcome, further analyses were conducted. Of people who had one or more incarcerations end in 2011, 65% had only one incarceration, 29% had two incarcerations, and only 5% had three to four incarcerations. Length of incarceration rather than frequency results in the high overall days incarcerated; 43% of people with incarcerations ending in 2011 lasted more than 90 days.

[5] A portion of incarcerations are very lengthy (16% were more than 180 days in 2011), and since there are fewer incarcerations, using average days incarcerated per person is more sensitive to outliers than average incarceration events per person.

2011 Interventions and 2012 Plans

Incarcerations remain a concern, as CTTs have not demonstrated substantial improvement in this area. In 2011, training and quality improvement efforts did not directly target incarceration as an outcome. However, training and technical assistance on improving treatment planning processes and delivering evidence-based substance use treatment — a key factor in many incarcerations — should impact incarcerations.

In 2012, AHCI, OBH and Community Care should discuss incarcerations, particularly related to understanding the charges and reasons for the lengths of incarcerations, with the CTTs. More refined tracking of these outcomes to distinguish among stays where people are awaiting a hearing, in jail for a probation or parole violation, or serving a sentence will increase understanding of this outcome. Opportunities to prevent and reduce the lengths of incarcerations should be discussed.

Outcome 3: Reduction in Harms Associated with Substance Use Disorders

Background

Many people receiving CTT services also use alcohol and/or drugs, and CTTs are expected to have the expertise and capacity to provide evidence-based substance abuse treatment that is an integrated part of CTT services (Integrated Dual Disorders Treatment, or IDDT).

Results

Prior to 2011, the primary outcome measure for substance use was monitoring whether people receiving CTT services also used detoxification or rehabilitation services for their addiction. While some utilization of these services is appropriate, high or recurrent use would indicate that CTTs are not providing substance use treatment or not helping people reduce the harm associated with their use. Table 5 shows that few people receiving CTT services use detox or rehab services in 2011. These outcomes are similar to 2010.

Table 5

2011 CTT Utilization Rates of Drug and Alcohol Detoxification and Rehabilitation Services

	Team Average	Team Range
Percent of consumers using detox services	2%	0% - 4%
Percent of consumers using rehab services	2%	0% - 8%

2011 Interventions and 2012 Plans

AHCI, with the support of Community Care and OBH, began an intensive training and technical assistance program to improve the provision of IDDT and ultimately, reduce the harms associated with substance use. CTTs participated in two-day trainings followed by regular case consultations with the trainer and AHCI staff. The case consultations involve reviewing an individual's treatment progress, his or her need for substance use services, and assessing his or her stage of treatment based on the stage of change (see definitions in

Table 6). The CTTs then discuss what stage-wise interventions fit the individual's treatment stage, and this informs treatment planning. Stages and interventions are reviewed every six months in conjunction with each individual's treatment planning.

In 2011, AHCI also expanded tracking outcomes related to substance use. AHCI is now monitoring how people progress through the stages of treatment (for example, from engagement to persuasion and active treatment) and the number of days abstinent. Table 6 shows that 214 people (27% of people receiving CTT services) participated in this review process in 2011, as CTTs began implementing this process following their trainings. Ultimately, all people with substance use disorders will be staged every six months.[6]

Table 6

Stage of Treatment for People with Co-Occurring Substance Abuse

	Definition	# people in stage	% in stage	avg. days abstinent in last month
Engagement	Person has no intention to change substance use and is usually not interested in counseling.	101	47%	15
Persuasion	Person is aware that a problem exists but has not yet made a commitment to take action.	50	23%	16
Active treatment	Person is engaged in substance use treatment and has reduced use, and is modifying behavior, experiences, or environment.	20	9%	26
Relapse prevention	Person is engaged in treatment, working to prevent relapse, and no longer meets criteria for substance use diagnosis.	43	20%	29
Total		214	100%	n/a

Table 6 also indicates that the majority of people are in the engagement or persuasion stage of treatment. CTT interventions should focus on practical support, engagement, and motivational interviewing which will allow clinicians to continually assess the person's readiness for change.

In 2012, technical assistance on implementing IDDT will continue, as will outcomes monitoring. Advanced training in motivational interviewing will also begin.

[6] This staging process can also be used to assess people's involvement with mental health treatment. CTTs have found this process so helpful for people with substance abuse that they are also implementing it on a case by case basis with others.

Outcome 4: Increase in Housing Stability and Independence

Background

Helping people find and keep independent housing is a critical part of CTT services and a key outcome. While a proportion of people receiving CTT services will need, either on a short term or longer term basis, more structured housing or housing that provides assistance with activities of daily living, at least 75% of people receiving CTT should ultimately be living independently[7] (according to the ACT fidelity assessment).

Results

Table 7 shows the housing categories for CTTs at the end of 2011. Many people who are living independently or with family will still receive support from CTTs to help them keep their housing.[8]

Table 7

2011 Independent Housing and Structured Housing Rates for CTTs

	Team Average	Team Range
Living independently	36%	27% - 49%
Living with family	14%	6% - 27%
Living independently OR with family	50%	32% - 62%
Semi-independent housing (including supported and supervised apartment settings)	12%	8% - 19%
Personal care homes	14%	1% - 28%
Community residential rehabilitation programs (CRRs)	8%	4% - 16%
Long-term structured residences (LTSRs)	5%	1% - 13%

Across CTTs, the average proportion of people living independently or with family is 50%. This varies from 32% to 62%; the two CTTs with primarily people discharged from Mayview have the highest proportion of people living in housing programs like personal care homes and long-term structured residences.

Between 2010 and 2011, all but one CTT increased the proportion of people living independently or with family. On average, CTTs improved the proportion of people living independently or with family by 31%.

[7] This expectation is outlined in the forthcoming version of the ACT fidelity assessment, the Tool for the Measurement of Assertive Community Treatment (TMACT), but was not part of the TMACT version used in 2011.
[8] The transition age team has the largest number of people living with family, as expected because of the age range of people receiving CTT services.

2011 Interventions and 2012 Plans

While housing outcomes improved in 2011, this outcome varies by CTT and no CTT has yet met the goal indicated by the ACT model (75% in independent housing). In late 2011, AHCI began an intensive case consultation process designed to build CTT expertise in assessing people's skills and needs along with developing goals and CTT support necessary to obtain and maintain independent housing. This technical assistance process will continue in 2012.

OBH is also working to decrease the lengths of stay in county-funded housing programs through improved discharge planning.

Outcome 5: Increase in Employment

Background

CTTs are expected to have the expertise and capacity to provide evidence-based supported employment services integrated with the rest of CTT services, as discussed previously in the TMACT results. The ACT model indicates that up to 40% of people can work competitively. Nationally, many ACT providers struggle to meet this benchmark.

Results

Table 8 shows the competitive employment outcomes at the end of 2011. CTTs had an average of only 6% of people working competitively. An additional 9% of people are looking for work, on average.

Table 8

2011 Competitive Employment for People Receiving CTT Services

	Team Average	Team Range
Working competitively	6%	3% - 11%
Actively seeking employment (job development)	9%	0% - 17%
Identifying employment interests and needed supports (vocational profile development)	3%	0% - 8%

These outcomes are well below the expectations outlined in the ACT model that up to 40% of people can work competitively.

2011 Interventions and 2012 Plans

In the second quarter of 2011, AHCI hired a new staff person to provide intensive field mentoring and coaching to both vocational specialist staff and team leaders to improve service provision. This first phase of technical assistance focused on developing vocational profiles (consumer interests, skills and goals) and developing job leads. Community Care also offered a performance incentive payment, but no CTT achieved sufficient progress to earn the incentive.

Field observation by AHCI staff and team leader report suggests CTTs began improving their provision of vocational services at the end of 2011. Examples include regular

vocational meetings where CTT staff develops ideas and plans for employment, improved skills in seeking out job leads and networking with potential employers, and hiring better qualified individuals as vocational specialists. Improved service delivery has not yet led to better outcomes.

CTT staff that have participated in the AHCI technical assistance for supported employment have completed a survey to identify additional needs and to improve the technical assistance process. The next phase of technical assistance, beginning in spring 2012, will continue to focus on job development skills and in developing support plans for people after they have begun work. Discussions on implementing another performance incentive as part of the alternative payment arrangement discussed in the hospitalizations outcomes are also underway.

Conclusion

In 2012, efforts to improve fidelity to the ACT model and the effectiveness of CTTs in each of these outcomes will continue. Planned initiatives include testing an incentive payment arrangement with two providers to impact hospitalizations and employment rates, technical assistance to improve clinical skills in the treatment of co-occurring substance use and mental illness, and technical assistance to increase the proportion of people living independently and working competitively. Adding other important outcomes – including consumer perspectives on their wellness and developing natural supports – will provide a more comprehensive assessment of the effectiveness of ACT services.