Allegheny
HealthChoices, Inc.

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A 2012 Update on Allegheny County Community Treatment Team Key Outcomes

Community Treatment Teams (CTTs) 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. ACT, originating almost 40 years ago, is an evidence-based practice. It has widely demonstrated success in helping people with serious mental illness that have not benefitted from traditional outpatient services live in the community and move towards recovery. ACT has been shown to be effective for people who have mental health diagnoses such as schizophrenia, bipolar disorder and major depression. In 2012, nine CTTs served approximately 844 people in Allegheny County.

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). Key outcomes assessed for people served on the Allegheny County CTTs include:

- Reduction in substance use;
- Increase in community-based housing;
- Increase in competitive employment; and,
- Decrease in psychiatric hospitalizations.

Additional local outcomes include:

- Wellness; and
- Social Connectedness.

AHCI, OBH, and Community Care, in collaboration with the providers, use outcomes data to identify areas for quality improvement, training and technical assistance. This report summarizes key outcomes data for 2012, related current and forthcoming interventions, and quotes of hope and recovery from people receiving CTT services.

*"What is Assertive Community Treatment?"**

- ACT services are provided to individuals in their homes and communities by a team of trans-disciplinary staff, including a team leader, clinical lead, psychiatrist(s), registered nurses, specialists (dual disorder, employment, and peer), mental health clinicians, and other rehabilitative staff.

- ACT staff share responsibility for all team members and provide a variety of services on a 24/7 basis. Services include outreach; case management; psychiatric services; counseling; housing support; linkage to healthcare providers; peer support; psychoeducation for natural supports; substance use treatment; crisis assessment, intervention, and diversion services; development of independent living skills; and hospital and criminal justice liaison services.

- ACT teams provide person-centered and recovery oriented services that are strengths-based, promote choice, and improve self-sufficiency through a variety of ways. This includes individualized and tailored engagement, comprehensive assessment across all life domains, and person-centered planning. Staff works with individuals as partners in helping them achieve their life goals so that people are empowered and fully participate in managing their illness and life.

* 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.

Integrated Dual Disorder Treatment

Reduction in Uses Associated with Substance Use

Background and Results

Roughly 40% - 50% of individuals on the teams with serious mental illness are affected by substance abuse disorders. The number of individuals with substance use disorders on each Allegheny County team ranges from 29 (33%) to 52 (57%) individuals. To adequately address the issues of substance use, ACT teams have applied the evidence-based practice of integrated dual disorder treatment (IDDT) into services.[1] Interventions are tailored to the person's stage of treatment and readiness for change. Teams collect data on stages of treatment and days abstinent. The stages of treatment are described in Table 1.

In 2011 and 2012, 352 of the 354 (99%) people with a co-occurring mental health and substance use diagnosis were assessed to determine the indicated stage of treatment. Table 2 provides information on the number of individuals in each stage of treatment between January 1, 2011 and December 31, 2012.

Of those in engagement and persuasion, 25% moved to a later stage of treatment; of those in the active treatment stage, 9% progressed to a later stage and 53% remained in this stage; and 76% of those in the relapse prevention stage remained in this stage without relapsing.

Current Interventions and Future Plans

As teams increase competency and fidelity in IDDT, individual outcomes will continue to improve in the following areas: greater retention in later stages of treatment; reduced substance use/increased abstinence; and increased field supervision on stage interventions.

Throughout 2013, teams continue to receive training and technical assistance in basic and advanced IDDT interventions.

Table 1. IDDT Stages of Treatment

Stages	Definition
Engagement	Person has no intention to change substance use and is usually not interested in counseling.
Persuasion	Person is aware that a problem exists but has not yet made a commitment to take action.
Active treatment	Person is engaged in substance use treatment and has reduced use, and is modifying behavior, experiences, or environment.
Relapse prevention	Person is engaged in treatment, working to prevent relapse, and has abstained from substance use for at least six months.

Table 2. Substance Use Stage of Treatment for People on CTTs, 2011-2012

Engagement	188 initially placed 86% (162) still in this stage 14% (26) progressed to a later stage
Persuasion	71 initially placed 56% (40) still in this stage 32% (23) returned to an earlier stage 11% (8) progressed to a later stage
Active Treatment	34 initially placed 53% (18) still in this stage 38% (13) returned to an earlier stage 9% (3) progressed to a later stage
Relapse Prevention	59 initially placed 76% (45) still in this stage 24% (14) returned to an earlier stage

[1]More information on IDDT can be found in its evidence-based manual: *Integrated dual disorders treatment.* (2010). Hazelden.

"… I told my brother and my sister [about my addiction]… it freed me to become well… I put myself on the line and was honest… I was afraid my family would judge me… it was really hard to do… but I did it."
-Amy

Housing

Increase in Community-Based Housing

Background and Results

Living in community-based independent housing* is a key outcome for individuals who are receiving CTT services. Evidence from the ACT model finds that on average, up to 80% of a team's caseload should be living independently in the community as opposed to a residential or congregate living program. AHCI, OBH, Community Care, and the CTT providers are committed to increasing the overall percentage of individuals living independently and improve tenure. Table 3 highlights the percentage of people and where they lived at the end of 2012 by housing categories.

The majority of people (56%) were living independently in the community, with most (40%) living in their own apartment or home at the end of 2012. In comparison to 2011, this is an improvement from 50% and 36%, respectively.

By the end of 2012, a total of 20% of the CTT population moved from non-independent living into living independently in the community, maintaining an average of 181 days in independent housing.

Current Interventions and Future Plans

Throughout 2012, AHCI provided technical assistance and education to CTT staff on how to properly assess and develop housing plans for people on CTTs. For the first time, this included utilizing structured instruments assessing a broad range of independent living skills and specific support needs to successfully transition and maintain independent housing.

In 2013, quarterly trainings are offered on how to support individuals in independent living for new and existing staff, as well as ongoing consultation to teams around specific individual housing plans.

*Independent housing/living independently is considered anyone who owns/rents their own apartment, room, or house; lives in someone else's apartment, room or house (non- family member); or lives with their family.

Table 3. Housing Information for People on CTTs, 2012

Housing Category	Team Average	Team Range
Living Independently*	56%	37% - 64%
Living with Family	15%	7% - 34%
Own/Rent Apartment, Room or House	40%	27% - 51%
Someone Else's Apartment, Room or House (Non-family member)	1%	0% - 3%
Personal Care Home	14%	1% - 22%
MH/DA Supervised	13%	9% - 20%
Residential Treatment	6%	3% - 14%
Institutional Setting	9%	3% - 18%
Shelter/Street/Outdoors	2%	0% - 5%

"This is what I wanted… my own personal space… I am learning to prioritize things… I want to use my skills, write them down and decorate my new place with them… I never dreamed I would ever be here… everyone said I would never be where I am at now… I finally took on my life and said I wanted to make something good of my life."

-Debbie

Supported Employment

Increase in Competitive Employment

Background and Results

National studies have found that about 60% of people with serious mental illness have an interest in employment, but only about 15% are currently employed. According to the ACT model, on average, 40% of a team's caseload is expected to be involved in vocational services. Table 4 below outlines the number of individuals involved in vocational services across teams, by stage, at the end of 2012.

"I couldn't buy nothing before [I had this job]..."

-Ben

Table 4. Employment Stages for People on CTTs, 2012

Stage of Employment	Team Average	Team Range
Identifying employment interests and needed supports (vocational profile development)	4%	0% - 10%
Actively seeking employment (job development)	6%	0% - 11%
Working competitively	9%	4% - 17%
TOTAL % **(involved in vocational services)**	19%	4% - 38%

"[Having a job is] a lot better than just sitting at home... it gives me something to do... it makes me feel a little bit better about myself... and that has not exactly happened before... Before this, I totally relied on other people... I don't need that as much anymore... For the first time, [my parents] actually tell me they are proud of me..."

-Jen

CTT's had an average of 9% of the people working competitively in 2012; an improvement from 6% in 2011. The current Allegheny County benchmark for people on teams in competitive employment is 20%. The teams continue to work towards this goal.

Current Interventions and Future Plans

AHCI completed its first full round of supported employment field coaching with all nine teams by the end of 2012. This included training the employment specialists in the evidence-based practice of Supported Employment (SE) and working with team leaders on developing supervision skills specific to the evidence-based practice of SE.

In 2013, the primary focus of training and coaching is on job development. Since one of the most common fears people have about working is that there will be a loss of financial and health benefits, training and coaching is also focusing on working with staff and individuals around understanding the impact of earning money on benefits.

" [I was] scared I would lose my benefits [because I was working]..."

-Ben

Inpatient Mental Health

Reduction in Psychiatric Hospitalizations

Background and Results

The ACT model has some of its strongest evidence in the reduction of psychiatric hospitalizations. This is attributed to the 24-hour support from the CTT team staff. This level of support is especially important when people are in crisis. Table 5 shows average inpatient mental health days per year per person from 2010 to 2012, based on the length of time on a team.

As Table 5 details, on average, the longer an individual is on a team, the fewer psychiatric hospitalization days they experience. Moreover, the number of people who experienced a hospitalization also slightly decreased from 29.6% in 2010 to 26.9% in 2012. These psychiatric hospitalization decreases are critical to the success of the ACT model, since people on CTTs are often high users of inpatient services.

To help divert individuals from the hospital, people on CTTs are encouraged to first contact their team when they are in times of crisis. However, there are situations when people might use other crisis services. From 2010 to 2012, utilization of WPIC's re:solve crisis center remained between 23% and 24%.[2]

Table 5. Average IPMH Days by Team Tenure, 2010 – 2012*

Years on Team as of 2010	IPMH Days 2010	IPMH Days 2011	IPMH Days 2012
Less than 1 year *(n = 114)*	27.9	27.5	22.6
1 Year *(n = 112)*	15.7	25.7	21.8
2 Years *(n = 84)*	9.3	16.2	20.0
3 Years *(n = 31)*	27.0	34.4	31.9
4 Years *(n = 26)*	27.1	11.5	4.1
5 Years *(n = 35)*	17.2	10.2	7.1
6 Years *(n = 47)*	15.0	10.5	11.4
7 Years *(n = 51)*	12.9	11.3	1.8
8 Years *(n = 22)*	15.5	10.5	1.6

**This analysis is based on a cohort of 523 consumers who received CTT services continuously from 2010 to 2012. There was one individual who was on a team for nine years but did not have a hospitalization during this time period.*

Current Interventions and Future Plans

Inpatient utilization continues to be a focus for the teams. Internal provider and team reports have been developed to promote ongoing quality improvement purposes on this outcome. Continued training and technical assistance on the ACT model should also positively impact overall hospitalization rates.

In 2013, Community Care, OBH and AHCI have engaged two CTT providers in discussions to explore the use of an alternative payment arrangement beginning in 2014. A benchmark specifically targeting inpatient utilization is being established as part of this initiative. It is hoped that this will give providers additional incentive to address psychiatric hospitalizations, especially for people who are high utilizers of this level of care.

"I am learning to identify what is a crisis and what is not a crisis and what is everyday life... I started doing my job [when I started using my skills]…. Enough is enough…. I will learn those skills."

-Debbie

[2]WPIC's re:solve services provide various crisis services 24 hours a day, 365 days a year to all community members. For more information, visit http://www.upmc.com/services/behavioral-health/pages/resolve-crisis-network.aspx

Wellness

Integration of Physical & Behavioral Health

Background and Results

Life expectancy for the general population is between 75 and 80 years. Research continues to find that people with serious mental illness die, on average, 8 - 25 years earlier than the rest of the population. People with a mental illness are more likely to smoke and be obese, which puts them at a greater risk for other chronic health conditions.

The average age of death for people on CTTs is consistent with research findings: in 2012, the average age of death was 53 years of age. This emphasizes the importance of having a holistic approach that includes physical wellness goals in addition to other traditional goals (i.e. housing and financial matters).

The proportion of people on Allegheny County CTTs with at least one co-occurring physical health diagnosis rose over time from 56% in 2001 to 80% in 2012. The rise in this proportion can be partially attributed to an increased awareness and identification of physical health diagnoses by behavioral health practitioners, including CTT staff. Table 6 below outlines the most common physical health diagnoses found in Allegheny County CTT consumers.

Table 6. Most Common Physical Health Diagnoses for People on CTTs, 2001 - 2012*

Disease-Related Diagnoses	All Years	2011	2012
Hypertension	245	207	212
Esophageal	140	122	130
Obesity	137	121	118
Asthma	133	107	111
Diabetes	123	102	101
Hyperlipidemia	101	96	90
Hypothyroidism	93	80	77

**The counts represent distinct people.*

Based on Table 6 information, physical health interventions and activities should be designed to meet peoples' overall healthcare needs.

Current Interventions and Future Plans

Allegheny County teams have several ongoing physical health initiatives. Teams have been helpful in assisting and coordinating yearly physicals and dental appointments. Several teams have also been successful in hosting wellness groups that have focused on nutrition, diet, exercise and smoking cessation. Some teams even have various sports groups where consumers and staff participate in physical activities such as bowling, basketball and volleyball.

In 2013, providers plan to use Wellness Coaching to address physical health issues. The teams' nurses and peers will be trained to work with people on their physical health issues and wellness opportunities, as well as the development of related goals.

Other providers are launching the InSHAPE program. The InSHAPE program is a promising practice specifically designed for people who have a serious mental illness to improve physical health. Additional evidence suggests that it also supports people in potential employment and education efforts.[3]

[3]For more information on the InSHAPE program, please visit http://www.mfs.org/services/inshape/inshape.

"I like to lose weight… I walk 10 minutes, 3 times a day."

-Amy

Social Connnectedness

Feeling Connected to the Community

Background and Results

Over the years, AHCI, Allegheny County and Community Care have tried to use various reporting mechanisms and tools to capture people's sense of belonging to a community, and social inclusion beyond what is provided by the team staff.

In 2013, the group selected the Social Connectedness section in the National Outcomes Measurement System (NOMS) in an effort to capture this information.[4] People participating on the teams were surveyed and asked to rate their relationships with people other than their behavioral health provider(s) over a 30 day period using a five-point scale (1 = strongly disagree through 5 = strongly agree).

People were asked to rate the following: 1) I am happy with the friendships I have; 2) I have people with whom I can do enjoyable things; 3) I feel I belong in my community; and 4) In a crisis, I would have the support I need from family or friends. The results are included in Table 7 below.

Table 7. Aggregate Social Connectedness Results for People on CTTs, 2013

Team Score	Team Average	Team Range
Low Levels of Social Connectedness ***(At 3 or below)***	20%	15% - 25%
Moderate Levels of Social Connectedness ***(Between 3 and 4)***	41%	27% - 68%
High Levels of Social Connectedness ***(Above 4)***	39%	23% - 56%

The results in Table 7 show that 80% of people, on average, have moderate to high levels of social connectedness. However, 20% of people remain feeling disengaged from various aspects of the community.

Current Interventions and Future Plans

This outcome is new to Allegheny County. During mid-2013 the first round of data collection/surveying took place.

Possible team/individual interventions for those with low or moderate scores regarding social connectedness include:

- Each team looking at the group that scored low and determining if (or what) team intervention will result in an overall increase in connectedness;
- Each team looking at the group of individuals that scored high to learn what possible consumer-identified interventions can be utilized to help individuals in the low scoring group feel more socially connected; and
- For each person with lower scores, staff will discuss responses to each question to inform person-centered planning.

For all people, it is important to revisit feelings of social connectedness every six months to inform person-centered planning and sustain feelings of connectedness.

[4]For more information on Social Connectedness, visit http://www.nriinc.org/projects/SDICC/SocialConnectednessApril2008.pdf.

"There is hope out there… hope for other people, too."

-Debbie

Conclusion & Moving Forward

Review of 2012 & Planning for 2013

In 2012, CTTs continue to show marked improvement in various key outcomes:

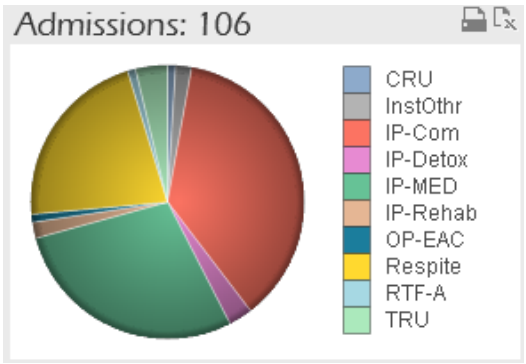
- *Integrated Dual Disorders Treatment*: IDDT in Allegheny County is still in its infancy and efforts are being made to provide IDDT to everyone with a co-occurring mental health and substance use disorder diagnosis.
- *Housing*: There was an increase of 6% in community-based independent housing since 2011.
- *Employment*: Although there was an increase of 3% in competitive employment since 2011, employment is an area still in need of greater improvement and where increased AHCI technical assistance is currently being provided.
- *Inpatient Mental Health*: The number of psychiatric hospitalization days and number of people in the hospital decreased between 2010 and 2012, especially for those with longer team tenure.

Additional/new outcomes also provide opportunities to further improve the quality of life for people participating on the teams.

- *Wellness*: Teams are mindful of people's physical health and help incorporate various wellness programs and goals, as appropriate, in their treatment plans.
- *Social Connectedness*: As this is new to Allegheny County, teams are exploring various interventions to increase a person's sense of belonging and social structure outside of services.

Community Care, OBH and AHCI are committed to providing continued training and technical assistance to the teams throughout 2013. Specific attention will be given to IDDT staging efforts; helping people prepare for transition into community-based housing; creating data outcomes related to wellness initiatives; and increased competitive employment opportunities.

In addition to the continued training and technical assistance detailed above, another initiative related to CTT outcomes is being implemented in 2013: A CTT dashboard (pictured below) is in the final stages of development. It will allow teams to monitor and utilize their data more efficiently via a web-based portal. The dashboard can be used for tasks such as outcome benchmarking, supervision and clinical guidance.



Left: This is a screen shot of the CTT dashboard.

Above: This is an enhanced image of one of the data elements tracked on the dashboard.

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AHCI's mission is to assure equitable access to quality, cost-effective behavioral healthcare that promotes positive clinical outcomes, recovery and resiliency. AHCI is a contract agency of the Allegheny County Department of Human Services' Office of Behavioral Health.