Allegheny County Community Treatment Teams

A Review of 2014 Key Outcomes

Allegheny HealthChoices • Inc

BEHAVIORAL HEALTH INNOVATION

Executive Summary

2014 Key Outcome Highlights

Community Treatment Teams (CTTs) provide a team-delivered, community-based service for those with serious mental illness. In 2014, about 860 people received CTT services collectively among the nine teams in Allegheny County. This report reviews key outcome data on the individuals served by CTT.

Reduction in psychiatric hospitalizations continues to be seen across all teams.

- Data supports the evidence that the longer someone is on a CTT, the fewer psychiatric hospitalization days s/he will experience.
- Recent pay for performance initiatives also lowered the average inpatient utilization.

Competitive employment remained unchanged between 2013 and 2014.

- The rate of competitive employment remained unchanged at 9%.
- Total involvement with vocational activities increased from 25% in 2013 to 28% in 2014.
- A recent pay for performance initiative has been implemented to incentivize CTTs to increase the number of people working competitively.

More people continue to live independently in the community.

- The percentage of people on CTTs living independently increased from 62% in 2013 to 66% in 2014.
- The majority of those living independently live in their own apartment or home (47%).

People with co-occurring disorders reflect positive movement in their recovery journey.

- The percentage of individuals with substance use disorders on the teams ranges from 36% to 56%.
- More people advanced to a later substance use stage of treatment (25%) in 2014 compared to 2013 (20%).

Efforts towards the integration of physical and behavioral health continue to move forward.

- Seventy-four percent of people on CTTs have a co-occurring physical health diagnosis.
- The majority of people (78%) were engaged in Wellness Coaching, with about half (52%) setting a wellness goal.

Allegheny HealthChoices, Inc. will use this report to monitor and identify CTT outcomes that will inform quality improvement efforts and technical assistance opportunities.

Overview

Reviewing the ACT Evidence-Based Model

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 originated almost 40 years ago and is an evidence-based practice. It has widely demonstrated success in helping people with serious mental illness who have not benefited from traditional outpatient services live in the community. In 2014, nine CTTs served approximately 860 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:

- Decrease in psychiatric hospitalizations;
- Increase in competitive employment;
- Increase in community-based housing;
- Increase in assessment and treatment of dual disorders; and
- Increase in attention to wellness.

AHCI, OBH, and Community Care, in collaboration with the CTT providers, use outcomes data to identify areas for quality improvement, training, and technical assistance. This report summarizes key outcomes data for 2014, related current interventions, future plans, and quotes of hope and recovery from people receiving CTT services.

"CTT is like a coach… [they] coach me when I have issues… they give me a different perspective on how to look at things… they are always there… they are the backbone to my success… I am so grateful for them in my life."

-Shelley

"What is Assertive Community Treatment (ACT)?"

ACT services are provided to individuals in their homes and communities by a team of transdisciplinary 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 a serving 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;
- dual disorder treatment;
- crisis assessment;
- intervention;
- diversion services;
- development of independent living skills; and
- hospital and criminal justice liaison services.

ACT teams provide recovery oriented services that are strengths-based, promote choice, and improve self-sufficiency in a variety of ways. This includes individualized and tailored engagement, comprehensive assessment across all life domains, and person-centered planning. Staff work 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's website on evidence-based practices at http://store.samhsa.gov/list/series?name=Evidence-Based-Practices-KITs for more information.

Inpatient Mental Health

Decrease in Psychiatric Hospitalizations

Background and Results

One of the strongest ACT model outcome is related to the reduction of psychiatric hospitalizations. This is attributed to the team-delivered approach and 24-hour support from staff. This level of support is especially important when people are in crisis. Table 1 shows the average number of inpatient mental health days per year, per person, from 2012 to 2014, based on the length of time on a team as of 2012.

Table 1. Average IPMH Days for 2012 Team Tenure Cohort, 2012 - 2014*

		Length of Stay on Team as of 2012									
		< 1 Year (n=74)	1 Year (n=78)	2 Years (n=93)	3 Years (n=79)	4 Years (n=55)	5 Years (n=20)	6 Years (n=22)	7 Years (n=29)	8 Years (n=41)	9 Years (n=46)
Average IPMH Days	*2012*	31.3	11.9	25.5	12.5	20.8	36.1	4.9	5.0	9.7	1.4
	2013	16.0	11.2	11.2	12.9	14.7	29.9	0.9	2.1	9.5	6.3
	2014	14.4	12.3	16.6	10.1	14.2	28.2	3.3	1.7	16.2	8.8

**This analysis is based on a cohort of 558 individuals who received CTT services continuously from 2012 to 2014. There was one individual who was on a team for 11 years as of 2012 but did not have a hospitalization during this time period.*

As Table 1 details, on average, the longer an individual is on a team, the fewer psychiatric hospitalization days they experience. These psychiatric hospitalization decreases are critical to helping people maintain community tenure, since people on CTTs are often high users of inpatient services. There are a few exceptions. Although year five shows a decrease over time, it has the highest average days due to three people using between 113 to 201 inpatient mental health days between 2012 and 2014. It also has a small sample size. Additionally, years eight and nine show an increase in average days over time. Respectively, each year three people had over 100 inpatient mental health days.

"[I need to keep] taking my medicine…. Before CTT, I quit taking my medicine… I do not want to go back to the hospital… and CTT lets me take my medicine on my own and I am not going to let them down."

-Lillie

Current Interventions and Future Plans

Reducing hospital utilization and increasing community-based diversions are ongoing objectives for all teams. In 2014, two CTT providers with six total teams completed a pay for performance (P4P) initiative that targeted inpatient utilization. A 20% withhold was established by Community Care on the regular CTT fee/rate. By design, the initiative was structured with tiered earnings (with the ability to earn an extra 10%) and was connected to reducing the average inpatient utilization per person per year to a predetermined benchmark. Both providers decreased average inpatient cost per person per year (28% and 64%) from the baseline year (2012). Future P4P initiatives are being implemented for all teams to reduce inpatient utilization and increase employment for people who use CTT services.

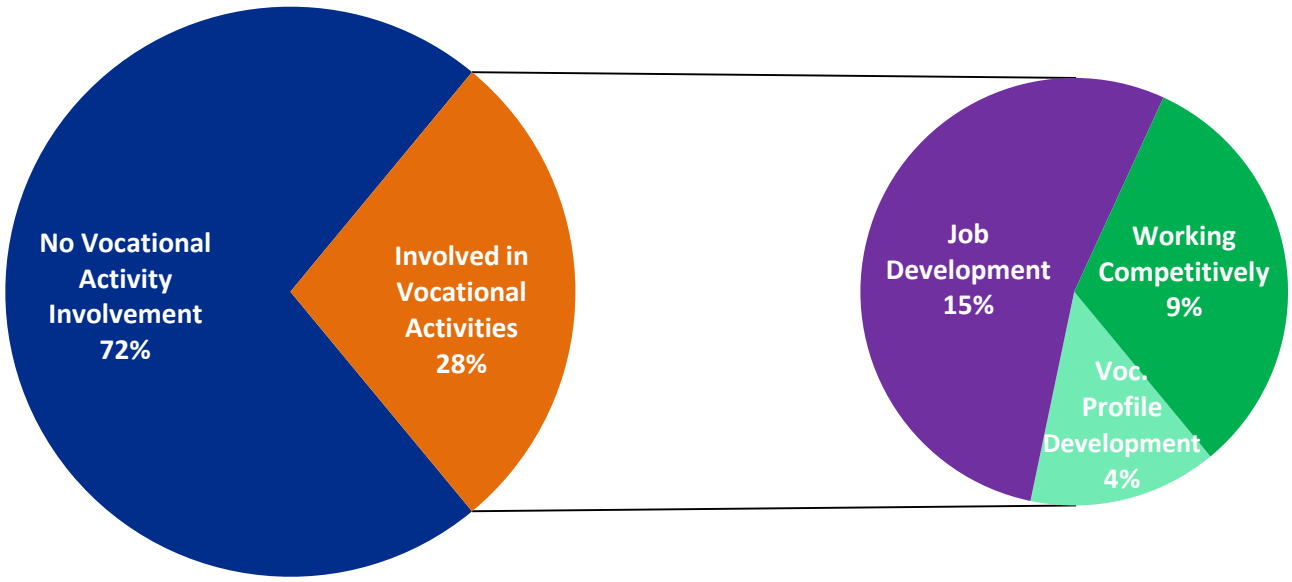
Supportive Employment

Increase in Competitive Employment

Background and Results

On average, the ACT model expects 40% of a team's caseload to be involved in vocational services. Figure 1 below outlines the percent of individuals involved in vocational services across teams, by stage, at the end of 2014.

Figure 1. Employment Stages for People on CTTs, 2014 (N=782)



CTT's had an average of 9% of the people working competitively in 2014. There was no change in the competitive employment percentage from 2013 to 2014. This may be due to the continued concern people have of losing Medicaid insurance/benefits if employed. The current Allegheny County benchmark for people on teams in competitive employment remains unchanged at 15%. The teams continue to work towards this goal. Of note, the total involvement in vocational activities increased by 3% from 25% in 2013 to 28% in 2014.

Current Interventions and Future Plans

AHCI continued to provide technical assistance and education to CTT staff in 2014 by focusing on increasing competency and fidelity in supported employment (SE), specifically in the areas of SE documentation and utilizing outcomes data in field supervision. Additionally, all employment specialists received advanced training in SE documentation and job development/employer relationship building. AHCI also developed a web-based employment component as part of the existing CTT application to enhance the tracking of employment data.

"I never thought I would get back to waiting tables again… I love it… the people I work with bring me home every night I work."

-Shelley

In 2015, quarterly trainings continue to be offered for all new and existing staff for individual placement and support/supported employment, benefits 101, supported employment documentation, and job development/employer relations. Also, a P4P initiative has been implemented to incentivize teams to increase the number of people who are competitively employed. The goal is to have at least 15% of people on CTTs be competitively employed for at least 30 days during CY 2015.

Housing

Increase in Community-Based Housing

Background and Results

A critical component of CTT services is assisting people in their search for and retention of community-based independent housing*. 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 in a residential or congregate living program. AHCI, Community Care, OBH, and the CTT providers are committed to increasing the overall percentage of individuals living independently and improving housing tenure. Figure 2 highlights the percentage of people by the type of housing they were living in at the end of 2014.

Figure 2. Housing Information for People on CTTs, 2014 (N=846)

66% **Living Independently**
Living with family (16%); Own/Rent Apartment, Room or House (47%); Someone Else's Apartment, Room or House (3%)

27% **Residential Program**
Personal Care Home (15%); MH/SUD Supervised (8%); Residential Treatment (4%)

6% **Institutional Setting**
This includes nursing homes, hospitals, and jail/prison settings

1% **Other**
This includes shelters, street and outdoor settings

**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.*

The majority of people (66%) were living independently in the community at the end of 2014, with most (47%) living in their own apartment or home. This is a 4% increase of people living independently compared to 2013. Of those living independently, 51% reside within the City of Pittsburgh.

"I can cook when I want to cook, go out when I want to go out… not be behind those closed doors, [I] did not like being locked up… I have freedom and it feels good."

-Lillie

By the end of 2014, 37 people receiving CTT services moved from non-independent living to living independently in the community, maintaining an average of 175 days in independent housing.

Current Interventions and Future Plans

Throughout 2014, AHCI continued to provide technical assistance and education to CTT staff on how to properly assess and develop housing plans for people on CTTs. A Community Living Skills Assessment Tool is completed in order to assess a broad range of independent living skills and to identify the support necessary for a person to successfully transition and maintain independent housing.

In 2015, quarterly trainings continue to provide existing technical assistance support. A new training will focus on psychiatric rehabilitation services. This training will utilize motivational interviewing and person-centered planning to teach CTT staff to encourage self-determination and empowerment, connect people to needed supports, and provide direct skills training to maximize independence.

Integrated Dual Disorder Treatment

Increase in Assessment & Treatment for Dual Disorders

Background and Results

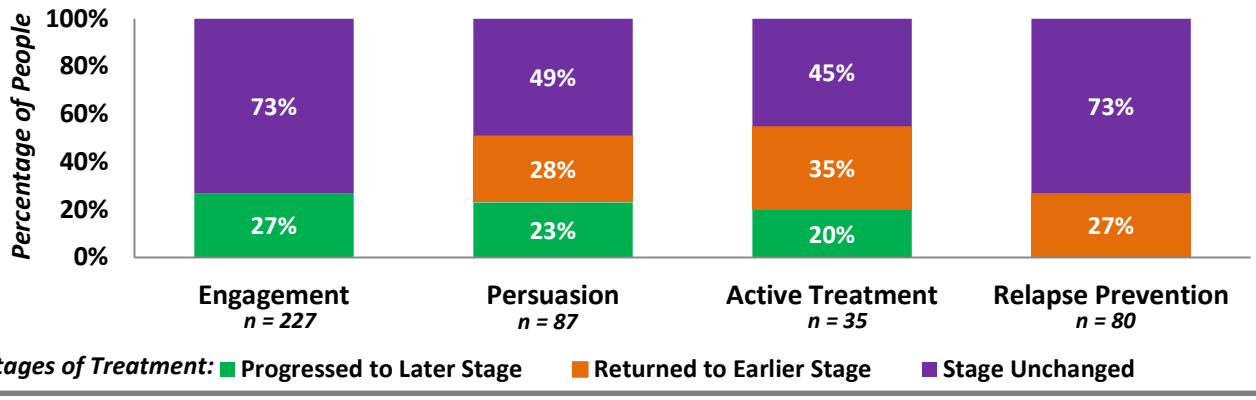
About 50% of individuals on teams with serious mental illness are also affected by substance use disorders. The number of individuals with substance use disorders on each Allegheny County team ranges from 36% to 56%. To adequately address the issues of substance use, CTTs have applied the evidence-based practice of integrated dual disorder treatment (IDDT) to 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 2.

Table 2. 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, 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.

Figure 3 provides information on the percent of individuals in each stage of treatment as of December 31, 2014. Of those in engagement and persuasion stages, 50% moved to a later stage of treatment; of those in the active treatment stage, 20% progressed to a later stage and 45% remained in this stage; and 73% of those in the relapse prevention stage remained in this stage without relapsing. Fluctuations in stage movements are expected as people are continuously working on their recovery.

Figure 3. Substance Use Stage of Treatment for People on CTTs, 2014 (N=429)



Current Interventions and Future Plans

Throughout 2014, AHCI continued to provide technical assistance and education to CTT staff focusing on increased competency and fidelity to IDDT, specifically in the areas of documentation and practice supervision.

In 2015, quarterly trainings continue to be offered for new and existing staff on IDDT. In addition, dual disorder specialists are being provided with and educated on the use of a new Dual Disorder Assessment Tool, which will properly assess the interplay between the individual's mental health and substance use disorder, along with identifying stage-appropriate clinical interventions.

"I couldn't do it no more… there had to be another way of life... I am sober for 13 years."

-Shelley

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

Wellness

Integration of Physical & Behavioral Health

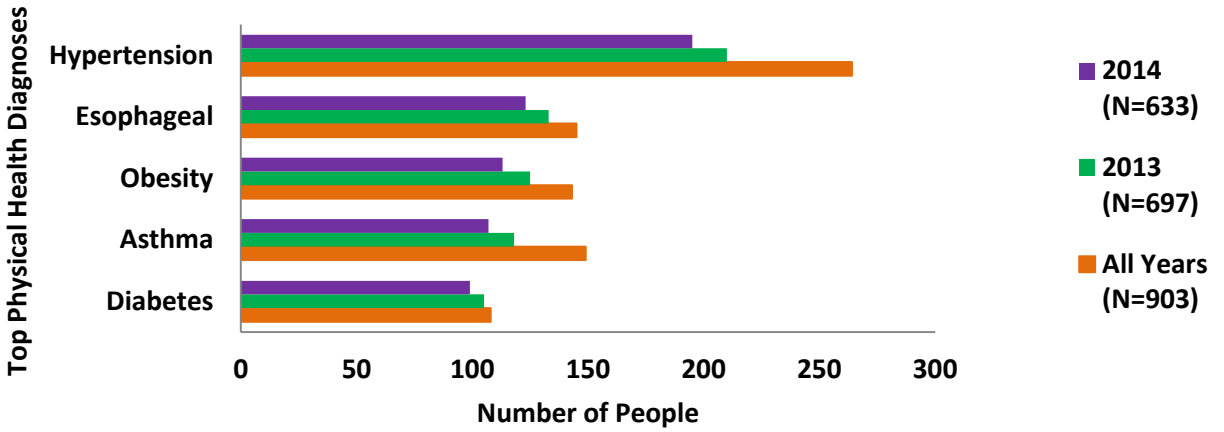
Background and Results

Research finds that people with serious mental illness die, on average, 8-25 years earlier than the general population. People with a mental illness are also more likely to smoke and be obese, which puts them at a greater risk for other chronic health conditions such as hypertension (high blood pressure) and diabetes.

In 2014, the average age of death for people on Allegheny County CTTs was 52 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 is currently 74%, a 4% decrease from 78% in 2013. Among the people with a physical health comorbidity, 71% have at least two physical health diagnoses. Behavioral health practitioners, including CTT staff, continue to be mindful of physical health diagnoses. Figure 4 below outlines the five most common physical health diagnoses for people on Allegheny County CTTs. This remains unchanged from 2013.

Figure 4. Five Most Common Physical Health Diagnoses for People on CTTs, 2001-2014*



**The counts represent distinct people within the given year. One person can have multiple diagnoses in a given year.*

Current Interventions and Future Plans

At the end of 2014, about 78% of people receiving CTT services were also engaged in Wellness Coaching[2] and about 52% of those engaged set a wellness goal. Moreover, about 70% of individuals had evidence of at least two communications with a physical health provider. Teams continue to assist and coordinate yearly physicals and dental appointments, as well as host various wellness groups.

In 2015, AHCI, Community Care and OBH worked with CTT providers to explore the collection of wellness data, such as smoking cessation and specialty physical health provider contacts. AHCI, Community Care and OBH continue to provide technical assistance on this outcome.

"Every time I go to the doctor's they say to me 'You are so healthy [compared to before], I am not sure what to do with you'… I lost 60 pounds… I feel good… everything is going good for me."

-Lillie

[2]*Wellness Coaching is designed to help people identify and pursue a change they would like to make in one of the eight dimensions of wellness, with emphasis in the physical wellness domain. For more information please visit http://www.integration.samhsa.gov/pbhci-learning-community/ peer_ wellness_ coaching_ supervisor_ manual.pdf.*

Conclusion

Review of 2014

CTTs continued to make positive progress in many areas throughout 2014. Data continues to show that the longer someone is on a CTT, the fewer psychiatric hospitalization days s/he will experience. Additionally, evidence suggests P4P initiatives also contributed to less average inpatient utilization per person for the year. For the third consecutive year, movement towards community-based independent housing increased to its highest mark of 66%. People with co-occurring mental health and substance use disorders were also moving forward in their stages of treatment. Twenty-five percent of people progressed to a later stage of treatment compared to 20% in 2013. Lastly, more awareness and interventions are targeting the physical and behavioral health integration needs of people on CTTs. More than 75% of the people on CTTs have been engaged in Wellness Coaching.

The ACT model benchmark for independent living (80%) was not met in 2014. Community Care, OBH and AHCI are committed to providing continued training and technical assistance to the teams. To this end, attention will be focused on empowering people in treatment to live and function independently. Finding affordable housing, providing the appropriate supports and living in a person's preferred area of choice may delay this housing shift. The implementation of the psychiatric rehabilitation services training is expected to provide staff with more resources to help people transition into community-based housing.

Additionally, the ACT benchmark for vocational activity (40%) was also not met. Efforts will be put forth to increase vocational activity among people on CTTs and search for and retain competitive employment opportunities. However, with employment, there is a concern of losing insurance and other support benefits. As such, some people do not pursue employment opportunities. In addition to more benefit education and counseling, a pay for performance initiative has also been implemented to incentivize teams to increase the number of people competitively employed.

"You shouldn't steer away from joy, happiness, and cheer and that is how I feel… not every day, but this is the healthiest I have been in my life… a lot has to do with CTT coaching me and believing in me."

-Shelley

AHCI

Allegheny HealthChoices • Inc

BEHAVIORAL HEALTH INNOVATION

444 Liberty Avenue, Suite 240 | Pittsburgh, PA 15222 | www.ahci.org | 412-325-1100

AHCI's mission is to assure equitable access to quality, cost-effective behavioral health care 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.