Allegheny County Community Treatment Teams: A 2013 Update on Key Outcomes

AHCI

Allegheny HealthChoices, Inc.

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 that have not benefitted from traditional outpatient services live in the community. In 2013, nine CTTs served approximately 900 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; and
- Increase in assessment and treatment of dual disorders.

Additional local outcomes include:

- Increase in attention to wellness; and
- Increase in feelings of social connectedness.

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 2013, related current interventions and future plans, and quotes of hope and recovery from people receiving CTT services.

"There is not one member on the team I do not like, I like them all… they are very real… this is not just another job to them."
-Lucy

"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 serving all team members and provide a variety of services on a 24/7 basis. Services include:

- Outreach/case management;
- psychiatric/counseling services;
- housing support;
- linkage to healthcare providers;
- peer support;
- psychoeducation for natural supports;
- dual disorder treatment;
- crisis assessment, intervention and diversion services;
- development of independent living skills;
- and hospital/criminal justice liaison services.

ACT teams provide person-centered and 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 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.

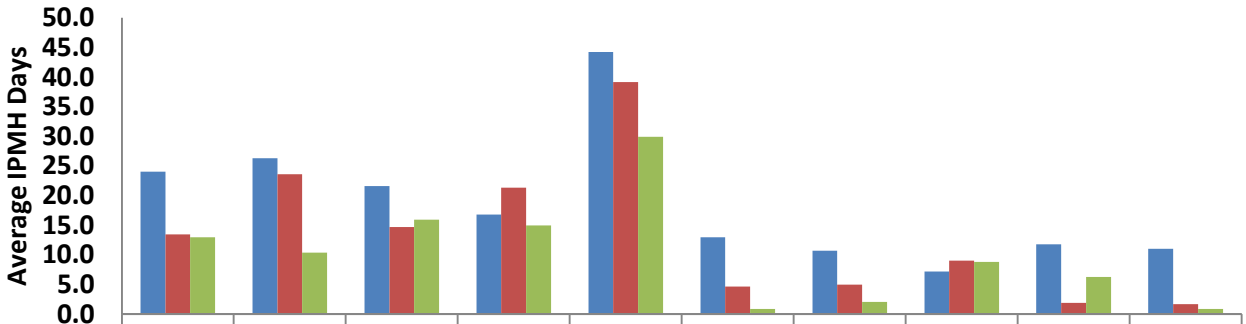
Inpatient Mental Health

Decrease in Psychiatric Hospitalizations

Background and Results

Some of the strongest ACT model evidence is related to 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. Figure 1 shows average inpatient mental health days per year per person from 2011 to 2013, based on the length of time on a team as of 2011.

Figure 1. Average IPMH Days for 2011 Team Tenure Cohort, 2011 - 2013*



	< 1 Year (n=91)	1 Year (n=104)	2 Years (n=89)	3 Years (n=60)	4 Years (n=24)	5 Years (n=23)	6 Years (n=29)	7 Years (n=44)	8 Years (n=49)	9 Years (n=21)
2011	24.1	26.3	21.6	16.8	44.3	13.0	10.7	7.2	11.8	11.1
2012	13.5	23.6	14.7	21.4	39.2	4.7	5.0	9.0	1.9	1.7
2013	13.0	10.4	15.9	15.0	29.9	0.9	2.1	8.8	6.3	0.9

Team Tenure as of 2011

**This analysis is based on a cohort of 535 individuals who received CTT services continuously from 2011 to 2013. There was one individual who was on a team for 10 years as of 2011 but did not have a hospitalization during this time period.*

As Figure 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 the success of the ACT model, since people on CTTs are often high users of inpatient services. The cohort of people with 4 years on a team as of 2011 had several high users of inpatient services (75% were in Mayview State Hospital at some time prior to CTT), but still improved their average inpatient days over time.

"I was in the hospital for a long time… but once I moved back with my daughter… the team was there for me."
-Lucy

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. Use of WPIC's re:solve crisis center in 2013 has remained unchanged from 2012 at 25%.[2]

Current Interventions and Future Plans

Reducing hospital utilization and increasing diversions are ongoing objectives for all teams. Various stakeholders conduct ACT model training and technical assistance on a continuous basis. Additionally, teams continue to use reports and other provider-specific interventions specific to this outcome.

Additionally, Community Care, OBH and AHCI engaged two CTT providers in discussions to explore the use of an alternative payment arrangement. This was instituted in 2014. Providers can receive bonus payments for reducing the average inpatient mental health payment per person for the year.

[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.

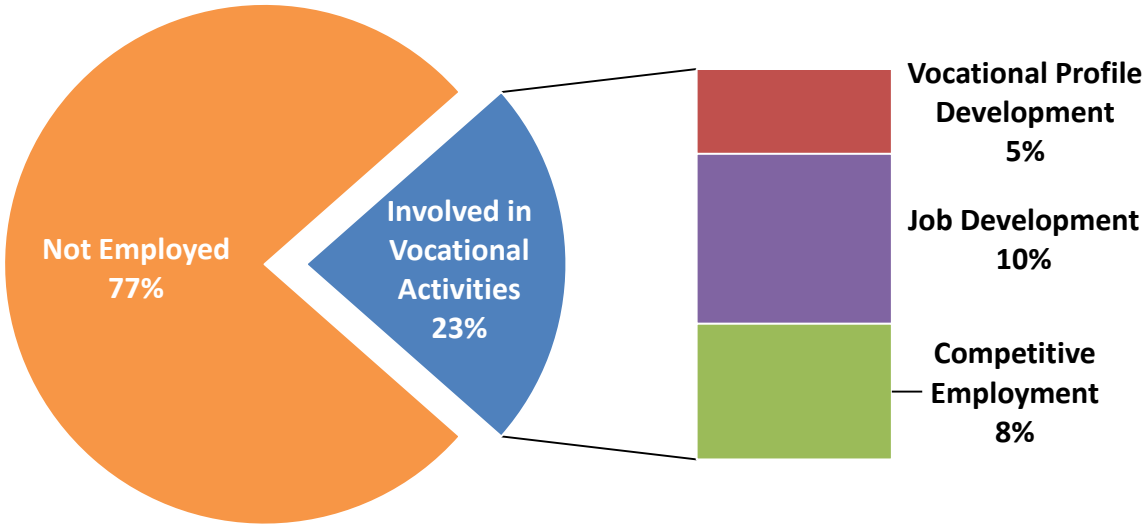
Supportive Employment

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 2 below outlines the percent of individuals involved in vocational services across teams, by stage, at the end of 2013.

Figure 2. Employment Stages for People on CTTs, 2013



CTT's had an average of 8% of the people working competitively in 2013; this is a slight decrease from 9% in 2012. Although there is a slight decrease in competitive employment, the total involvement in vocational activities increased by 4% from 2012. The current Allegheny County benchmark for people on teams in competitive employment is 15%. The teams continue to work towards this goal.

Current Interventions and Future Plans

Throughout 2013, AHCI continued to provide technical assistance and education to CTT staff focusing on increased competency and fidelity in individual placement and support/supported employment, specifically in the areas of documentation and utilizing outcomes data in field supervision.

"The team helped me practice doing interviews and sat me down on how to get this job… they worked with me for about a year. It really does good for me because when I did not have a job I was down in the dumps and always trying to find something to do, feeling depressed… now I am glad I have this job that I can put my mind to this and have something to do."
-Theresa

In 2014, quarterly trainings will continue to be offered for new and existing staff for individual placement and support/supported employment and benefits 101, along with additional trainings in job development/employer relations and supportive employment documentation.

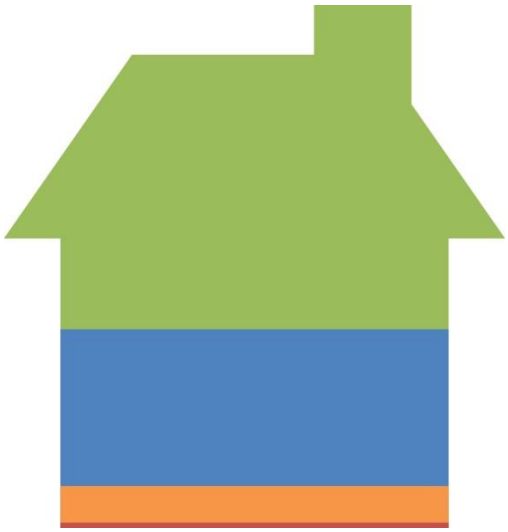
Housing

Increase in Community-Based Housing

Background and Results

A critical component of CTT services is assisting people in their search and retention in 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 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 improving tenure. Figure 3 highlights the percentage of people and where they lived at the end of 2013 by housing categories.

Figure 3. Housing Information for People on CTTs, 2013



62% **Living Independently**
Living with family (15%); Own/Rent Apartment, Room or House (45%); Someone Else's Apartment, Room or House (2%)

30% **Residential Program**
Personal Care Home (12.5%); MH/DA Supervised (12%); Residential Treatment (5.5%)

7% **Institutional Setting**
This collectively includes nursing homes, hospitals, and jail/prison settings

1% **Other**
This collectively 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 (62%) were living independently in the community at the end of 2013, with most (45%) living in their own apartment or home. This is an improvement from 56% and 40% in 2012, respectively.

By the end of 2013, a total of 19% of the CTT population moved from non-independent living into living independently in the community, maintaining an average of 174 days in independent housing.

Current Interventions and Future Plans

Throughout 2013, 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 in order to successfully transition and maintain independent housing.

In 2014, quarterly trainings continue to be 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.

"[The team] kept me motivated… reminded me it takes time and [I] need to work towards it, and then I was blessed with my apartment… it's like a new atmosphere."
-Andrew

Integrated Dual Disorder Treatment

Increase in Assessment & Treatment for Dual Disorders

Background and Results

About 50% of individuals on the 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 40% to 58%. 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.

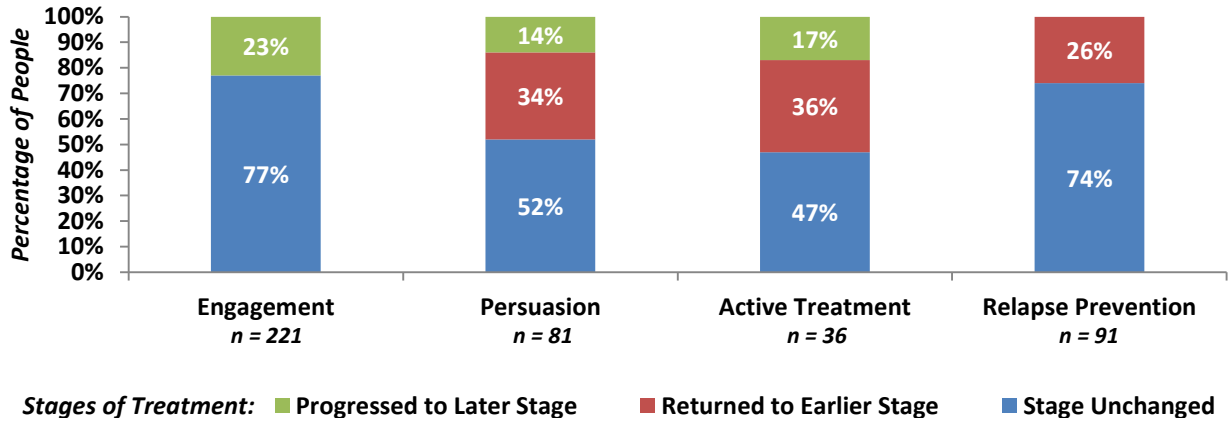
By December 31, 2013, 89.5% (443) of people with a co-occurring mental health and substance use disorder diagnosis were assessed for IDDT. This is an increase of 19.8% (133 people) compared to 2012. Figure 4 provides information on the percent of individuals in each stage of treatment between January 1, 2011 and December 31, 2013.

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

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

Figure 4. Substance Use Stage of Treatment for People on CTTs, 2011-2013



Of those in engagement and persuasion stages, 37% moved to a later stage of treatment; of those in the active treatment stage, 17% progressed to a later stage and 47% remained in this stage; and 74% 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.

Current Interventions and Future Plans

Throughout 2013, AHCI continued to provide technical assistance and education to CTT staff focusing on increased competency and fidelity in IDDT, specifically in the areas of IDDT documentation, and field supervision on stage-appropriate interventions.

In 2014, quarterly trainings will continue to be offered for new and existing staff for IDDT and motivational interviewing, along with additional trainings in advanced motivational interviewing and IDDT documentation.

"Now that I look back on it … I have never had this much clean time [of 4 years] as I do now."
-Lucy

Wellness

Integration of Physical & Behavioral Health

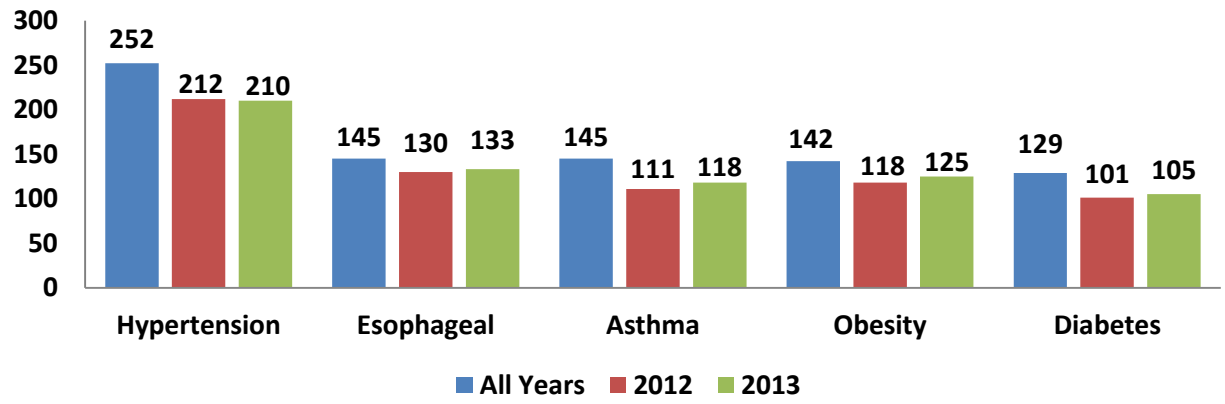
Background and Results

While life expectancy for the general population may be between 75 and 80 years, research shows that people with serious mental illness die, on average, 8 - 25 years earlier. 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.

The average age of death for people on CTTs is consistent with the life expectancy disparity noted above: in 2013, 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 is currently 78%, a slight decrease from 80% in 2012. Behavioral health practitioners, including CTT staff, continue to be aware and mindful of physical health diagnoses. Figure 5 below outlines the five most common physical health diagnoses for Allegheny County CTT consumers, which remain unchanged from 2012.

Figure 5. Five Most Common Physical Health Diagnoses for People on CTTs, 2001- 2013*



**The counts represent distinct people.*

Current Interventions and Future Plans

Teams continue to assist and coordinate yearly physicals and dental appointments as well as host various wellness groups.

"I am more into food that is healthy… I eat a lot of turkey and fish."
-Andrew

Additionally, in 2013, all team leaders, peers and nurses were trained in Wellness Coaching and are currently participating in a learning collaborative. Through Wellness Coaching, all teams are expected to engage 80% of their caseload; help set up individual wellness goals; and initiate individual physical health coordination efforts by December 31, 2014. In an effort to meet these targets, AHCI and Community Care continue to provide technical assistance on this initiative and have recently reviewed team-individualized wellness quality improvement plans. Wellness outcomes and plans are to be revisited on a quarterly basis.

Social Connectedness

Feeling Connected to the Community

Background and Results

In 2013, AHCI, Allegheny County and Community Care used the Social Connectedness section in the National Outcomes Measurement System (NOMS) to measure people's sense of belonging to a community, and social inclusion beyond what is provided by the team staff.[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 Figure 6.

Figure 6. Aggregate Social Connectedness Results for People on CTTs, 2014

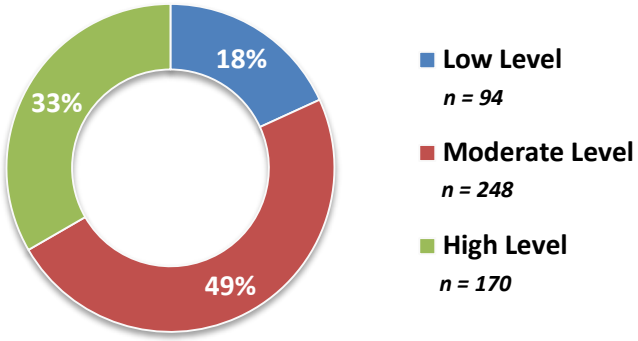


Figure 6 shows that 82% (418) of people, on average, have moderate to high levels of social connectedness. This is a 2% increase from 2013. Nonetheless, 18% (94) of people remain feeling disengaged from various aspects of the community.

Current Interventions and Future Plans

This is the second time this outcome has been collected in Allegheny County. As previously used methods to address social connectedness are evaluated, teams proactively explore utilizing other new group and individualized interventions.

Recently, AHCI developed a project to analyze people's Social Connectedness. This allows people to use their personal cell phones via text messaging or an email account to track their perception of social connectedness. The message that is sent reads, "On a scale of 1 (low) to 10 (high), how connected did you feel today?" People will have the opportunity to monitor their ratings using the web-based application. Through this website, participants can give permission to share their ratings with their behavioral healthcare provider, including service coordinators, therapists, and psychiatrists. By sharing ratings with the behavioral healthcare provider of their choice, together they can work to address ways to improve their social connectedness in their community.

"I am very cautious of the word friend… it has to be someone I can talk to and they can talk to me… I usually go out with my granddad and [we] go buy jazz CDs together… There are a lot of guys like me who are mentally ill and their families have abandoned them… I am blessed to have my mom and family in my corner."
-Andrew

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

Conclusion & Moving Forward

Review of 2013 and Planning for 2014

CTTs continue to show progress in various key outcomes throughout 2013:

- *Inpatient Mental Health*: Findings continue to show, on average, the longer an individual is on a team, the fewer psychiatric hospitalization days they experience.
- *Employment*: Although there was a slight decrease in competitive employment, there was an overall 4% increase in individuals who are participating in vocational service activities. This is a noted area for improvement where additional AHCI technical assistance has been implemented.
- *Housing*: Individuals residing in community-based independent housing have increased from 56% in 2012 to 62% in 2013.
- *Integrated Dual Disorders Treatment*: About 90% of individuals with a co-occurring mental health/substance use disorder diagnosis have been assessed for IDDT. This is an increase of almost 20% compared to 2012.

Allegheny County continues to monitor various local outcomes:

- *Wellness*: As the teams continue to implement Wellness Coaching, wellness data elements are being collected throughout the learning collaborative and will continue to be collected going forward.
- *Social Connectedness*: Teams continue to explore various interventions that address and help enhance one's social inclusion outside of services. Recently, teams have started to embrace the Social Connectedness Project with the people they serve.

Community Care, OBH and AHCI are committed to providing continued training and technical assistance to the teams throughout 2014. Specific areas of attention will be focused on helping people live and function independently; searching and retaining competitive employment opportunities; and continuing to provide resources to help increase the quality of life for individuals so they can live meaningful lives in the community.

Additionally, a CTT dashboard went live in the third quarter of 2013 and is being utilized by all teams, Community Care, OBH and AHCI staff members. This allows teams and stakeholders to monitor and utilize their data more efficiently via a web-based portal. The dashboard has been serving as a vital tool for all teams as they continue to work towards improving ACT and local outcome benchmarks. Teams are currently exploring ways to incorporate this tool into supervision and clinical guidance.

"Take your time and think of what you're doing… try not to hurt yourself… it is not worth it…. keep on going forward."
-Theresa

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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.