

VALUEOPTIONS CT
IMPACT OF INTENSIVE CARE MANAGEMENT PROGRAM; Youth
QUALITY IMPROVEMENT ACTIVITY (QIA)

Date: March 12, 2013

Goal:

The Impact of the Intensive Care Management Program is a study designed to assess the impact of having an Intensive Care Manager (ICM) and/or a Peer Services (PS) employee involved in the care of a Medicaid (HUSKY) youth. The primary measure for this study is a comparison of the number and percentage of days spent in the community during the six (6) months prior to the assignment to an ICM and/or a Peer and then for the six month period post discharge from the ICM And/or Peer assignment. The hypothesis going into the project was that members would have more time in the community following their discharge from ICM and/or PS assignment than they did in the six (6) months prior to involvement of the ICM and/or Peer in their treatment.

Background of the Quality Improvement Activity:

At the time of the inception of the original contract between CT ValueOptions and the Departments of Children and Families (DCF) and Social Services (DSS), an Intensive Case Management (ICM) program was developed and implemented based on contractual requirements. Because more traditional face-to-face ICM programs were already in existence within the state agencies, the CT ValueOptions program was specifically designed to decrease the acute inpatient length of stay by *facilitating referral to and placement in appropriate confined settings for high risk members*. This is achieved by working directly with providers and state agency personnel. The CT model assigned the ICM to work with the involved providers and agency workers to address any barriers that were prohibiting the member from accessing the necessary level of care.

Additionally, Peers were often assigned to the case to work with the families of high risk members to address any family issues that might be interfering with the member receiving necessary services. Peers are individuals who understand behavioral health and/or substance abuse through lived experience, either personally, or with a family member who has received those services. The role of the Peer is to:

- Assist members with finding an appropriate provider
- Explain mental health and substance use services
- Connect members to community resources and supports
- Help members apply for programs
- Inform members of their rights and responsibilities
- Encourage members to focus on their strengths and abilities
- Teach self-advocacy skills to empower the member/family
- Support members & families to engage in treatment
- Assist ER diversion to a more appropriate response
- Ease member's transition to home from out of home placement

In April of 2011, with the inception of the new contract that added the Department of Mental Health and Addiction Services (DMHAS) to the CT Behavioral Health Partnership, consideration was given to changing the existing structure of the ICM program to allow for more direct contact between ICMs and members. However, while that decision was being considered, it was decided that it would be useful to study the impact of the existing ICM program on the outcome of the members involved in the program before making any substantial changes. As a result of discussions between the Departments and ValueOptions, it was decided to use "time in community" as a measure of the impact of the ICM program.

Methodology:

Youth Sample Criteria:

In order to be eligible for inclusion in this study the member must be

1. A CT Medicaid youth between the ages of 0 and <18
2. Discharged from an ICM and/or a Peer assignment during the time period from 1/1/12 to 6/30/12
3. Assigned to an ICM and/or a Peer for at least 14 days
4. Assigned to an ICM for 235 days or less or assigned to a Peer for 100 days or less
5. Not have a gap in eligibility of more than 45 days during either the 6 months prior to or post the ICM and/or PS assignment

Additionally:

6. Peer assignments must have an authorization for care in the system so that an analysis of days in community can be completed for these members

Time In Community Measure Description

The time in community measure involves the division of levels of care available to the Medicaid population into two categories; in a confined setting or in the community (or outside of a confined care setting). The total number of days in the measurement period is calculated and then the number of days in a confined setting of each child being evaluated is calculated. The difference between each of these measures, the time in community, is calculated for each child. An average for the time in confined settings and an average for time in the community are calculated for both the period of time prior to the ICM and/or Peer assignment. Additionally, in order to examine the differences in the types of confined settings of the youth before and after assignment, subtotals of the time spent in different types of confined settings are calculated.

ValueOptions CT Eligibility Criteria for ICM Assignment- Children/Adolescents:

To be eligible for ICM [children/adolescents] at least one of the following must exist:

- Recipient of 4 or more admissions to the same or different level of care within a six month period
- Recipient of specialized behavioral health care in an out-of-state hospital
- A member age 5 and under with a recent admission to a psychiatric hospital
- A failed out-of-home placement(s) or significant disruption of a foster placement during the last six months
- Multiple state agency involvement necessitating care coordination
- High use of emergency room, and emergency services such as a mobile crisis team, and a lack of follow through with treatment which may result in the need for 24-hour level of behavioral health care
- Evidence of behavioral health diagnosis or condition where the member has a persistent or otherwise complex medical condition and is at greater risk because of the co-existing behavioral health diagnosis or condition. These members will be assigned to the CHN ICM to ensure adequate coordination of medical and behavioral health services.
- Demonstrated, documented, and consistent non-engagement with outpatient and/or community-based services (behavioral health or medical) for a period of at least six months, placing the member at risk for hospitalization
- Discharge from a long-term placement or state facility with 30-day notification by the facility

Discharge from ICM Criteria:

- A member's individual needs are transferred to a community-based resource that has proven the ability to support the child's goals
- No more than one acute episode of care during a 90-day period where the acute episode is no longer than three days in duration
- 90-day period of time "detox-free" for members with a substance abuse diagnosis
- Member/family declines ICM services or opts out
- Member is no longer Medicaid eligible

Demographic Information: Youth Study Cohort-

ICM/PS Internal Assignments	
	Cohort
Total Cases	329
Unique Members	298
ICM only Cases	158
Females	76
Males	82
Peer Services (PS) only Cases	119
Females	52
Males	67
Both ICM and PS Case	25
Females	12
Males	13
Average Age ICM and PS (entire cohort)	12.41
Average Age Female w/ either ICM or PS	13.34
Average Age Male w/ either ICM or PS	11.61
Average Age ICM only	12.32
Average Age ICM only Female	12.93
Average Age ICM only Male	11.76
Average Age PS only	11.91
Average Age PS Female only	13.46
Average Age PS Male only	10.70
Average Age both ICM and PS	13.85
Average Age Female both ICM and PS	14.32
Average Age Male both ICM and PS	13.41

More males than females were assigned an ICM or a peer and the males assigned to an ICM or a peer were younger than the females assigned.

Average Length of Stay in Assignment

Average Length of Stay in Assignment	
ALOS ICM and PS (entire cohort)	80.59 days
ALOS ICM only	109.47 days
ALOS ICM only Females	104.91 days
ALOS ICM only Males	113.70 days
ALOS PS only	47.55 days
ALOS PS only Females	43.54 days
ALOS PS only Males	50.67 days

Males were assigned to both an ICM and a Peer for a longer period of time than were females.

DCF vs. Non-DCF Involvement of Youth in Cohort

Number of DCF Cases (entire cohort)	128
Number of Non-DCF Cases (entire cohort)	201
Number of ICM only DCF Cases	77
Number of ICM only Non-DCF Cases	81
Number of PS only DCF Cases	28
Number of PS only Non-DCF Cases	91
Number of both ICM and PS DCF Cases	10
Number of both ICM and PS Non-DCF Cases	15

More Non-DCF than DCF-involved youth were assigned to an ICM or a peer during the study period. However, when membership is considered, the likelihood of a DCF youth being assigned an ICM or a peer is significantly higher.

Findings:

Time in Community Prior to and Post ICM OR Peer Assignment

<u>Prior</u>	<u>ICM</u>	<u>PS</u>	<u>Post</u>	<u>ICM</u>	<u>PS</u>
Total Internal Assignments	158	119	Total Internal Assignments	158	119
Total Possible Days in Community	28,914	21,777	Total Possible Days in Community	28,914	21,777
Total Days in 24 Hour Setting	7,137	2,419	Total Days in 24 Hour Setting	8,465	1,706
IPF Days	4,501 (254)	954 (90)	IPF Days	2,404 (62)	562 (28)
Solnit Days	1,422 (20)	59 (1)	Solnit Days	1,722 (15)	179 (2)
Non Solnit Days	3,079 (234)	895 (89)	Non Solnit Days	682 (47)	383 (26)
IPD Days	0	0	IPD Days	0	0
IPM Days	25 (10)	7 (5)	IPM Days	4 (3)	3 (2)
PRTF Days	1,143 (18)	228 (3)	PRTF Days	1,810 (20)	480 (5)
RTC Days	1,468 (16)	1,230 (8)	RTC Days	4,247 (30)	661 (5)
Total Days in Community	21,777	19,358	Total Days in Community	20,449	20,071
% of Days in Community	75.3%	88.9%	% of Days in Community	70.7%	92.2%
Group Home Days	1,049 (9)	0	Group Home Days	812 (9)	0 (0)

Please Note: Numbers in parentheses are the numbers of episodes of care that contribute to the number of days

% Change between Prior and Post

	<u>ICM</u>	<u>PS</u>
Total Days in 24 Hour Setting	18.6%	-29.5%
IPF Days	-46.6%	-41.1%
Solnit Days	21.1%	203.4%
Non Solnit Days	-77.8%	-57.2%
PRTF Days	58.4%	110.5%
RTC Days	189.3%	-46.3%
Days in Community	-6.1%	3.7%

Analysis of the Findings

Youth with an ICM assignment had **18.6% more days in a confined setting** during the 6 months following assignment than they did before ICM assignment. They spent:

- 77.8% **fewer days in Acute Care Inpatient** facilities in the 6 months following assignment and
- 21.1% **more days in Solnit** (State Hospital for CT youth) in the 6 months following assignment
- 58.4% **more days in Psychiatric Residential Treatment Facilities (PRTF)** in the 6 months following assignment
- 189.3% **more days in Residential Treatment Care** in the 6 months following assignment

Youth with a Peer assignment had **29.5% fewer days in a confined setting** during the 6 months following assignment than they did before their Peer assignment. They spent:

- 57.2% **fewer days in Acute Care Inpatient** facilities in the 6 months following assignment and
- 203.4% **more days in Solnit** in the 6 months following assignment
- 110.5% **more days in PRTF** in the 6 months following assignment
- 46.3% **fewer days in RTC** in the 6 months following assignment

Time in Community Prior to and Post ICM AND Peer Assignment

<u>Prior</u>	<u>ICM and PS</u>	<u>Post</u>	<u>ICM and PS</u>
Total Internal Assignments	25	Total Internal Assignments	25
Total Possible Days in Community	4,575	Total Possible Days in Community	4,575
Total Days in 24 Hour Setting	387	Total Days in 24 Hour Setting	1,062
IPF Days	387 (33)	IPF Days	259 (20)
Solnit Days	0	Solnit Days	19 (1)
Non Solnit Days	387 (33)	Non Solnit Days	240 (19)
IPD Days	0	IPD Days	4 (1)
IPM Days	0	IPM Days	0
PRTF Days	0	PRTF Days	250 (3)
RTC Days	0	RTC Days	549 (3)
Total Days in Community	4,188	Total Days in Community	3,513
% of Days in Community	91.5%	% of Days in Community	76.8%
Group Home Days	103 (1)	Group Home Days	160 (2)

% Change between Prior and Post

	ICM and PS
Total Days in 24 Hour Setting	174.4%
IPF Days	-33.1%
Solnit Days	NA*
Non Solnit Days	-38.0%
PRTF Days	NA*
RTC Days	NA*
Days in Community	-16.1%

* Percentage change cannot be calculated due to the existence of 0 days in the denominator.

Analysis of the Findings

Members with an ICM and Peer assignment had **174.4% more days in a confined setting** during the 6 months following assignment than they did before ICM assignment. They spent:

- **38.0% fewer days in Acute Care Inpatient** facilities in the 6 months following assignment and
- **More days in Solnit (State Hospital for CT youth) in the 6 months following assignment**
- **More days in Psychiatric Residential Treatment Facilities (PRTF) in the 6 months following assignment**
- **More days in Residential Treatment Care** in the 6 months following assignment

Conclusions: Youth assigned to an ICM spent more time in a confined setting six months post their assignment as compared to the six months prior to their assignment. Data on the specific levels of care indicate that youth spent less time in acute care community hospitals, but more time in Solnit post their ICM assignment. Further, youth assigned to an ICM spent more time post their assignment in the PRTF and RTC levels of care.

Conversely, youth assigned to a Peer spent fewer days in a confined setting six months post their assignment as compared to the six month prior to their assignment. Similar to the data on youth assigned to an ICM, youth assigned to Peers spent less time in acute care community hospitals, but more time in Solnit post their Peer assignment. While youth assigned to a Peer were more likely to spend time in PRTF post their Peer assignment, they were also less likely to spend time in RTC.

While the sample is relatively small for youth assigned to both an ICM and a Peer (N=25), the outcomes are similar for those assigned to an ICM only. Youth spent more time in confined settings post their ICM and Peer assignment compared to prior, although fewer time was spent in acute care community hospitals.

These results indicate that ICMs and/or Peers were able to successfully facilitate the movement of youth to appropriate levels of care where there are typically delays in admission.