Mayview Regional Service Area Plan
Quality Improvement and Outcomes (QIO) Committee
December 2009 Report for Review

Overview

Mayview State Hospital closed in December 2008. Many of the individuals who were discharged from Allegheny, Beaver, Lawrence, and Washington Counties as part of the Mayview closure have now been living in the community for an extended period of time. Greene County is also included in the project however they had no one residing in Mayview during the duration of the closure process. As their time in the community increases, the services and supports that these individuals receive can also change as their interests and needs change. To assess these changes, this report focuses on two closely related topics – how people's needs and interests are evolving in the community as reflected in their Community Support Plans (CSPs), and how the services they are using are reflected in those plans. We pay particular attention to the use of Community Treatment Team (CTT) and case management/service coordination services (CM/SC). The report also looks at the stability of housing since discharge, and the types of challenges individuals are facing as reflected in early warning reports and critical incidents.

This report is structured around the following four questions:

1. Are the recommended services and supports that were identified at discharge different from the services and supports that are currently recommended?
2. What services are people actually accessing?
3. What types of early warning signs and critical incidents are occurring for individuals who have been discharged from Mayview?
4. Are people maintaining their housing? Are there changes to the level of restrictiveness in where people have lived since their discharge from the hospital?

Methodology

Many data sources were used for this report, including the following:

- Community Support Plans (CSPs) that were completed with individuals prior to their discharge from Mayview;
- Updated CSPs that were completed with individuals once they were in the community;
- CSP tracking reports that the counties monitor and complete on a monthly basis for those discharged;
- Data on the actual services delivered between January 1, 2009 and June 30, 2009 based on provider claims;
- The Allegheny HealthChoices, Inc. (AHCI) CTT application;
- The Mayview residential tracking system; and
- The early warning/critical incident tracking system.

Community Support Plans (CSPs)

Individuals discharged from Mayview as part of the Mayview project participated in the recovery-oriented CSP discharge planning process. The CSPs identified the recommended services, supports, mental health treatment, and housing needed for people to transition successfully into the community.

For initial or baseline CSPs, the participants included the consumer, hospital treatment staff, community program staff, hospital liaisons from providers and the counties, an advocate, and peer mentor. Family members were also invited upon agreement of the consumer. The meetings also utilized an external facilitator and recorder.

Updated CSPs were completed with the county staff, program staff, and the consumer. This report compares the baseline CSPs to the updated CSPs completed since individuals have been in the community.

The timeframe for completing these updated CSPs varied among the counties. Some CSPs were reviewed at regular intervals, as in Allegheny County (after the first three months and six months after discharge, then annually); others were completed when a significant change in circumstances, such as housing, occurred; other plans were updated in the summer months of 2009 in response to this report. Updated CSPs were completed between May 2008 and September 2009, with the majority completed after June 2009.

This report focuses on the 244 people who have both a baseline and updated CSP. Updated CSPs were not completed for individuals who met the following exclusion conditions:

- If they were not tracked on a monthly basis due to being deceased, in nursing homes, or moved out of the region (20);
- If they refused to participate (six);
- If they were in extended inpatient stays (four);
- If they were incarcerated (four); or
- If they were transferred to or recently discharged from Torrance State Hospital (19).

Given these exclusion criteria, CSPs were updated for 244 individuals. Those who did not receive an updated CSP will continue to be tracked on a monthly basis. When individuals are discharged from Extended Inpatient Services, jail, or Torrance State Hospital they will be included in the tracking process once again.

Table 1.0 below shows the number of people who had baseline and updated CSPs completed for each county.

Table 1.0

Baseline and Updated CSPs: Distribution among the Mayview Counties				
County	**Baseline CSP**		**Updated CSP**	
	# of People	**% of People**	**# of People**	**% of People**
Allegheny	239	80%	193	79%
Beaver	28	9%	26	11%
Lawrence	7	2%	5	2%
Washington	23	8%	20	8%
Total	**297**	**100%**	**244**	**100%**

Question 1: Are the recommended services and supports that were identified at discharge different from the services and supports that are currently recommended?

A comparison of the baseline and updated CSPs for the 244 people who completed both plans indicates that recommended services and supports generally remain consistent from when individuals were discharged.

- Allegheny County shows an increase in the percentage of people who are recommended to receive CTT services and a decrease in the percentage of people who are recommended to receive CM/SC. The suburban counties (Beaver, Lawrence, and Washington) show a decrease in the recommended use of CTT and a corresponding increase in CM/SC services.

- The recommended frequency of CTT contacts shifts from daily contact, with an increase in 4-6 and 2-3 weekly contacts.

- The recommended frequency of CM/SC contacts shifts from weekly contacts to increases in 2-3 contacts per week (primarily for enhanced clinical case management), semi-monthly contacts (primarily for service coordination), and monthly contacts (primarily for administrative case management).

- All 244 individuals with an updated CSP have a crisis plan.

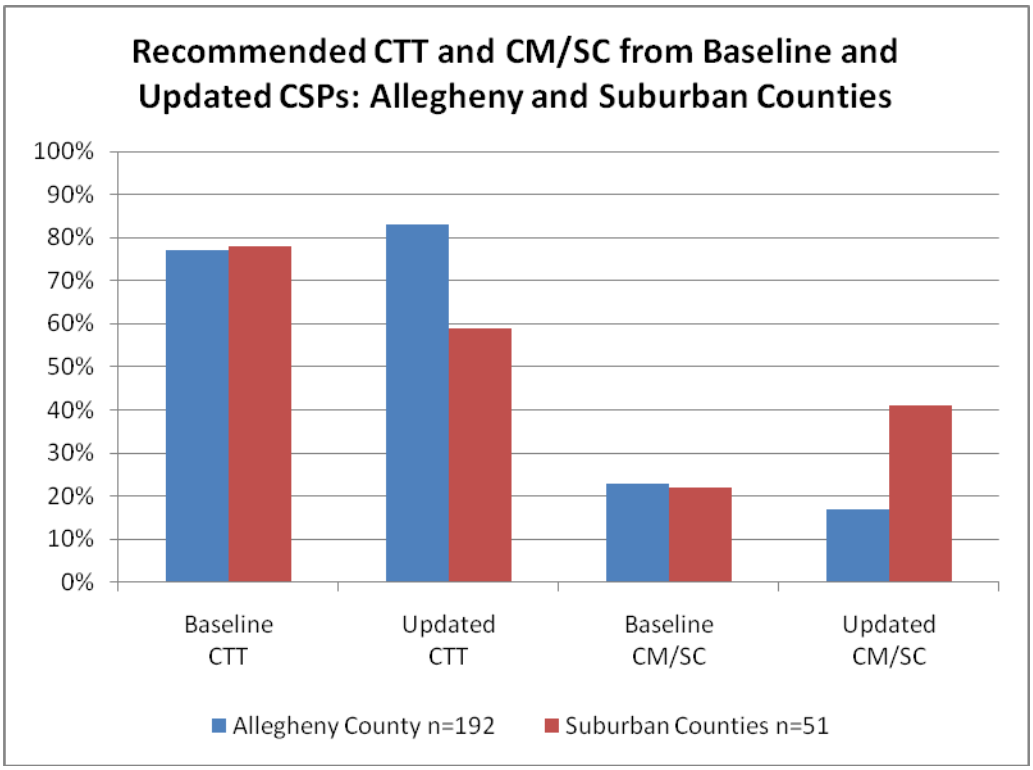
- A review of other services and supports, such as benefits, employment, and social supports, all indicate small changes and are consistent with the recommendations at the time of discharge.

Recommended Use of CTT and CM/SC Services

As part of the CSP discharge planning process, some level of case management support upon discharge from Mayview was recommended for every person. CTT services were recommended for most individuals given the intense level of support it provides; CM/SC support was recommended for all other individuals. CM/SC services include administrative case management, blended/targeted case management, enhanced clinical case management, intensive case management, resource coordination, service coordination, and support coordination.

There are differences in recommendations for the use of CTT and CM/SC services from the baseline CSPs and updated CSPs, especially when comparing Allegheny County and the suburban counties as indicated in the chart below.

Chart 1.1



- Allegheny County shows a 6% shift to CTT from CM/SC as a recommended service.
- The suburban counties show a 19% shift to CM/SC services from CTT services.
- This shift to increased CM/SC services in the suburban counties will need to be monitored to ensure proper level of support for these individuals.

Recommended Frequency of Contact for CTT and CM/SC Services

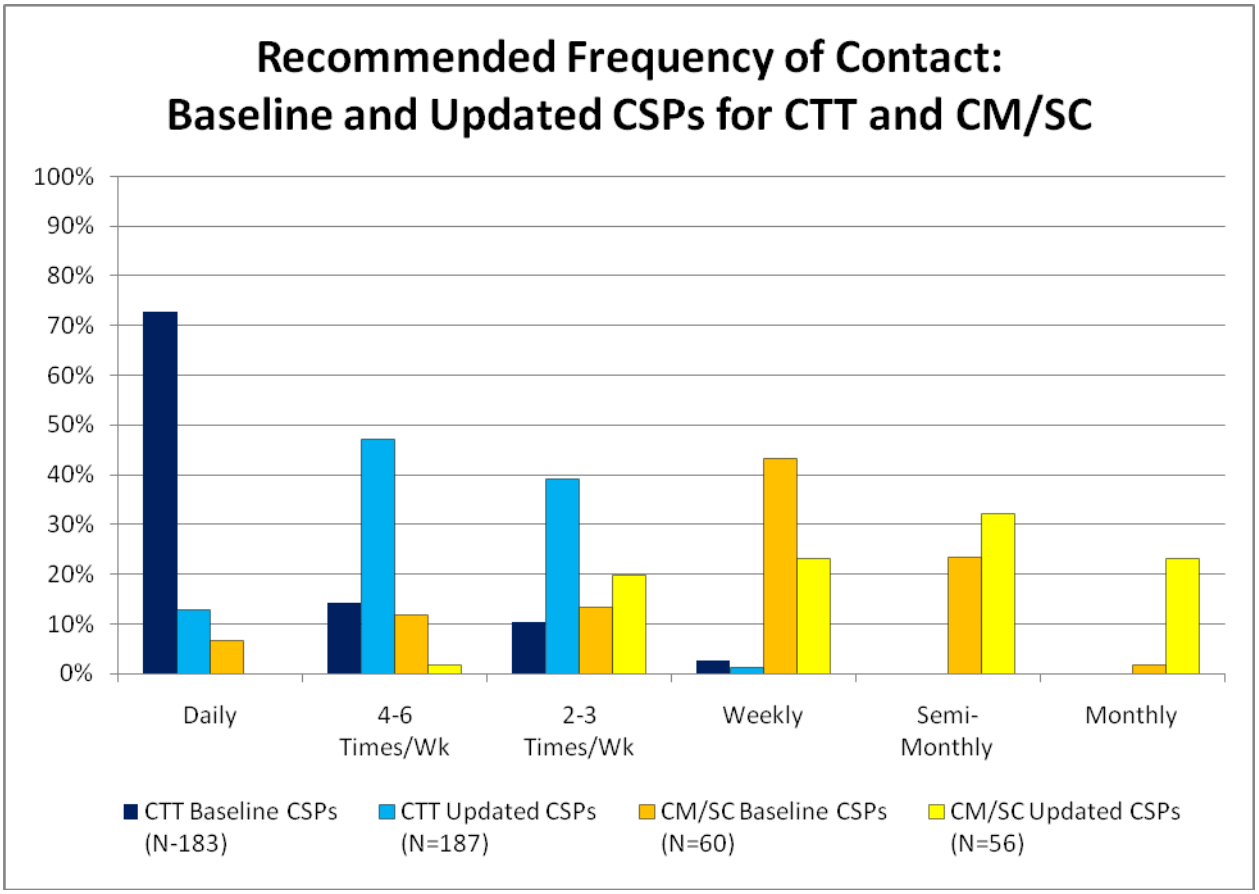
CTT is an intensive service based on the needs of each person and often involves a higher frequency of contact than CM/SC services. Daily CTT contacts were often recommended during the baseline CSP process to provide the highest possible level of support for an individual upon their discharge into the community.

Changes in the recommended frequency of contact for both CTT and CM/SC represent a shift from higher levels of contact to less frequent contacts, although the recommended levels of contact remain high. The decrease in recommended CTT contacts, in particular, is not surprising since almost everyone had an initial recommendation of seven contacts per week. These recommendations may have been based more on assuring safety given long histories of institutional care and not knowing how someone would react to the move to the community. The

recommendations in the updated CSP are more likely to represent a consumer's wishes and desired amount of contact based on their experiences.

As Chart 1.2 below shows, a comparison between the baseline and updated CSPs shows a shift away from daily contacts and an increase in contacts of 4-6 and 2-3 times per week for individuals receiving CTT. The recommended CM/SC contacts shift from weekly contacts to more semi-monthly and monthly contacts. These findings are consistent for both Allegheny and the suburban counties.

Chart 1.2



- The percentage of individuals with recommended daily CTT contacts decreased from 73% to 13% in baseline to updated CSPs. Recommended CTT contacts of 4-6 times per week and 2- 3 times per week increased from 14% to 47% and 10% to 39%, respectively.

- The percentage of individuals with recommended weekly CM/SC contacts decreased from 43% to 23% in baseline to updated CSPs. These decreases appear to be offset by increases in recommended contacts of 2-3 per week and semi-monthly contacts. The

percentage of people with recommended monthly CM/SC contacts increased from 2% to 23%.

- Daily CTT contacts generally were recommended for all individuals discharged from Mayview. Given the long periods of institutionalization experienced by many of these individuals, their complex medication regimes, and the magnitude of the personal change they were experiencing; it was felt that daily contacts would be helpful and necessary to help ease the transition for these individuals.

- The shifts in recommended contacts should indicate a better understanding of actual needed and desired levels of support now that individuals have been in the community.

- The increase in the percentage of monthly recommended contact for CM/SC is largely due to increases in the number of people who were recommended administrative case management along with more restrictive levels of care. Individuals recommended for monthly administrative case management live in more restrictive residential settings that offer additional daily supports, such as LTSRs and specialized supportive housing. These changes raise a question about how these consumers achieve community integration without regular case management support.

Benefits, Income, and Representative Payee

The benefits an individual receives, the source of income, and the use of a representative payee were compared between the baseline and updated plans. These comparisons indicate little change between the baseline and updated plans. Medicaid and/or Medicare continue to be the primary benefits, SSDI and SSI continue to be the primary sources of income, and most people continue to use a representative payee.

- Benefit patterns in the baseline and updated CSPs are very similar. Slight increases are reported in Medicaid and Medicare, private insurance, and use of food stamps.

- Income sources in the baseline and updated CSPs were very similar. SSDI and SSI are the predominant sources of income. In addition to the 10% increase in those that receive SSI, other changes include an increase in the number that reported "Other" income and a decrease in those who reported receiving cash assistance.

- A large majority of individuals continue to use representative payees for assistance in money management.

Employment, Education, and Leisure Activities

There is little change in activities planned for the areas of employment, education, and leisure. This is concerning given the discussion and emphasis that have been placed on these issues, especially employment. No more than 11% of plans reflected recommended or planned activities in any of the areas related to employment and education. In subsequent reports, consumer satisfaction measures in this area should be looked at very carefully. There were slight increases in the following areas related to employment and education:

- Recommended involvement with the Office of Vocational Rehabilitation;
- Plans for competitive employment; and
- Interest in completing a GED.

There were decreases in the following areas related to employment and education:

- Actively seeking employment;
- Plans for continuing education (beyond GED); and
- Use of clubhouse.

CSPs did reflect, however, important responses in the area of hobby and leisure activities. The percentage of people recommended involvement with group leisure activities decreased from 72% to 62%; the percentage of people who want to pursue hobbies and leisure activities on their own increased from 81% to 95%. To the extent that individuals want and/or require some support in this area should be considered in planning for the frequency of CTT or CM/SC contacts as reflected in the earlier discussion. It is important that activities offered at residences not be seen as the only option for individuals, especially in light of the information provided in the CSPs.

Social Supports

The use of social and natural supports in the community is an important component of a person's recovery and serves as a complement to other treatment activities. These activities also support community interaction and integration.

Families continue to be the primary source of social support for individuals, followed by peer mentors. While initial CSPs included plans for family support, it was difficult to determine how successful that would be given the relatively low level of family participation in the CSP process; however, increased family involvement continues to be a positive finding consistent across updated CSPs.

The recommendation for use of peer mentors has dropped slightly from 69% to 64%. This does not necessarily indicate a problem because the CTTs all have peers as staff on the team, and consumers have access to those individuals. For individuals moving from CTTs to CM/SC, the availability of peer mentors should continue.

Transportation Supports

The most notable change in the updated CSPs is that providers increasingly are the source of transportation for clients. The recommendation that providers transport clients has increased to 90%. This may be a reflection of where some of the residences are located, changes in availability of public transportation as reflected by a planned decrease in the use of public systems, or a lack of emphasis on teaching individuals how to use public transportation. It clearly is an area for further review.

Question 2: What services are people actually accessing?

In order to answer this question, the following data was reviewed:

- Provider services from January 1, 2009 through June 30, 2009 based on claims data for the 244 individuals who had both baseline and updated CSPs. Note the following limitations when using claims data:
    - Paid services include claims filed to Community Care Behavioral Health and Value Behavioral Health for people who have HealthChoices insurance (Medicaid).
    - Allegheny, Beaver, and Washington County base-funded services are also included. Services paid for by Lawrence County base are not included because AHCI does not have access to this information.
- Physical health contacts and crisis services from September 2008 through October 2009 based on the CSP monthly tracking data for the 244 individuals with baseline and updated CSPs; and
- CTT crisis utilization data from January 1, 2009 through June 30, 2009 from the AHCI CTT application for the individuals who received CTT services; 187 people from the 244 who had baseline and updated CSPs.

A review of service activity data indicates that individuals discharged from Mayview received a variety of behavioral and physical health services and supports.

- Actual CTT contacts are slightly fewer than recommended for those with recommendations for daily contact – particularly for individuals who live in facilities that are staffed 24 hours/day. Other levels of contact indicate that people are being seen regularly and at the frequency recommended.
- Actual CM/SC contacts averaged one to two contacts per week for all levels of recommended frequency; including monthly, semi-monthly, weekly, and multiple contacts a week as seen in Table 2.2. There was also a trend towards less frequent contacts in the updated CSPs.
- A majority of the individuals received CTT services, which is consistent with recommendations in the updated CSPs. Because the CTT is an all inclusive service, individuals received few other behavioral health services.
- Individuals receiving CTT appear to have received the majority of crisis services, which were delivered by the teams. Individuals without CTT utilized fewer crisis supports. This may be an indication that individuals with the greatest needs are being served by CTTs and are receiving crisis services as expected. Those with less acute needs are being seen by CM/SCs

and, therefore, require fewer crisis services. This lower utilization should be monitored to ensure individuals without CTT are aware of and have access to crisis services.

- Ninety seven percent (97%) of people had at least one visit with a medical doctor. Ninety (90%) of those with updated CSPs had at least one physical health visit with a primary care physician (PCP) and 73 % saw a specialist at least once.

Recommended Frequency of Contact and Actual Contacts for CTT and CM/SC

Table 2.1 indicates that individuals who have CTT services recommended in their updated CSPs received close to the recommended frequency of contact. This is the case for individuals who reside in 24-hour staffed facilities as well as those who do not. Daily contacts are slightly higher for individuals not living in 24-hour staffed facilities; which is expected given the likelihood of an individual's need for an added level of support for a longer period of time.

Table 2.1

Comparison of Recommended and Actual CTT Contact Frequencies from January 1, 2009 through June 30, 2009 by Residential Staffing Level				
In 24 hour staffed residence?	**Yes**		**No**	
Recommended CTT Contact Frequency	**# of People**	**Actual Avg. Wkly Contacts**	**# of People**	**Actual Avg. Wkly Contacts**
Daily (7 / wk)	12	4.6	10	6.2
4-6 / wk	71	3.5	16	4.4
2-3 / wk	61	3.0	8	2.3
Wkly (1 / wk)	1	1.7	1	1.9
Totals	**145**	**3.4**	**35**	**4.4**

Actual is less than recommended Actual is greater than or equal to recommended

Table 2.2 indicates that most individuals who have CM/SC services in their updated CSPs received more than their planned frequency of contacts – especially when the planned frequencies are weekly, semi-monthly, or monthly.

An exception to this can be seen for those who live in 24 hour a day staffed facilities and were recommended to receive 4-6 and 2-3 contacts a week. These individuals received fewer contacts than planned, although they were still seen multiple times a week.

Table 2.2

Comparison of Recommended and Actual CM/SC Contact Frequencies from January 1, 2009 through June 30, 2009 by Residential Staffing Level				
In 24 hour staffed residence?	**Yes**		**No**	
Recommended CM/SC Contact Frequency	**# of People**	**Actual Avg. Wkly Contacts**	**# of People**	**Actual Avg. Wkly Contacts**
4-6 / wk	1	2.7	0	n/a
2-3 / wk	6	1.8	4	2.1
Wkly (1 /wk)	8	1.7	1	1.2
Semi-monthly (0.5 / wk)	17	1.4	1	1.2
Monthly (0.25 / wk)	2	2.4	0	n/a
Totals	**34**	**1.6**	**6**	**1.8**

Actual is less than recommended Actual is greater than or equal to recommended

It should be noted that many people received both CTT and CM/SC (183 and 144, respectively). When compared, 106 of the 183 people with CTT claims also received CM/SC during this time period. This is expected given the CTT eligibility criteria often requires a person be open in another behavioral health service, such as administrative case management, to receive CTT services. However, the intensity of the administrative case management activity for these individuals is not large. In addition, anyone who had a change in level of care and transitioned from one service to the other from January 1, 2009 to June 30, 2009 has claims activity for both services.

Other Behavioral Health Services

Table 2.3 shows a count of the number of people who used specific behavioral health services from January 1, 2009 through June 30, 2009. This table includes service data from claims for 232 of the 244 people that have both baseline and updated CSPs. The monthly CSP tracking reports indicate that 11 of the 12 other remaining people are receiving services, with one individual refusing services. Data for residential programs is not included below as this information is addressed in the next section of this report.

Table 2.3

Number of People Who Received Behavioral Health Services from January 1, 2009 through June 30, 2009	
Service Category	**# of People**
Outpatient (includes med checks)	59
Community Support Team (CST) (SOS)	39
Other behavioral health services *	33
Inpatient Mental Health	31
Crisis Services **	30
Social Rehabilitation	26
Family Support Services	23
Housing Support Services	22
Emergency Services	12
Respite	8
Residential Treatment Facility for Adults (RTF-A)	6
Extended Acute Care (Inpatient)	3

* Includes Partial, Mobile MH, Adult Outpatient, Psychiatric Rehabilitation, Lab, Consults, Community Vocational Rehab, Facility Based Vocational Rehab, Inpatient DA Detoxification, MH Justice-Related Services. Totals for each of these services were small so they were combined into one category.

** Crisis services include walk-in crisis, mobile crisis, and telephone crisis services.

- For the most part, Table 2.3 reflects services provided to individuals who were not receiving CTT services. For those who did receive CTT, many behavioral health services such as psychiatric services and supports, crisis services, drug and alcohol services, and

vocational rehabilitation are components of the team services and not reported separately. A notable exception is inpatient services.

- In addition, over 75% of the individuals who were discharged from Mayview reside in residential programs that provide behavioral health supports or services - especially group and social rehabilitation services. These services are not represented in Table 2.3.

Individuals who were discharged from Mayview are also supported by the State Operated Services Quality Management and Clinical Consultation (QMCC) team. This team provides clinical consultation services to the Mayview Counties as they work with individuals who have been discharged from the hospital. Service data indicates that 227 of the 244 individuals had a QMCC contact from January 1, 2009 through June 30, 2009.

Crisis Services

Access to crisis services plays an important role in supporting individuals in the community. As mentioned in the previous section regarding other behavioral health services, CTTs provide crisis supports to their members. A review of the CTT application for the 187 individuals who have CTT shows that 64 people had crisis events from January 1, 2009 to June 30, 2009. The CTT crisis services are listed in Table 2.4 below, along with the number of separate events for each type of service. As this table shows, the majority of CTT crisis supports were by telephone, with individuals having multiple crisis events.

Table 2.4

Summary of Crisis Services from January 1, 2009 through June 30, 2009 for People Receiving CTT		
Type of Crisis Service	**# of People**	**Events**
CTT Mobile Face-to-Face	34	69
Diversion	25	56
Hospital ER	17	27
Non-CTT Mobile Face-to-face	22	35
Telephone	52	475
Total	**64**	**662**

Individuals receiving CM/SC had lower utilization of crisis services. Claims data from January 2009 to June 2009, as well as a review of the monthly CSP tracking reports from August 2008

through September 2009 for these individuals indicate seven people received crisis services, totaling 48 events.

The higher utilization of crisis services among those with CTT is often due to the intense level of support CTTs provide. CTTs are on-call 24 hours/day, seven days/week and operate two shifts a day and on weekends. They are also called when someone on their team presents at an emergency room. This higher utilization of crisis services may also be a factor of how CTTs report contacts and define "critical events." A person needing after-hours support in CTT may not indicate a crisis in the traditional sense; however, this would be reported as a crisis contact. A similar contact for a person with CM/SC may not be recorded as a crisis event, resulting in a potential underrepresentation of crisis services for those with CM/SC.

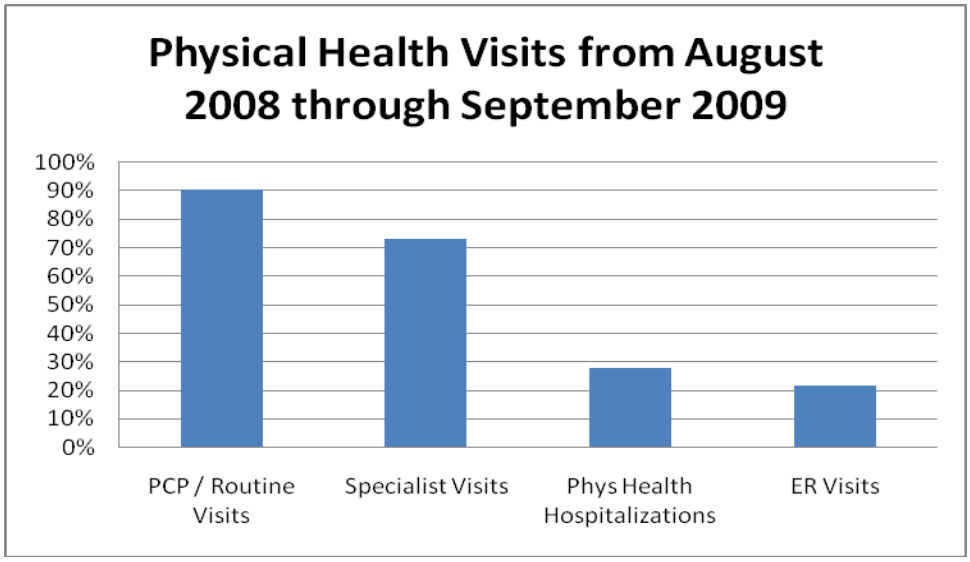
It is recommended that counties continue to work with providers and individuals to make them aware of the supports that are available - especially for those individuals without CTT.

Physical Healthcare Visits

Accessing physical healthcare is an important aspect of the services that individuals receive in the community, especially given the complex medical needs of many of those discharged from Mayview.

As Chart 2.1 shows, 90% of those with updated CSPs had at least one physical health visit with a PCP. Seventy-three percent (73%) of people with an updated CSP saw a specialist at least once. Five individuals refused services and were the only individuals without any physical healthcare visits. The counties continue to work with these individuals to encourage physical healthcare activity.

Chart 2.1



The data indicates that physical health visits are occurring, with the majority of people having multiple physical health visits. Although this is positive, it may also be an indication of the relative physical health of those who were discharged.

The counties continue to address these physical health challenges through various supports, including the QMCC's monthly physical health assessments of those who are deemed high-risk and medically fragile. In addition, the counties report physical health contacts on a monthly basis through the CSP tracking. The Mayview QIO committee has also identified physical health issues as an ongoing focus area for the Mayview regional steering committee. The counties also participate in a regional committee with the physical health and behavioral health managed care organizations to address coordination of care issues.

While the physical healthcare of those discharged from Mayview has been a priority for the counties, it is recommended that this continue to be a focus area given the complex medical needs of this group.

Question 3: What types of early warning signs and critical incidents are occurring for individuals who have been discharged from the hospital?

In June 2008, AHCI implemented an early warning and critical incident tracking system, which assists in the capture and communication of early warning indicators and critical incidents. In addition to monitoring individual incidents, the application facilitates county-specific and regional analyses. This reporting process promotes provider engagement and accountability in preventing and addressing adverse events.

Reporting and tracking early warning indicators and critical incidents help to assure that individuals are safe in the community and provides a mechanism to proactively identify and address early warnings before they potentially develop into critical incidents. To answer this question, the data was reviewed from the following sources:

- Early warning and critical incident indicators from the critical incident tracking system;
- Psychiatric hospitalizations from claims data; and
- Incarcerations as indicated by the Counties in the monthly CSP tracking.

This review included all 307 individuals discharged as part of the Mayview initiative, and not just the 244 people who had both baseline and updated CSPs.

Early Warning Indicators

Table 3.1 shows the number of early warning events reported from January 1, 2009 to September 30, 2009 along with the unduplicated number of people with events. Often individuals had more than one event. As the chart below shows, 145 individuals accounted for the 681 early warning events. On average, there were 75.7 early warnings per month during this timeframe.

Table 3.1

Early Warning Indicators from January 1, 2009 to September 30, 2009			
Warning Indicator Type	**Total # of Events**	**Total # of People**	**Average Events per Month**
Refusal to Take Medications Posing Risk	194	55	21.6
Atypical Behavior - Change From Baseline	152	76	16.9
E/R Visit - Behavioral/Physical Health	147	58	16.3
Indications For Increased Service/Supports	56	38	6.2
Police Involvement	54	32	6.0
Inability to Locate Consumer	30	8	3.3
Complaints - Property Destruction/Eviction	15	9	1.7
Unexcused Missed Appointments with Provider	15	11	1.7
Attempts At Elopement	14	5	1.6
Consumer Not Responding to Contact	2	2	0.2
Sleep Pattern Change From Baseline	2	2	0.2
Totals	**681**	**145**	**75.7**

As indicated above, the following are the most common kinds of early warning signs reported:

- When individuals pose a risk by refusing to take medication – 21.6 average events per month;
- When providers observe atypical behavior from a person's normal behavior to the extent that it is cause for concern – 16.9 average events per month; and
- When a person goes to the emergency room for either physical or behavioral health reasons – 16.3 average events per month.

Critical Incidents

Table 3.2 shows the number of critical incidents reported from January 1, 2009 to September 30, 2009 along with the number of unduplicated people involved. On average, there were 42.4 critical incidents per month during this timeframe.

Table 3.2

Critical Incidents from January 1, 2009 to September 30, 2009			
Critical Incident Type	**Total # of Events**	**Total # of People**	**Average Events per Month**
Medical Hospitalization	101	52	11.2
Community Hosp - Involuntary	72	50	8.0
Other Incident - Serious Nature	67	32	7.4
Housing Change	62	49	6.9
Community Hosp - Voluntary	39	24	4.3
Arrest	11	8	1.2
Medical Treatment Error	9	8	1.0
Client Injury - Accident/Intentional	6	6	0.7
Missing Person	6	5	0.7
Death	4	4	0.4
Abuse - Physical/Sexual	2	2	0.2
Attempted Suicide	2	2	0.2
Fire	1	1	0.1
Totals	**382**	**141**	**42.4**

As indicated above, the following are the most common kinds of critical incidents reported:

- Medical hospitalization – 11.2 average events per month;
- Involuntary commitment to a community hospital – 8.0 average events per month;
- Voluntary admission to a community hospital – 4.3 average events per month; and
- Other incidents determined to be of a serious nature – 7.4 average events per month. This includes a variety of situations such as disagreements at residential settings, missed medications, and injuries not requiring medical attention.

Although "Housing Change" is listed in Table 3.2 as a type of critical incident, this is actually more of a monitoring function of residential changes. A critical incident of "Housing Change" is automatically added when a residential change is entered into the Mayview residential tracking application. These changes in residence are not necessarily adverse incidents, but are closely monitored by the counties.

Early warning and critical incidents are reported by county and provider staff. There are differences between the counties in the volume of warning signs and incidents reported. Allegheny County reports the most activity; however, the majority of individuals live in Allegheny County. In addition, Allegheny County has more broadly adopted this process than the other counties, and has been using the system the longest. For these reasons, the number of incidents reported for Allegheny County is higher compared to the other counties. Although there is some variability in how warning signs and incidents are reported, efforts are being made to standardize the reporting process to make the system more reliable.

The counties also use a process called root cause analysis to review serious unexpected incidents and identify any systemic, procedural, or other causes that may have contributed to these events. This information is then used to develop protocols or other action plans to reduce future instances of these events and improve the overall system of care.

Psychiatric Hospitalizations, Incarcerations, and Deaths

This section provides additional details on the following three types of critical incidents. These statistics include all individuals involved in the Mayview initiative dating back to the initial phase of discharges in 2005.

- Psychiatric hospitalizations from claims data from January 1, 2009 to October 31, 2009:
    - Community psychiatric hospitalizations occurred for 22% of the individuals, with 195 separate inpatient episodes.
    - When excluding the three outliers, the average length of stay for inpatient hospitalizations is 28 days, with a minimum of 1.5 days and maximum of 155 days.
    - The ALOS for the three outliers is 191.9 days, with a minimum of 161.7 days and maximum of 241.5 days.
- Incarcerations as reported from the monthly CSP tracking reports through August 2009:
    - Data from CSP monthly tracking indicates incarcerations have occurred for 24 individuals (8%), with 42 separate events.
    - Excluding the one outlier, the ALOS is 35.9 days (minimum 1 day, maximum 132 days).

- The ALOS for the one outlier individual is 271.5 days given two separate incarcerations.

- Deaths from the Mayview consumer tracking and critical incidents through September 2009:
  - Ten people (3%) have died since the beginning of the MRSAP initiative in 2005, including six from natural causes, two accidental deaths, and two suicides.

The critical incidents and early warnings are reviewed regularly and are monitored for trends. At this time, it is difficult to say whether these numbers are high or low for the Mayview population, particularly when compared to the overall population of individuals in the five-county region. Efforts continue to standardize and increase reporting throughout the region to improve the validity and reliability of the tracking system. This system continues to be a valuable tool for providers and the counties as they work with and support individuals in the community.

Question 4: Are people maintaining their housing? Are there changes to the level of restrictiveness in where people live since their discharge from the hospital?

Stable housing is another important factor that impacts the recovery of an individual in the community. This section compares the housing that people went to upon their discharge to their housing as of August 31, 2009 to see if housing arrangements changed since people have been in the community. Changes in various levels of supports for the different types of housing (i.e., restrictiveness) are also reviewed for those who changed their housing since discharge. Data from the Mayview residential tracking system that is maintained by the Counties was used for the 244 individuals who had both baseline and updated CSPs.

A review of the data indicates the following:

- Sixty-two of the 244 individuals (25%) changed their type of housing between their discharge date and August 31, 2009;
- Twenty-nine people (47%) moved to a less restrictive setting, 20 people (32%) moved to a more restrictive setting (includes moves to nursing homes), and 13 people (21%) moved to a setting with the same level of restrictiveness; and
- No one became homeless.

As of August 31, 2009, of the 244 individuals who have both baseline and updated CSPs:

- Sixty-nine people (28%) lived in restrictive settings, such as LTSRs and nursing homes, the same number as at discharge;
- One hundred twenty-seven people (52%) lived in supervised settings such as personal care homes and CRRs, a decrease of 10 people from housing at discharge;
- Twenty-five people (10%) lived in dependent settings such as supportive housing with an increase of 5 individuals from housing at discharge; and
- Twenty-three people (9%) lived in independent settings such as with family or own their own, increasing by 5 individuals from housing at discharge.

Housing stability

Twenty-five percent (25%) of people (62 out of 244) changed their housing arrangement from the time of their discharge and as of August 31, 2009. Table 4.1 below shows how these changes in housing impacted the various levels of restrictiveness.

- **Decreases in restrictiveness:** As indicated by the sum of the green squares in Table 4.1, 29 of the 62 changes (47%) moved to a setting that was less restrictive or had fewer built-in supports; for example, LTSR to CRR. This includes 13 individuals who moved to independent living arrangements from more restrictive settings.

- **Increases in restrictiveness:** As indicated by the sum of the blue squares in the Table 4.1, 20 of the 62 housing changes (32%) involved a move to a setting that was more restrictive, or had more built-in supports; for example, family setting to a CRR. Of the nine moves to the "restrictive" level, three were to nursing homes, four were to LTSRs, and two were to inpatient units (as of August 31, 2009).

- **No change in restrictiveness:** As indicated by the sum of the white squares in Table 4.1, 13 of the 62 (21%) people moved to a setting with the same level of restrictiveness; for example, from an independent setting to a setting with family, or from an LTSR to a nursing home.

Table 4.1

Summary of the 62 Changes in Housing Type by Level of Restrictiveness: Housing at Discharge and as of August 31, 2009

Level of Restrictiveness		Moved To			
		Independent	Dependent	Supervised	Restrictive
Moved From	Independent	2	6	1	1
	Dependent	6	1	4	1
	Supervised	7	7	8	7
	Restrictive	0	3	6	2

Increase in Restrictiveness Decrease in Restrictiveness Neutral Change

Moving from a less restrictive setting to a more restrictive setting is not necessarily a negative outcome. This may indicate that an individual needs more assistance with daily living skills or treatment than was available in a less restrictive setting. Also, as noted above, three of the changes to more restrictive settings were individuals moving to nursing homes; this typically occurs due physical health issues.

Table 4.2 below provides details of where individuals moved at the time of their discharge, as well as a comparison of the recommended housing from the updated CSPs to the actual housing as of August 31, 2009. Definitions of the housing categories are included in the glossary at the end of this report.

Table 4.2

Housing: At Discharge, Recommended in the Updated CSP, and as of August 31, 2009							
Housing Type	**Level**	**Housing at Discharge**		**Housing Recommended in the Updated CSP**		**Housing As of 8/31/09**	
		#	**%**	**#**	**%**	**#**	**%**
Personal Care Homes *	Supervised	58	24%	59	24%	58	24%
Long-Term Structured Residence (LTSR)	Restrictive	61	25%	55	23%	55	23%
Community Residence Rehabilitation	Supervised	44	18%	34	14%	29	12%
Specialized Supportive Housing	Supervised	22	9%	25	10%	26	11%
Supportive Housing	Dependent	17	7%	19	8%	18	7%
Living Independently	Independent	12	5%	12	5%	15	6%
Mental Retardation (MR) Housing	Supervised	12	5%	13	5%	13	5%
Nursing Home	Restrictive	7	3%	10	4%	12	5%
Family	Independent	6	2%	8	3%	8	3%
Permanent Supportive Housing	Dependent	3	1%	8	3%	7	3%
Community Inpatient	Restrictive	0	0%	0	0%	2	1%
Domiciliary Care	Supervised	1	0%	1	0%	1	0%
State Mental Hospital	Restrictive	1	0%	0	0%	0	0%
TOTAL		**244**		**244**		**244**	

* Personal Care Homes also include Comprehensive Mental Health Personal Care Homes (CMHPCH) and Enhanced Personal Care Homes (EPCH).

The differences in Table 4.2 between the recommended housing and actual housing for individuals as of August 31, 2009 can be due to many reasons. Often, waiting lists for certain levels of housing may cause delays in people's placement. Additionally, the recommendations may indicate a planned residential move once certain conditions are met, such as treatment milestones. Also, certain recommendations may be outdated given when an individual's updated CSP was completed in relation to their housing as of August 31, 2009.

Many of the residential programs included in Table 4.2 as well as the various services discussed throughout this report are newly developed in response to the closure of Mayview. These additional services not only provide the necessary resources to maintain those discharged from Mayview, but also serve to enhance the community-based service infrastructure for all individuals in the region.

Conclusion

Individuals discharged from Mayview State Hospital had recommended services, supports, CTT and CM/SC frequencies of contact, and residential programs identified during the CSP discharge planning process based on their expected needs in the community. As this report indicates, these needs change as their time in the community grows longer. The Counties, community providers, the Pennsylvania Office of Mental Health and Substance Abuse Services (OMHSAS), and other stakeholders have processes in place to work together, along with discharged individuals, to assess these changing needs and adjust services and supports as appropriate. The CSP updates and monthly tracking activities by the Counties are examples of these efforts. The Mayview Steering Committee and QIO Committee, which have broad stakeholder representation including consumers and family members, also provide a forum for ongoing regional collaboration.

Challenges remain as individuals continue to work on their recovery in the community. Social and leisure activities, employment, education, and other quality of life areas require ongoing effort and attention as community integration continues to develop and mature. Behavioral health issues compounded by complex medical conditions will continue to be an area of focus, as well as maintaining crisis supports and early warning and critical incident tracking in the community.

As people spend more time in the community, it will be important to not only assess the quality of their services and supports, but also their quality of life and overall satisfaction. Surveys assessing these types of issues are also regularly conducted, and results will be reported as time in the community continues to increase for the individuals discharged from Mayview State Hospital.

Glossary

Case management: Services designed to ensure people with mental illness receive the continuous care and support they need. Case managers help people to access mental health, substance abuse, housing, social and education services in order to lead a more stable and healthy life in the community. Case managers have a low consumer to staff ratio (usually fewer than 20 consumers to one staff).

Clubhouse: Clubhouses provide opportunities for people with mental illness to socialize, provide support to each other, develop relationships, and work. Members work together to manage the clubhouse operations.

Community residential rehab (CRR): A voluntary residential program in an apartment or group-home setting that provides housing, personal assistance, and psychosocial rehabilitation.

Community Support Plan (CSP): Each person discharged from Mayview as part of the closure develops a CSP. The treatment team, family (if the consumer chooses), community providers, county, advocates and peer mentors may all participate in the plan development.

Community Treatment Team (CTT): Also known as Assertive Community Treatment, CTT is a team-delivered service with extensive success in helping people with serious mental illness live in the community. While staffing patterns may vary from rural to urban areas, CTTs typically include a Team Leader, a Psychiatrist, Nurses, Mental Health Professionals, Drug and Alcohol Specialists, Peer Support Counselors and Vocational Specialists. The hours are flexible, services are provided in the community, and CTT handles after-hours emergencies. The teams provide a wide array of services, including psychiatric evaluations, mental health and drug and alcohol therapy, medication management, case management, peer support, assistance with housing, crisis and hospital diversion services, vocational assessments and supported employment, and assistance in managing personal finances. The staff to consumer ratio is low (10 consumers per staff).

Comprehensive mental health personal care home (CMHPCH): In addition to providing meal preparation and assistance with activities of daily living of enhanced personal care homes, CMHPCHs provide medication monitoring, activities, and have 24-hour staff including mental health professionals and registered nurses.

Consumer Action and Response Team (CART): CART is Allegheny County's Consumer and Family Satisfaction Team. People who work for CART are either consumers or family members. They do interviews with consumers and families in order to report on people's satisfaction with services and quality of life as well as their needs and preferences.

Consumer and Family Satisfaction Team (CFST): Each county in the Mayview service area has a CFST. People who work for CFSTs are either consumers or family members. They do interviews with consumers and families in order to report on people's satisfaction with services and quality of life as well as their needs and preferences.

Crisis Intervention Team (CIT): The CIT includes a specialized group of Pittsburgh Police officers who are trained to handle crises involving individuals with mental illness.

Department of Public Welfare (DPW): The state agency that oversees state mental hospitals and behavioral health treatment services.

Domiciliary care (Dom care): A private home which provides room, board and personal care for people who are mentally ill, mentally retarded, elderly, or physically disabled. Dom care homes usually accommodate three to four residents.

Drop-in center: A place for people with mental illness to go to build meaningful relationships, socialize, learn new skills, and participate in arts, music, and cultural and recreational activities.

Enhanced clinical case management (ECCM): ECCM is a team-delivered mental health treatment service available in Allegheny County. The team includes a clinical therapist, nurse, case manager, and peer specialist.

Enhanced personal care home (EPCH) A facility in which food, shelter and personal assistance or supervision are provided 24 hours a day. These facilities provide assistance or supervision in activities of daily living (ADLs), including dressing, bathing, diet or medication.

Long-term residences (also called specialized supportive housing): Allegheny County has developed several group homes for people who need extra support and supervision in specific areas (including medical needs or behaviors that require close supervision). These community-based homes have 24-hour staff.

Long term structured residence (LTSR): A highly structured 24-hour supervised therapeutic mental health residential facility. LTSRs provide intensive mental health services.

Mayview Regional Service Area Plan (MRSAP): Developed by Allegheny, Beaver, Greene, Lawrence and Washington counties, the goal of the service area plan is to provide excellent behavioral health care for the residents of the five counties. The planning process focuses on how best to support people discharged from Mayview in the community. The planning process also focuses on developing services and supports for people who would in the past have needed to go to Mayview.

Mobile medications: Mobile medication teams include three nurses and a peer specialist, with the consultation of a pharmacist. The teams focus on both providing medications and teaching people how to manage their own medications.

Mayview Steering Committee: The Steering Committee guides the planning process for the five counties in the Mayview service area. The Steering Committee includes behavioral health professionals, staff from all five counties, administrators from Mayview State Hospital, consumers, advocates, and Pennsylvania Department of Public Welfare (DPW) representatives.

Office of vocational rehabilitation (OVR): Part of the state Department of Labor and Industry, OVR oversees rehabilitation services to promote the employment of people with mental illness and other disabilities.

Peer mentor: The Peer Support and Advocacy Network (PSAN) is operating a peer mentor program for people being discharged from Mayview. People with mental illness are trained to become mentors for people being discharged. Mentors support people through the CSP process and maintain their relationships with people in the community.

Peer specialist: Peer specialists are current or former consumers of behavioral health services who are trained to offer support and assistance in helping others in their recovery and community-integration process. Peer specialists provide mentoring and service coordination supports that allow individuals with serious mental illness to achieve personal wellness and cope with the stressors in their lives. Efforts to provide certification for peer specialists are occurring in Pennsylvania.

Peer Support and Advocacy Network (PSAN): PSAN is a consumer-operated agency. PSAN provides peer support activities at their drop-in centers. They also operate a warmline and a peer mentor program for people being discharged from Mayview.

Permanent supportive housing (PSH): PSH provides affordable housing linked to supportive services that are available, but not required. PSH is safe and secure, affordable to consumers, and permanent, as long as the consumer pays the rent and follows the rules of their lease. This program also includes a Housing Support Team that assists people in maintaining their tenancy and with integrating into their home community.

Psychiatric rehabilitation (also called psychosocial rehabilitation or psych rehab): Programs that help people with mental illness to re-discover skills and access resources needed to become successful and satisfied in the living, working, learning and social environments of their choice. Programs can be mobile (provided in the community) or site-based (provided at a provider's site).

Residential Treatment Facility for Adults (RTFA): RTFA programs provide highly structured residential mental health treatment services for individuals 18 years or older. They offer stabilization services and serve as an alternative to either state or community hospitalization.

Service coordination: Allegheny County calls case management services "service coordination." See case management definition for more information.

Social rehabilitation (social rehab): Social rehab programs help people with mental illness learn social skills and assists people in developing natural support systems in the community.

Specialized supportive housing (also called long-term residences): Allegheny County has developed several group homes for people who need extra support and supervision in specific areas (including medical needs or behaviors that require close supervision). These community-based homes have 24-hour staff.

Steering Committee: See Mayview Steering Committee above.

Supportive housing: Programs that provide transitional or permanent housing along with needed supported services for individuals.

Warmline: The Warmline is a consumer-operated telephone service available for mental health consumers, or any other interested parties that are 18 and older, to call for support. The service provides supportive listening, problem solving, resource sharing, referral, and peer support.