Outcomes in Integrated Care

2014

www.wheelerclinic.org

Funded by the Connecticut Health Foundation
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Executive Summary
Executive Summary

Patient-Centered Care

Recognizing the need to enhance health equity for the low-income, seriously mentally ill, and other vulnerable populations Wheeler serves, we refined our strategic direction to build a more systemic approach to whole-person health. Wheeler’s Health & Wellness Centers, developed in collaboration with key strategic partners who share our vision, represent a critical step in the transformation of our health system.

These centers, located in Bristol and Hartford, provide an integrated, comprehensive continuum of patient-centered primary care, behavioral health and community resources, supported by multidisciplinary health teams, to reduce disparities in care, enhance health equity and achieve the triple aim of health reform: improve health, reduce costs & increase quality.

Wheeler is uniquely positioned to engage more individuals and families in preventative and primary care, including individuals at greatest risk due to poverty, serious mental illness, criminal justice and child welfare system involvement, providing better access to high quality care. The Wheeler Health & Wellness Centers provide health homes for these individuals, enhancing health outcomes and reducing reliance on high cost care, including emergency department visits.
Executive Summary

Why Metrics Matter

Establishing a shared set of core metrics and the data exchange protocols and processes necessary to allow for meaningful data analysis across participants in this emerging health system, with the support of the Connecticut Health Foundation, has been critical to shaping future systems change.

Together we are creating a framework for shaping systems change within Wheeler’s health system as well as on a statewide level by:

- **Understanding causes** – Data available nationally and within our own systems demonstrate the disparities in access to care for individuals with serious mental illness (SMI) and other medically underserved populations. Wheeler’s understanding of the barriers to care has driven the development of the Health & Wellness Centers. Ongoing data collection and analysis drives service-level engagement strategies to overcome those barriers and deliver needed care in a trusted, familiar environment.

- **Finding leverage points** – The Wheeler Health & Wellness Centers, co-located with and/or connected to high-volume behavioral health, community justice and child welfare programs within the Wheeler system, and based in communities Wheeler has served for generations, provide key leverage points for engaging high-risk, underserved populations in integrated preventative and primary care.

- **Improve the health of large numbers of people** – The Wheeler Health & Wellness Centers serve communities facing extreme disparities in care: up to 60 percent of Wheeler’s adult behavioral health clients have no access to primary care; in Bristol, more than 10,000 low-income residents have little to no access to health center services. Our ability to track core metrics and stratify analyses of data by gender, race and ethnicity informs the development and dissemination of an effective health home model.

- **Sustain change over time** – The Wheeler Health & Wellness Centers will sustain change for individuals over time by reducing fragmentation in care and providing a stable health home. Broader systems change can be achieved through the dissemination of health outcomes, cost-efficiencies and disparities reductions achieved through the model.
Executive Summary

999 Asylum Avenue
Hartford, Connecticut

Integrated primary and behavioral health care with linkage to dental and specialty care for adults enrolled in Wheeler’s behavioral health and intervention programs and services. Primary care services are provided by a Saint Francis nurse practitioner embedded within Wheeler’s high-volume outpatient clinic. The center is located within designated primary care, mental health and dental health care professional shortage area adjacent to Saint Francis Hospital.

Integrated primary and behavioral health care with linkage to specialty care

10 North Main Street,
Bristol, Connecticut

Integrated primary, behavioral health and dental care with linkage to specialty care for individuals at all stages of life, from infants to seniors. All patient services are provided by Wheeler staff. Medical oversight is provided by the Bristol Hospital Multi-Specialty group. The center is located in Bristol’s West End, a medically underserved community and designated primary care, mental health and dental health care professional shortage area.
Disparities in Access to Care
Disparities in Access to Care

Behavioral Health Clients Access to Primary Care - Location

Approximately 5,000 adults were referred to Wheeler’s behavioral health outpatient clinics located in Hartford, New Britain and Plainville between February and December 2014. Nearly half, 48 percent, of these patients, reported that they did not have a primary care physician. The difference in access to primary care, by behavioral health service location, is noteworthy with 60 percent of clients served in Hartford reporting no access to primary care, while 36 percent of clients served in Plainville and 45 percent of clients served in New Britain reporting the same.

Disparities in access to care in suburban towns versus urban centers can be seen statewide. Only seven percent of Connecticut residents living in wealthy suburbs report having no source of usual care, while 17 percent of state residents living in urban centers face the same issue.¹ These differences are magnified at every level for behavioral health consumers.

Behavioral Health Clients Access to Primary Care - Gender

Access to primary care also differed greatly by service location and client gender. Across all locations, 35 percent of female clients served between February and December 2014 reported that they did not have a primary care physician. More than half of men served, 55 percent, in the same time period did not have a primary care physician. The difference in access to primary care for both genders, by behavioral health service location, is noteworthy with a higher percentage of female (44%) and male (67%) clients served in Hartford reporting no access to primary care. Differences in access to care between clients of both genders served at Wheeler’s suburban and urban locations are also pronounced as indicated above.

Disparities in Access to Care

Behavioral Health Clients Access to Primary Care - Race

Access to primary care also differs by race. Behavioral health clients reporting no access to primary care ranged from 41 percent among Asian clients, to 60 percent among American-Indian clients served during the reporting period (racial groups marked with an asterisk (*) in the Behavioral Health Clients with no PCP by Race - All locations graph on page 15 include only one client in the category).

The most notable disparity between behavioral health clients served in suburban versus urban treatment locations when examined by race occurred among white behavioral health consumers. White behavioral health clients served in Hartford entered services reporting no access to primary care at a much higher rate (63%) than did white clients across all locations (44%). The difference among African-American clients was much less pronounced: 59 percent in Hartford versus 56 percent across all locations.

Behavioral Health Clients Access to Primary Care - Ethnicity

A higher percentage of behavioral health clients of Hispanic or Latino ethnicity (55%) across all locations report no access to primary care than do Non-Hispanic behavioral health clients (44%). Lack of access to care is most pronounced in Hartford, however the largest gap in access between Hispanic and Non-Hispanic behavioral health clients (10%) is seen in the New Britain location on the Behavioral Health Clients with no PCP by Ethnicity and Location graph on page 15.
Disparities in Access to Care

Behavioral Health Clients with no PCP by Race - All locations

* Only one client within category served during reporting period.

Behavioral Health Clients with no PCP by Ethnicity and Location
Bringing Integrated Care to a Medically Underserved Community

Wheeler’s Bristol Health & Wellness Center provided integrated primary and behavioral health care and enabling services to 555 distinct patients during 2014, the center’s first full year of operation. Patients ranging in age from infants to seniors accounted for more than 1,100 visits. Eighty-seven percent of visits were for medical services. The majority of patients served (63%) were Bristol residents. Nine percent of patients were residents of New Britain. Most patients were enrolled in Medicaid or Medicare, or were uninsured.
Disparities in Access to Care

Patient Age Group

- 00-05: 2.0%
- 06-11: 4.0%
- 12-17: 12.1%
- 18-64: 76.6%
- 65+: 5.4%

Payer Mix Medical

- Commercial Only: 62.7%
- Grant Funded: 4.4%
- Self-Pay Only: 26.8%
- Medicare Only: 4.7%
- Medicaid: 1.4%
Linda’s Story

When Linda was released from incarceration, she entered Wheeler’s Bettor Choice Compulsive Gambling Treatment program, which offered a variety of tools and supports to help her deal with her addiction and manage behaviors. She made a vital connection with her therapist who provided strength and support, and linkages to primary care services through Wheeler’s Health & Wellness Center in the same location.

“Wheeler helped me to stay on the path,” said Linda. “With all services under one roof, including my program, my support groups, therapist and medical services, I am more likely to show up for an appointment. Having everything close makes it easier.”

A licensed hairdresser who plans to pursue a career in nursing, including a Master’s degree, Linda says the future is important to her. “Wheeler offers hope and helps me to feel safe, and they do a good job at encouraging me to take care of my physical and mental health,” she said. “After all I’ve been through, there really is a rainbow at the end of it all.”
Patient Engagement
Patient Engagement

Referral to Primary Care - Location

Nearly half of behavioral health clients without a primary care physician accepted a referral to primary care during the reporting period. The rate of referral acceptance during the last six months of the reporting period (the comparison period between July – December 2014) showed pronounced improvement at each location when compared to the referral acceptance rate for the initial five months of the reporting period (the baseline period of February – June 2014). The most dramatic improvement occurred at the Hartford location: referral acceptance rose from 22 percent during the first period to 63 percent during the second period.

It is important to note that the number of clients accepting a referral to primary care in the 10-month reporting period far exceeds the number of clients actually attending a primary care service in that period: 1,187 behavioral health clients accepted a referral to primary care; 177 clients, or 15 percent of those referred, attended a primary care service. The data underscores the importance of continued investment in patient engagement strategies.

Referral acceptance rates for behavioral health clients seen in Plainville or New Britain locations and referred to primary care services at the Bristol Health & Wellness Center were consistently high during the first and second portion of the reporting period. Improvements in acceptance rates between the first and second portion of the reporting period were also documented for both service locations.
Patient Engagement

Referral to Primary Care - Gender

Female behavioral health clients with no primary care physician accepted referrals at a higher rate than did male clients. Across all locations, 56 percent of women accepted a primary care referral as compared to only 49 percent of men. Differences in referral acceptance by gender and location are consistent with general referral acceptance rates with the lowest rates for both genders occurring at the Hartford location (53% for woman and 46% for men) and the highest rates occurring in Plainville (59% for women and 54% for men). Referral acceptance rates increased substantially between the baseline and comparison periods.

Referral to Primary Care - Race

Referral acceptance differed little between African-American and White behavioral health clients, the largest racial groups served for the full reporting period. Referral acceptance across locations for African-American behavioral health clients with no primary care physician was 51 percent. The rate was 52 percent for White behavioral health clients reporting no primary care physician. The most marked deviation by location and race was documented in Plainville: 62 percent of African-American behavioral health clients reporting no primary care accepted a referral at this site. Referral acceptance rates increased for most groups between the baseline and comparison periods. A small decline in referral acceptance was observed in clients of American Indian heritage and the referral acceptance rate was static in among clients of Asian descent.

Accepted Referral Rate of Gender Groups by Referral Period

Accepted Referral Rate of Racial Groups by Referral Period
Patient Engagement

Referral to Primary Care - *Ethnicity*

Similarly, rates of referral acceptance for Hispanic and Non-Hispanic behavioral health clients showed little difference across locations, with 51 percent of both groups accepting referrals for primary care throughout the full reporting period. The most notable difference again appeared at the Plainville location, with 66 percent of Hispanic clients accepting referrals as compared to only 54 percent of Non-Hispanic clients. Referral acceptance rates increased for both groups between the baseline and comparison periods.

Refusal of Care

The most frequently cited reason (74.5%) for refusal of a referral for primary care regardless, of age, gender, race, ethnicity or service location was *No need/feel fine/not sick*. Lack of insurance (10.5%) was reported as a distant second reason for refusal of referral. Lack of transportation (6.8%) and lack of time due to work or care giving responsibilities (5.8%) were also cited. Only a small number of clients (28 or 2.4%) cited bad past experience or fear as the reason for refusal.

Some variation in citing lack of need for care was noted *between* groups with African-American clients citing this reason at a higher rate (82.1%) than White clients (71.1%) and men citing the reason more frequently than women (76.3% for males as compared to 69.9% for females). A small difference was noted between Hispanic (72.3%) and Non-Hispanic clients (75.6%).

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**Accepted Referral Rate of Ethnicity Groups by Referral Period**

<table>
<thead>
<tr>
<th>Ethnicity Group</th>
<th>Referral Period</th>
<th>Accepted Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic/Latino</td>
<td>02/2014 - 06/2014</td>
<td>59%</td>
</tr>
<tr>
<td>Non-Hispanic/Latino</td>
<td>07/2014 - 12/2014</td>
<td>65%</td>
</tr>
</tbody>
</table>

**Refused Referral Reason**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Need/feel fine/not sick</td>
<td>74.5%</td>
</tr>
<tr>
<td>No time/Work/Care giving</td>
<td>5.8%</td>
</tr>
<tr>
<td>No Transportation</td>
<td>6.8%</td>
</tr>
<tr>
<td>No Insurance</td>
<td>10.5%</td>
</tr>
<tr>
<td>Bad Past Experience/Fear</td>
<td>2.4%</td>
</tr>
</tbody>
</table>

**Client Group | # of Clients Cite No Need | % of Clients Cite No Need**

- Female: 209, 69.9%
- Male: 644, 76.3%
- African-American: 253, 82.1%
- White: 519, 71.1%
- Hispanic: 246, 72.3%
- Non-Hispanic: 580, 75.6%
Engagement in Primary Care

Clients’ successful engagement with a primary care provider after accepting a referral varied by location, reporting period and engagement into behavioral health services. The Hartford Health & Wellness Center saw the highest rate of engagement, 38 percent, during the baseline period when a warm hand-off between behavioral health staff and the primary care provider was utilized. This rate dropped to 17 percent during the comparison period. The Plainville and New Britain locations referred clients without primary care access to the Bristol Health & Wellness Center. The rate of engagement in primary care remained relatively consistent, around 9 percent, across baseline and comparison periods. Both health & Wellness Centers received close to twice the number of referrals during the comparison period. When adjusted for positive engagement into behavioral health services, primary care engagement rates increased across the board. The Bristol Health & Wellness Center saw an increase from 9 percent to 10 percent in the comparison period while the Hartford Health & Wellness Center saw an increase from 17 to 24 percent.
Engagement in primary care was highly consistent among both Hispanic and Non-Hispanic clients but varied widely among racial groups. Although a higher number of White clients attended a primary care service than any other group, the engagement rates during the baseline (15%) and comparison (13%) periods were among the lowest of all groups and showed the sharpest contract to referral acceptance rates for those periods. Engagement rates fell for nearly all groups between the baseline and comparison periods.

The data suggests that a warm-hand off to an on-site primary care provider, as provided at the Hartford Health & Wellness Center during the baseline period, produces the most positive engagement result. The data also suggests that informational referrals with the availability of on-site primary care, as provided in Hartford during the comparison period, produce engagement outcomes at about twice the rate of an informational only referral to an off-site location protocol.
Patient Engagement

Karl’s Story

As a teen, Karl spent his days bass fishing at the Connecticut River and bike riding in his hometown of Hartford. He turned to Wheeler last year following multiple attempts to end his life. He enrolled in Wheeler’s Substance Abuse Care Facilitation program, which coordinates care for adults with multiple complex needs who require both behavioral health and medical health care services. While in treatment, Karl received medical services through the Wheeler Health & Wellness Center, in partnership with Saint Francis Primary Care. He was treated for a number of medical conditions, including diabetes, high cholesterol and acid reflux disease.

Karl strives to stay well physically and mentally and appreciates Wheeler’s delivery of integrated care. “The best thing about Wheeler’s care is that everything is in one place,” said Karl. “Blood work is right across the street. Everything is convenient.”

Karl completed a number of outpatient groups, attends medication management appointments and is sober. He applied for disability and is transitioning from a shelter to independent living.

“My physical health is better because of my mental health.”

Screening and Population Health Indicators
Basic health screening is key to prevention, early detection and effective intervention in the general population and critical in reducing health disparities in vulnerable populations including individuals with serious mental illness and those placed at risk by poverty. The Health & Wellness Centers provided body mass index, blood pressure, diabetes and tobacco use screening to nearly 800 patients. This has allowed identification of smokers and diabetic patients who can benefit from immediate intervention. While analysis of individual and population-level interventions and changes over time will be required to assess service effectiveness, the screenings conducted, as well as the clinical performance measures established at the Bristol Health & Wellness Center, represent an important first step in engagement in primary and preventive care for populations that have been historically medically underserved and exhibit chronically poor health outcomes.
Screening and Population Health Indicators

As a federally qualified health center, Wheeler’s Bristol Health & Wellness Center incorporates systems of quality assessment, quality improvement and quality management that focus on improving care processes and outcomes. This includes performance measures that provide a balanced and comprehensive representation of health center service, clinically prevalent conditions among underserved communities, and the population across life cycles. Wheeler will report these measures into the Uniform Data System in 2016.

Quality of Care Measures

- Percentage of prenatal care patients who entered treatment during their first trimester
- Percentage of children with their 3rd birthday during the measurement year who are fully immunized before their 3rd birthday
- Percentage of patients aged 2 until 17 who had evidence of BMI percentile documentation AND who had documentation of counseling for nutrition AND who had documentation of counseling for physical activity during the measurement year
- Percentage of patients aged 5 through 40 with a diagnosis of mild, moderate, or severe persistent asthma who received or were prescribed accepted pharmacologic therapy
- Percentage of children, age 6–9 years, at moderate to high risk for caries who received a sealant on a first permanent molar during the reporting period
- Percentage of patients aged 12 and older screened for clinical depression using an age-appropriate standardized tool AND follow-up plan documented
- Percentage of patients aged 18 and older who:
  - Had documentation of a calculated BMI during the most recent visit or within the six months prior to that visit and if the most recent BMI is outside parameters, a follow-up plan is documented
  - Were screened for tobacco use at least once during the measurement year or prior year AND who received cessation counseling intervention and/or pharmacotherapy if identified as a tobacco user
  - Had a diagnosis of Coronary Artery Disease (CAD) who were prescribed a lipid-lowering therapy
  - Were discharged alive for acute myocardial infarction (AMI) or coronary artery bypass graft (CABG) or percutaneous transluminal coronary angioplasty (PTCA) in the prior year OR who had a diagnosis of ischemic vascular disease during the measurement year who had documentation of use of aspirin or another antithrombotic
- Percentage of women 21–64 years of age who received one or more Pap tests to screen for cervical cancer
- Percentage of patients aged 50 to 75 who had appropriate screening for colorectal cancer
- Percentage of newly diagnosed HIV patients who had a medical visit for HIV care within 90 days of first-ever HIV diagnosis
Screening and Population Health Indicators

Health Outcomes and Disparities

Percentage of adult patients 18 to 75 years of age with a diagnosis of Type I or Type II diabetes, whose hemoglobin A1c (HbA1c) was greater than 9% at the time of the last reading in the measurement year or an HbA1c test was not done

- Percentage of patients 18 to 85 years of age with diagnosed hypertension (HTN) whose blood pressure (BP) was less than 140/90 at the time of the last reading
- Percentage of patients born to health center patients whose birthweight was below normal (less than 2500 grams)

**Percent of Clients with Diabetes who Attended a Service at Wheeler Clinic Hartford Health & Wellness Center**

Clients attended a services between inception and 11/2014

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>6%</td>
<td>94%</td>
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</table>

Source: HWC

**Percent of Clients with Diabetes who Attended a Service at Wheeler Clinic Bristol Health and Wellness Center**

Clients attended a services between 02/2014 and 12/2014

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.50%</td>
<td>93.5%</td>
</tr>
</tbody>
</table>

Source: PsychConsult
Screening and Population Health Indicators

“They treat you like family.”

Isaac’s Story

When Isaac was released from prison, he needed substance abuse recovery support, a place to live and attention to his medical issues, including hearing loss and leg pain. He started outpatient treatment at Wheeler’s Hartford Adult Outpatient facility, which is co-located with the Wheeler Health & Wellness Center, in partnership with Saint Francis Primary Care. While in treatment, he received support and linkages to other programs and services, including primary care.

“When I came to Wheeler, I needed help for many problems,” said Isaac. “In addition to substance abuse treatment, the staff helped me to find a place to live. They helped me to manage my medications, and they treated my medical conditions.”

Isaac is engaged in Wheeler’s Substance Abuse Care Facilitation program and the Wheeler Health & Wellness Center. With services offered in one location, he maintains his sobriety and medication compliance. He has an apartment, a part-time job and volunteers in the community.

Isaac credits Wheeler with his achievement of wellness and stability. “I went to jail, and I got help,” he said. “Now I’m better than before. The staff at Wheeler cares about you. They treat you like family.”

Recovery, Health and Growth.
Enhancing Health Equity
The Wheeler Health & Wellness Centers, in addition to providing critically needed integrated primary and behavioral health care services to more than 800 individuals from vulnerable populations, have served as a catalyst for other system transformations:

- **Multidisciplinary care teams** – Multidisciplinary care teams have been established at both locations to ensure all members of the care team are involved in coordinating client care and identifying population level needs.

- **Tobacco Cessation Services** – Wheeler has launched tobacco cessation services at the Bristol Health & Wellness Center with funding support from the Connecticut Department of Public Health. Services, including medications and nicotine replacements, are offered at no cost to participants in English and Spanish.

- **Substance Abuse Care Facilitators** – Wheeler has launched substance abuse care facilitation services in the greater Bristol and Hartford communities to support individuals struggling to maintain recovery and reduce unnecessary emergency and inpatient utilization. The Connecticut Department of Mental Health and Addiction Services has provided funding to support substance abuse care facilitators at the Bristol and Hartford Health & Wellness Centers.

- **Dental Services** – With help from the Connecticut Health and Educational Facilities Authority, dental hygiene services are available at the Bristol Health & Wellness Center.

- **Pharmacy** – A Genoa, a QoL Healthcare Company pharmacy, located at Wheeler’s Plainville outpatient clinic, provides on-site and home delivery of prescription medications to patients throughout Wheeler’s service continuum.

- **Outreach and Engagement** – The Anthem Blue Cross and Blue Shield Foundation has invested in community outreach and engagement efforts at the Bristol Health & Wellness Center, supporting efforts to increase access to care.

**UPDATE**

Wheeler’s Health & Wellness Center, Bristol, was selected by the Health Resources and Services Administration (HRSA), an operating division of the U.S. Department of Health and Human Services, to receive funding as a federally qualified health center (FQHC) on August 1, 2015.
Credits and Thanks

We extend our sincere thanks to the individuals and organizations, public and private sector partners who have partnered with us to transform health outcomes within the communities we serve.
For more information:

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