Measuring Health Outcomes

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SAMHSA-HRSA Center for Integrated Health Solutions (CIHS)

• Make Integrated Healthcare a National Standard of Practice

• Create and Operate a World-class National Technical Assistance Center

• Support the Success of the SAMHSA PBHCI and HRSA Grantees
SAMHSA Primary and Behavioral Health Care Integration (PBHCI) Program

Program Purpose: To establish projects for the provision of coordinated and integrated services through the co-location of primary and specialty care services in community-based mental and behavioral health settings.

Goal: To improve the physical health status of adults with serious mental illnesses (SMI) who have or are at risk for co-occurring primary care conditions and chronic diseases served in community mental health settings.

PBHCI Data Collection

National Outcome Measures (NOMS)
- SAMHSA performance measures
- Every six months

Mechanical Health Indicators
- BMI, Blood Pressure, Breath CO, Waist Circumference
- Every six months

Lab Health Indicators
- Fasting Plasma Glucose/HgbA1c, Cholesterol
- Every 12 months
Using the Data

Consumer Level
• Individual Wellness Dashboard
• Morning Huddle Report

Population Management
• Planning Health Interventions
• Measuring Health Outcomes
• Address Health Disparities

Sustainability
• Cost Savings
• Marketing Materials
Technical Assistance

Individual Technical Assistance
- Phone and video consultations, e-mail
- Medicaid Health Home Consultation to States

Group Learning Experiences
- Regional and State Based Learning Communities
- Trainings and Presentations
- National Webinars

Tools
- Web-based Resources (http://www.integration.samhsa.gov)
- Training Curricula
- White Papers and Factsheets
- eSolutions Newsletter

Wellness Activities
Solutions for Wellness
Benefits & Barriers of Healthy Eating
57 members attended at least one group in May. Of average, members attended 3 groups.

Pre- & Post-Tests
There were a total of 4 members who completed a Pre and Posttest.

Knowledge of Topic at Conclusion of Module
- Worsened, 0%
- No change, 50%
- Improved, 50%

Enrollment
A total of 275 individuals have been enrolled in Part To Scale. In order for the project to meet the enrollment target for the end of Year 3, 211 members should be enrolled for the next 4 months.

Year 3 Enrollment by Month
- Oct-12: 250
- Nov-12: 260
- Dec-12: 270
- Jan-13: 280
- Feb-13: 290
- Mar-13: 300
- Apr-13: 310
- May-13: 320

Enrolled vs. Target
Measuring Health Outcomes

Connecting Behavioral and Primary Care

Mary Moran
Project Director
Centerstone

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Evaluator
Centerstone Research Institute

OUTLINE

• Grant Summary
  • Current physical health of clients

• Physical Measurements
  • What we collect
    • How are they being used
  • Challenges/Solutions
  • Success Stories/Lessons Learned

• Physical Health Questions
  • What we collect
    • How are they being used
  • Challenges/Solutions
  • Success Stories/Lessons Learned

• Health Service Data
  • What we collect
    • How are they being used
  • Challenges/Solutions
  • Success Stories/Lessons Learned

• Future Plans
Motivation to Pursue Funding

• Large population of clients with severe mental illness
• Untreated or undertreated chronic physical health conditions
• Clients who either did not have primary care providers, or were not actively engaged with their PCPs

Grant Overview

• Received funding from PBHCI SAMSHA grant in Fall 2012 to integrate care
• Formed partnership with Unity Physician Partners to deliver primary care in our behavioral health clinic
• Added Well-Connect component that provides care coordination, promotes wellness and teaches self-management of chronic health conditions

Well-Connect:
an Integrated Care Solution
at Centerstone
### Client Risk Factors at Intake

<table>
<thead>
<tr>
<th>Tobacco</th>
<th>Alcohol</th>
<th>Systolic/Diastolic</th>
<th>BMI</th>
<th>Waist Circumference</th>
<th>Breath CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>38%</td>
<td>16%</td>
<td>55% / 46%</td>
<td>81%</td>
<td>89%</td>
<td>22%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HgbA1C</th>
<th>Lipid HDL</th>
<th>Lipid LDL</th>
<th>Triglycerides</th>
</tr>
</thead>
<tbody>
<tr>
<td>69%</td>
<td>28%</td>
<td>21%</td>
<td>41%</td>
</tr>
</tbody>
</table>

### Physical Measurements

**Collecting Vitals and Blood draws**

- How is this used for CLIENTS:
  - Clients are presented with an individualized score card

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![Well-Connect: an Integrated Care Solution at Centerstone](image)

**Individual Wellness Report, 06/07/14**

<table>
<thead>
<tr>
<th>Category</th>
<th>Indicator (Unit)</th>
<th>Baseline</th>
<th>6-Month</th>
<th>12-Month</th>
<th>18-Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>BMI (kg/m²)</td>
<td>27.4</td>
<td>26.9</td>
<td>26.6</td>
<td>26.4</td>
</tr>
<tr>
<td></td>
<td>Waist Girth (cm)</td>
<td>81.0</td>
<td>82.0</td>
<td>83.0</td>
<td>84.0</td>
</tr>
<tr>
<td></td>
<td>Systolic Blood Pressure (mmHg)</td>
<td>120</td>
<td>119</td>
<td>118</td>
<td>117</td>
</tr>
<tr>
<td></td>
<td>Diastolic Blood Pressure (mmHg)</td>
<td>80</td>
<td>81</td>
<td>82</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>Blood Sugar (mg/dL)</td>
<td>90</td>
<td>91</td>
<td>92</td>
<td>93</td>
</tr>
<tr>
<td></td>
<td>Hemoglobin (g/dL)</td>
<td>14.5</td>
<td>14.5</td>
<td>14.5</td>
<td>14.5</td>
</tr>
<tr>
<td></td>
<td>Blood Pressure (mmHg)</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>Blood Sugar (mg/dL)</td>
<td>90</td>
<td>91</td>
<td>92</td>
<td>93</td>
</tr>
<tr>
<td></td>
<td>Hemoglobin (g/dL)</td>
<td>14.5</td>
<td>14.5</td>
<td>14.5</td>
<td>14.5</td>
</tr>
<tr>
<td></td>
<td>Blood Pressure (mmHg)</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>Lipid HDL (mg/dL)</td>
<td>49</td>
<td>50</td>
<td>51</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Lipid LDL (mg/dL)</td>
<td>106</td>
<td>107</td>
<td>108</td>
<td>109</td>
</tr>
<tr>
<td></td>
<td>Triglycerides (mg/dL)</td>
<td>137</td>
<td>138</td>
<td>139</td>
<td>140</td>
</tr>
<tr>
<td></td>
<td>Breath CO (%)</td>
<td>69</td>
<td>69</td>
<td>69</td>
<td>69</td>
</tr>
</tbody>
</table>
Physical Measurements

• Collecting Vitals and Blood draws

  • How is this used for STAFF:
    • Staff receive a weekly updated Biomarkers Risk Report that indicates client severity and information on which groups would be useful

**Challenges:**

1. Consistently drawing blood or requesting blood work on all clients
   **SOLUTION:** Refer to weekly report to ensure follow-up on missing information. Flexibility around staff meeting client where they are (e.g., another location, client’s home if necessary)

2. Convincing all clients to agree to blood draws
   **SOLUTION:** Working on creating incentives to encourage blood draw. Working with staff to frame blood draw in a positive way

3. Fasting for blood draws
   **SOLUTION:** Trying to schedule blood draws as early in morning as possible. Going to client if timing and transportation is a problem. Providing snacks for clients that have fasted

4. Coordinating with primary care entity to facilitate the blood draws
   **SOLUTION:** Creating procedures to streamline the process. Fostering a give and take of assistance to the PCP as needed. Including primary care doctor in weekly meetings
Physical Measurements

Success Story/Lessons Learned

• Clark had blood sugar readings over 600
• Primary Care Doctor interpreted results as non-compliance with medical advice
• Team monitored diet, medication, and blood sugar daily
• Advocated for doctor to refer to endocrinologist
• Learned Clark has insulin resistant diabetes
• With health coaching and monitoring by endocrinologist, his diabetes is under control

Physical Health Questions

Incorporating Additional Physical Health Questions

• How is this used for CLIENTS:
  • Facilitating a dialogue about clients’ physical health needs and limitations that directly impact their plan for service
  • Alerts clients to any previously undiagnosed/unknown conditions

1. Have you EVER been told by a doctor or other health professional that you had (check all that apply):
   - Type II diabetes/high blood sugar
   - Type I diabetes/high blood sugar
   - High blood pressure/Hypertension
   - High cholesterol
   - Obesity
   - Asthma
   - Chronic bronchitis, emphysema, or COPD
   - Other lung disease describe
   - Heart disease describe
   - Arthritis or other rheumatic disease
   - Cancer describe

   In the past 6 months, about how often do you do LIGHT OR MODERATE leisure-time physical activities for AT LEAST 10 MINUTES that caused ONLY LIGHT sweating or a SLIGHT TO MODERATE increase in breathing or heart rate?  __________ Times per
   - Day
   - Week
   - Month
   - 6 Months (Total)

   Unable to do this activity
   Never
Physical Health Questions

Incorporating Additional Physical Health Questions

How is this used for STAFF:

- Using questions in conjunction with physical measurements and service data to determine Level of Care Groups, Which Wellness Groups to Offer

Challenges:

1. Increased burden of paperwork on staff
   SOLUTION: Modification of tool per their suggestions
   Growing utility of the information collected

2. Increased time and burden for client
   SOLUTION: Giving option of splitting up enrollment process into multiple sessions

3. Had to reduce duplication of questions asked
   SOLUTION: Consulting with program staff about questions that are already asked and where and when they need to be asked
Physical Health Questions

Success Story/Lessons Learned

- Joy was referred because she was over utilizing the emergency room
- Joy reported that she was having strokes
- Team recognized inconsistencies in self-report and her presentation
- Team sought ER discharge paperwork
- Determined client had congestive heart failure and was not managing it
- Plan to continue to try to engage her with a PCP and care team
- Her mental health symptoms and cognitive deficits continue to be a barrier

Health Service Data

Collecting and Electronically Receiving Information about Service Utilization

PCP History, External Referral Follow-ups, ER Visits, Hospitalizations, Kept/Missed Appointments

- How is this used for CLIENTS:
  - PCP information is used to assist the client in finding a PCP of their choice or receiving services from our on site physician

Unity Physician Partners, Inc.
Health Service Data

• Collecting and Electronically Receiving Information about Service Utilization
  • PCP History, External Referral Follow-ups, ER Visits, Hospitalizations, Kept/Missed Appointments

  • How is this used for STAFF:
    • External Referrals and Follow-ups – Used to determine our success with clients engaging in their own health management
    • ER Visits and Hospitalizations – Used as alerts to initiate client contact
      Provide information on areas of perceived over utilization
      Will be utilized in determining cost savings
    • Missed Appointments – Ensures follow-up on clients that miss crucial appointments such as medication refills
    • Kept Appointments – Used to monitor different care groups

Challenges:

1. Determining what data we need to monitor
   SOLUTION: Trial and error. Often getting a lot of data and not sure how to use it. But after time passed and processes got solidified, it would become obvious which data would be useful and how to incorporate

2. Some of the ER and Hospitalizations not reported consistently
   SOLUTION: Able to get electronic claims data from one MCO
   Working with staff to consistently report in system when information is learned
Health Service Data

Success Story/Lessons Learned

1. Suzy recently missed several medication appointments
   • Ran out of medication
   • Streaked through the assisted living facility
   • Lost housing
   • Could have been prevented
   • Team now receives missed appointment alerts that are easy to use

2. ER and Hospitalization data has been beneficial to engage clients who are difficult to engage otherwise
   • Meeting clients at crisis points increases their likelihood of engagement in new behaviors
   • Alerts team to reoccurring medical issues that clients may not have reported to behavioral health providers
   • Helps team to assist clients in developing self management skills that can ultimately reduce admissions
Sustainability Plans

• Partnerships with payors to engage MCO members
• Seek funding for service mixes that lead to better outcomes
• Improve use of data to identify health risks, provide individualized care
• Maximize funding sources for wellness activities (e.g., peer coaching, teaching illness management)
• Educate behavioral health staff about the impact of physical health conditions on client’s well-being
• Educate primary care staff about the impact of behavioral health conditions on client’s follow-through on medical recommendations