Integrated Health/Person Centered Health Home

Austin Travis County Integral Care

Kathleen A. Casey
Dawn R. Handley
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Influencing factors

• Strong track record of successful integration with FQHC partner CommUnity Care
  – E-Merge Program
  – Health Integration Program (HIP)
  – 1115 Waiver Integration Project
  – SAMHSA/HRSA Integration in Crisis Services
• SB 58- Health Home Pilot Opportunity
• Meadows Mental Health Policy Institute
• Data on clinical outcomes
Clinical Health Indicator Improvements

- All consumers in study had minimum of 1 year enrollment in HIP with a minimum of 3 appointments.

- Health Indicator measures were taken at first appointment and most recent appointment, then compared.

- Study only tracks consumers with measures outside of a healthy range at first appointment, since measures in a healthy range do not require treatment.
Health Integration Project

Clinical Health Indicator – Blood Pressure

- Blood Pressure reading is systolic/diastolic.
- Consumers tracked with hypertension (140/90 and above) at first appointment.
- Average Change in measure 18/15.
- Average blood pressure fell from “hypertension” to “pre-hypertension” range.
- For every reduction of blood pressure by 20/10, risk of heart attack and stroke is cut in half.
Health Integration Project

Clinical Health Indicator – Blood Glucose

- Consumers only tracked with Diabetic Blood Glucose Levels (126 and above) at first appointment.
- Average change in measure 36mg/dL
- People with diabetes are twice as likely to develop heart disease.
- People with blood glucose of greater than 200mg/dL considered most at risk.
- Average measure fell out of high risk range, from 227mg/dL to 191 mg/dL.
Health Integration Project

Clinical Health Indicator – Body Mass Index (BMI)

• BMI is a height to weight ratio.

• Consumers only tracked with overweight or obese BMI reading (25 and above) at first appointment.

• Only measure to not show improvements, with average change in a 0.3 gain.

• BMI of 30 and above considered obese and most at risk for multiple health conditions.

• BMI can not be medically treated, and the only effective intervention is diet and exercise.

• Atypical anti-psychotics known to induce weight gain.
Clinical Health Indicator – Cholesterol

- Consumers only tracked with borderline high total cholesterol levels and above (200 and above) at first appointment.

- Average change in measure
  - 44mg/dL (Total cholesterol)
  - 3mg/dL (HDL)
  - 48 mg/dL (LDL)
  - 79mg/dL (Triglycerides)

- Total cholesterol dropped from “high” to “borderline high”
- LDL cholesterol dropped from “high” to “near optimal” range
- HDL rose from “Major risk” to “Moderate risk” range
- HDL is “Good cholesterol”, LDL is “Bad cholesterol”.

### Cholesterol

<table>
<thead>
<tr>
<th></th>
<th>Average at First Measurement Reading</th>
<th>Average at Last Measurement Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholesterol</td>
<td>253</td>
<td>210</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>% with Improvement</th>
<th>% without Improvement</th>
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<tbody>
<tr>
<td>18%</td>
<td>82%</td>
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</table>
Clinical Health Indicator – Cholesterol

**LDL/Bad Cholesterol**
- Average at First Measurement Reading: 175
- Average at Last Measurement Reading: 127

**HDL/Good Cholesterol**
- Average at First Measurement Reading: 38
- Average at Last Measurement Reading: 41

**Triglyceride**
- Average at First Measurement Reading: 298
- Average at Last Measurement Reading: 218

**% with Improvement**
- LDL/Bad Cholesterol: 13%
- HDL/Good Cholesterol: 45%
- Triglyceride: 22%

**% without Improvement**
- LDL/Bad Cholesterol: 87%
- HDL/Good Cholesterol: 55%
- Triglyceride: 78%
Health Integration Project

**Hospital Usage**

- Study included consumers enrolled in 2012 with a minimum of a year in HIP services, and with emergency department (ED), or inpatient admits to local hospitals within two year range, one year before enrollment and one year after.

- Sum of ED admits and inpatient days both one year before enrollment in HIP and after taken and compared.

- Average cost of ED admits and inpatient days applied to difference to estimate cost savings.

- One year time frames used to take into consideration seasonal variables, e.g. flu season, etc…
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Hospital Usage

- ED admits
  - 342 consumers
  - 618 less ED admits in year post HIP enrollment
  - Average of $1429 per admit
  - Estimated annual savings $883,122

Cost Estimate

Sum of ED admits

<table>
<thead>
<tr>
<th>Year Pre Enrollment in HIP</th>
<th>Year Post Enrollment in HIP</th>
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<tbody>
<tr>
<td>1777</td>
<td>1159</td>
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Cost Estimate

- Year Pre Enrollment in HIP: $2,539,333
- Year Post Enrollment in HIP: $1,656,211

Sum of ED admits: $2,539,333 - $1,656,211 = $883,122

Estimated annual savings: $883,122
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Hospital Usage

- Inpatient days
  - 114 consumers
  - 155 less inpatient days in year post HIP enrollment
  - Average of $2001 per inpatient day
  - Estimated annual savings $310,155

- Total Estimated Annual Savings $1,193,277

Cost Estimate

<table>
<thead>
<tr>
<th>Year</th>
<th>Sum of IP Days</th>
<th>Cost Estimate</th>
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</thead>
<tbody>
<tr>
<td>Year pre enrollment in HIP</td>
<td>387</td>
<td>$774,387</td>
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<tr>
<td>Year post enrollment in HIP</td>
<td>232</td>
<td>$464,232</td>
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</tbody>
</table>
Progress to Date

• 4 ATCIC/MMHPI Institute Meetings

• Interviews with Community Partners

• Implementation of OATI Readiness Tool

• Enhanced Integration Planning with CommUnity Care
Next Steps

• Expansion of Readiness Assessment throughout the organization

• Enhanced Integration with CommUnity Care

• Re-convene community partners to plan integration for Austin and Travis County
Questions?