JPS Health Network
The $950 million tax-supported healthcare system serving residents of Fort Worth and surrounding communities in Tarrant County, Texas.

John Peter Smith Hospital
• 573 acute-care beds
• Tarrant County’s only Level I Trauma Center
• 1.7 million+ patient encounters in 2015
• 120,000+ emergency room visits annually
• 60,000 Urgent Care visits/year

30 primary care and specialty clinics
20 school-based health centers
1.1 million patient encounters annually
Nine residency programs, including the nation’s largest hospital-based family medicine residency

Patient Care Pavilion at John Peter Smith Hospital
JPS Behavioral Health

JPS Health Network has a robust Behavioral Health Service Line

2015 Behavioral Health Volumes
• 20,000+ psychiatric emergency visits
• 31,000+ psychiatric inpatient days
• 3,500+ psychiatric observation days
• 1,500+ partial hospitalization days
• 25,000+ psychiatric outpatient visits
• 71,000+ depression screenings in primary care

7 Behavioral Health 1115 Waiver Projects

Two Psychiatric Hospitals (96 & 36 beds)
Psychiatric Emergency Center
Integrated Medical Unit
Walk-In BH Clinic
1 BH School-Based Health Center

4 Partial Hospitalization Programs
Day Rehab For Homeless
Virtual Psychiatric Guidance
6 PC Clinics with Embedded BH Specialists
8 Peer Support Specialists
Psychiatry residency programs
### Behavioral Health Outpatient Services

<table>
<thead>
<tr>
<th>Location</th>
<th>Partial Hospitalization</th>
<th>Med Mgmt</th>
<th>Assessment</th>
<th>Psychological Testing</th>
<th>Psychology</th>
<th>Counseling</th>
<th>Vocational Rehab</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Arlington</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>-</td>
<td>-</td>
<td>YES</td>
<td>-</td>
</tr>
<tr>
<td>Northeast</td>
<td>-</td>
<td>YES</td>
<td>YES</td>
<td>-</td>
<td>-</td>
<td>YES</td>
<td>-</td>
</tr>
<tr>
<td>Stop Six</td>
<td>-</td>
<td>YES</td>
<td>YES</td>
<td>-</td>
<td>-</td>
<td>YES</td>
<td>-</td>
</tr>
<tr>
<td>Viola Pitts</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>-</td>
<td>YES</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Northeast SBC</td>
<td>-</td>
<td>YES</td>
<td>YES</td>
<td>-</td>
<td>-</td>
<td>YES</td>
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</tr>
<tr>
<td>Hemphill</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
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<tr>
<td>HEB BH Clinic</td>
<td>YES</td>
<td>YES</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Psych Day Rehab</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>-</td>
<td>-</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Healing Wings</td>
<td>-</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>-</td>
</tr>
<tr>
<td>SE Tarrant Co MH</td>
<td>-</td>
<td>YES</td>
<td>-</td>
<td>YES</td>
<td>-</td>
<td>YES</td>
<td>-</td>
</tr>
</tbody>
</table>
The Case for Integrated Care

Total Healthcare Costs of Patients With and Without Depression

## The Case for Integrated Care

<table>
<thead>
<tr>
<th>Year</th>
<th>All MH Clients Who Died During Year</th>
<th>MH Male Clients Who Died During Year</th>
<th>MH Female Clients Who Died During Year</th>
<th>Mean Years of Life Lost Per Mental Health Client</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>55.0</td>
<td>52.4</td>
<td>58.1</td>
<td>28.5</td>
</tr>
<tr>
<td>1998</td>
<td>55.0</td>
<td>53.3</td>
<td>56.6</td>
<td>28.8</td>
</tr>
<tr>
<td>1999</td>
<td>54.0</td>
<td>50.8</td>
<td>57.3</td>
<td>29.3</td>
</tr>
</tbody>
</table>

# The Case for Integrated Care

Source: SAMHSA: A standard framework for levels of integrated healthcare

<table>
<thead>
<tr>
<th>MINIMAL COLLABORATION</th>
<th>BASIC COLLABORATION FROM A DISTANCE</th>
<th>BASIC COLLABORATION ONSITE</th>
<th>CLOSE COLLABORATION/PARTLY COLLABORATED</th>
<th>FULLY INTEGRATED</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Separate systems</td>
<td>➢ Separate systems</td>
<td>➢ Separate systems</td>
<td>➢ Some shared systems</td>
<td>➢ Shared systems and facilities in seamless bio-psychosocial web</td>
</tr>
<tr>
<td>➢ Separate facilities</td>
<td>➢ Separate facilities</td>
<td>➢ Same facilities</td>
<td>➢ Same facilities</td>
<td>Consumers and providers have same expectations of system</td>
</tr>
<tr>
<td>➢ Communication is rare</td>
<td>➢ Periodic focused communication; most written</td>
<td>➢ Regular communication, occasionally face-to-face</td>
<td>➢ Face-to-face consultation; coordinated treatment plans</td>
<td>In-depth appreciation of roles and culture</td>
</tr>
<tr>
<td>➢ Little appreciation of each other's culture</td>
<td>➢ View each other as outside resources</td>
<td>➢ Some appreciation of each other's role and general sense of large picture</td>
<td>➢ Basic appreciation of each other's role and cultures</td>
<td>Collaborative routines are regular and smooth</td>
</tr>
<tr>
<td></td>
<td>➢ Little understanding of each other's culture of sharing of influence</td>
<td>➢ Mental health usually has more influence</td>
<td>➢ Collaborative routines difficult; time and operation barriers</td>
<td>Conscious influence sharing based on situation and expertise</td>
</tr>
</tbody>
</table>

"Nobody knows my name. Who are you?"

"I help your consumers."

"I am your consultant."

"We are a team in the care of consumers."

"Together, we teach others how to be a team in care of consumers and design a care system."
JPS Behavioral Health Integration Model

- Monthly Information Packets
- Practice Agreements
- Best Practice Advisories
- Face-to-Face CME’s
- Evidence based library

- Shared care plan
- Multidisciplinary Case Conference
- Shared Patient Lists

- Group Visits
- Embedded BH Specialists
- Virtual Psychiatric and Clinical Guidance
- Diabetes Education Classes

- PHQ-9
- SBIRT
- Tobacco Use
- HbA1c
- LDL

- Information Sharing
- Joint Planning
- Integrated Service Delivery
- Bi-Directional Screening
Information Sharing
- Practice Agreements

• Negotiated with primary care physician leaders and medical directors
• Documented in written agreement
• Approved by Med Executive Committee
Core Elements of our Practice Agreements

- Statement of Purpose
- Roles and Responsibilities
- Screening Process
- Referral Protocols
- Communication Standards
- Patient Interventions and Transitions
- Strategies for Patients in Crisis
## Improve Screening Rates

<table>
<thead>
<tr>
<th>Percentage of patients screened with team’s selected cross-specialty screening</th>
<th><strong>Numerator</strong>: Total number of patients in the population of focus who have received screening with the selected screening tool within the past 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Denominator</strong>: Total patient population of focus for improved care integration at your site.</td>
<td></td>
</tr>
</tbody>
</table>

### Behavioral health screenings for primary care settings

- PHQ2/PHQ9
- SBIRT (Screening, Brief Intervention and Referral to Treatment)
- Tobacco use screening
- Alcohol abuse screening (audit), MAST
- Drug abuse screening (DAST)
- Screening for risk of harm to self or others

### Physical health screenings commonly done in behavioral health settings

- Diabetes screening
- Hypertension Screening
- BMI Calculation
- COPD Screening
- Cardiovascular disease screening
- HIV, STD, hepatitis
Why should we screen?

1. 43,000 Suicides occur in the US every year. More than 70% of those saw their PCP within 30 days prior to committing suicide.

2. 34% of all accidental deaths and 10% of all suicides in Tarrant County were Substance Abuse related.

3. Individuals with a mental illness live 29.3 years less than individuals without a mental illness.
Bi-Directional Screening - PHQ-9

- Standardize screening administration and follow-up processes across primary care practices
- Train staff on how to use screening and how to escalate
- Work with IT to develop MER reporting specs and create reports
- Automate alerts in EMR prompting providers to screen patients at routine intervals
- Include recommended guidelines in EMR for provider action
- Monitor and share results to inform quality improvement
Bi-Directional Screening - Best Practice Advisory

Staff trained on screening tool

Automated alert in EMR prompts providers to document follow-up plan for scores > 9

Results monitored

Physician Documentation of Follow-Up Plan

Among individuals with PHQ-9 score >9

Before "Best Practice Advisory" 46.8%

After "Best Practice Advisory" 89.4%
Bi-Directional Screening
- PHQ-9

Over 168,000 primary care screenings for depression
Information Sharing  
- Best Practice Advisory

1. Patient record in EMR prompts depression screening with PHQ-9. After all questions are answered, a total score will populate and assign a severity risk.

2. If the score is >9, the screening creates a “Best Practice Advisory.”

3. If the provider chooses to take action and evaluate further, a smart order set automatically populates (e.g., referrals, medications, follow-up).

4. “Best Practice Advisory” additionally presents recommended intervention based on PHQ-9 Score.

5. The system will remind staff/providers to screen for depression using the PHQ-9 if the patient has not been screened within the past 12 months.
## Bi-Directional Screening - PHQ-9

<table>
<thead>
<tr>
<th>Score</th>
<th>Interpretation</th>
<th>Treatment Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-9</td>
<td>Mild to Minimal Risk</td>
<td>• Support, educate to call if worsens, follow up as needed.</td>
</tr>
</tbody>
</table>
| 10-14     | Moderate Risk                | • Antidepressant therapy and/or psychotherapy  
• Behavioral health specialist provides resources, initiates treatment planning and motivational therapy as needed  
• Conduct suicide risk assessment  
• Virtual Psychiatric Guidance  
• Follow up in 4-8 weeks |
| 15-19     | Moderately Severe Risk       | • Antidepressant and/or psychotherapy  
• Behavioral health specialist provides resources, initiates treatment planning and motivational therapy as needed  
• Conduct suicide risk assessment  
• Virtual Psychiatric Guidance  
• Referral to Psychiatry if warranted  
• Follow up in 2-4 weeks |
| 20 or higher | Severe Risk                 | • Antidepressant, Possible augmentation  
• BH specialist provides resources, initiates treatment planning and follows up with patient.  
• Conduct Suicide risk assessment  
• Follow up in 2-4 weeks  
• Referral to Psychiatry |
Bi-Directional Screening  
- LDL & HbA1c with atypical antipsychotic

The atypical antipsychotic medications result in an average weight gain of 8% to 28%. Two of the medications also result in increased risk for diabetes due to their impact on glucose levels.

In order to help address these concerns, our system moved to 6 month LDL and HbA1c screenings.

Best Practice Advisory in our EHR
Bi-Directional Screening
- LDL & HbA1c for those taking atypical

A1c Screening
LDL Screening
Linear (A1c Screening)
## Improve Coordination

<table>
<thead>
<tr>
<th>Percentage of patients who received the teams’ selected integrated care intervention in past 12 months.</th>
<th><strong>Numerator</strong>: Number of patients in the population of focus who have received the selected integrated care intervention in the past 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Denominator</strong>: Total patient population of focus for improved care integration at your site.</td>
</tr>
</tbody>
</table>

- Patients with a shared care plan documented at both the PC Provider site and the BH Provider site
- Patients whose treatment plans include goals for both PC and BH
- Patients whose care was covered in Care Coordination Conferences with PC and BH Providers in the past 12 months (Note: Teams focusing on more complex patients may want to track patients covered in coordination conferences at more frequent interval. They could to use the different interval in addition to or instead of the 12-month interval.)
- Patients receive a visit with both their PC Provider and BH Provider within a set time period (e.g. past 60 days for more complex patients)
Integrated Service Delivery
- Embedded BH Specialists

We currently have embedded behavioral health expertise into multiple settings:

• Primary Care Clinics
  - Family Health Clinic
  - Stop Six Clinic
  - Viola Pitts Clinic
  - Southeast Medical Home
  - Northeast Clinic
  - Northeast School Based Clinic

• Trauma Services

• AIDS/HIV Medical Home (Healing Wings)

• Diabetes Groups

• Co-Facilitating General Medical Condition Groups Throughout System
Our system is transitioning to shared care plans as a way to improve coordination and integration of care

- Work in progress
- Broader than Behavioral Health and Primary Care
- Allows all specialties and primary care to see, edit and document problems, goals, interventions, and outcomes.
- Seen in the same format from the same screen for all disciplines involved.
Integrated Planning
- Shared Patient Lists

Our Shared Patient Lists were created to identify patients shared between a behavioral health provider and primary care provider at the same location

- Identifies key metrics:
  - BP
  - HbA1c
  - PHQ-9
  - Diagnoses
  - Medications
  - # of ED Visits in past 6 months
  - # of Hospitalizations in past 6 months

- Embedded Specialists summarize key points from previous visits and reports to providers.

- Drives recommendations for transitioning level of specialty involvement and care
Multidisciplinary Case Conference occur at the request of the patient and/or the providers.

These typically involve the most complex patients.
## Improve Outcomes

<table>
<thead>
<tr>
<th>Percentage of patients receiving integrated care whose condition improved.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Numerator:</strong> Number of patients in population of focus whose condition has been documented as improved in past 12 months, as measured by selected indicator.</td>
</tr>
<tr>
<td><strong>Denominator:</strong> Total patient population of focus for improved care integration at your site.</td>
</tr>
</tbody>
</table>

Examples of improvement in **behavioral health** conditions in **primary care** settings:
- Screening results no longer positive
- Adherence to medication for behavioral health condition (in DSRIP category 3)
- Completion of counseling for behavioral health condition, based on documented achievement of 1+ treatment plan goals
- Reduced PHQ-9 score for all patients with initial scores over 10, to less than 10
- Reduced PHQ-9 score for all patients with initial scores over 10, to less than 5
- Behavioral health condition in remission
- Abstinence from alcohol or other drug use
- Reduced alcohol or other drug use

Examples of improvement in **primary care** conditions in **behavioral health** settings:
- Screening results no longer positive
- Reduced tobacco use
- Discontinued tobacco use
- HbA1c less than 9%
- BP to <140/90
- LDL-C control
- Patients engaged in or received treatment for STD, HIV, hepatitis
At several primary care clinics, JPS has quarterly Co-Facilitated Medical Groups with the Primary Care Physician and Embedded Specialists.

The groups consist of Diabetes, Hypertension and Congestive Heart Failure cohorts.
Integrated Service Delivery - Diabetes Education Classes

We have eight Diabetic Education Groups at various locations in both English and Spanish. Each of the group cohorts meet for four weeks.

Embedded specialists lead the 4th group to discuss depression, coping skills, and stress management related to their medical conditions and lifestyle changes.
Those with an LDL >130mg/dl had an average decrease by 59mg/dl during this period.
Bi-Directional Screening
- HbA1c (lower is better)

Data points:
- Jan-14: 36.2%
- Feb-14: 36.2%
- Mar-14: 36.5%
- Apr-14: 36.6%
- May-14: 36.4%
- Jun-14: 35.8%
- Jul-14: 35.8%
- Aug-14: 35.7%
- Sep-14: 35.8%
- Oct-14: 35.4%
- Nov-14: 35.3%
- Dec-14: 34.9%
- Jan-15: 35.5%
- Feb-15: 35.4%
- Mar-15: 35.3%
- Apr-15: 35.2%
- May-15: 35.6%
- Jun-15: 35.7%
- Jul-15: 35.1%
- Aug-15: 34.7%
- Sep-15: 34.2%
- Oct-15: 34.0%
- Nov-15: 34.0%
- Dec-15: 34.0%
- Jan-16: 34.0%
Virtual Psychiatric & Clinical Guidance

The virtual resource program is a psychiatric guidance service designed to foster integration of behavioral healthcare in primary care settings. The service is available by phone or email seven days a week, 24-hours a day, at no cost to participating primary care providers.

Program includes:
• Virtual guidance
• Monthly e-resource
• Research library
• Community resources
• Webinars and presentations

- Education
- Evidence base practice
- Case specific consultation
Integrated Service Delivery
- Virtual Psychiatric & Clinical Guidance

Virtual Services

<table>
<thead>
<tr>
<th></th>
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<tr>
<td>2013-Q3</td>
<td>104</td>
<td>308</td>
<td>483</td>
<td>465</td>
<td>639</td>
<td>806</td>
<td>745</td>
<td>1102</td>
<td>629</td>
<td>990</td>
<td>1080</td>
</tr>
</tbody>
</table>

Centered in Care
Powered by Pride
Integrated Service Delivery
- Virtual Psychiatric & Clinical Guidance

Virtual Website Visits

- 2013-Q3: 2175
- 2013-Q4: 1134
- 2014-Q1: 1927
- 2014-Q2: 2476
- 2014-Q3: 2475
- 2014-Q4: 2609
- 2015-Q1: 2135
- 2015-Q2: 2226
- 2015-Q3: 2310
- 2015-Q4: 2267
- 2016-Q1: 2797
Primary care providers can speak with a psychiatrist about evidence based and best practice medication algorithms within 30 minutes.
### Information Sharing - Monthly Information Packets

<table>
<thead>
<tr>
<th>Month</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 2013</td>
<td>Depression</td>
</tr>
<tr>
<td>November 2013</td>
<td>Anxiety</td>
</tr>
<tr>
<td>December 2013</td>
<td>Insomnia</td>
</tr>
<tr>
<td>January 2014</td>
<td>Bipolar</td>
</tr>
<tr>
<td>February 2014</td>
<td>Schizophrenia</td>
</tr>
<tr>
<td>March 2014</td>
<td>PTSD</td>
</tr>
<tr>
<td>April 2014</td>
<td>Integrated Healthcare</td>
</tr>
<tr>
<td>May 2014</td>
<td>Psych Meds and Pregnancy</td>
</tr>
<tr>
<td>June 2014</td>
<td>Metabolic Side Effects from Antipsychotics</td>
</tr>
<tr>
<td>July 2014</td>
<td>Domestic Violence</td>
</tr>
<tr>
<td>August 2014</td>
<td>Substance Abuse</td>
</tr>
<tr>
<td>September 2014</td>
<td>Antidepressant-Anticonvulsants for Chronic Pain</td>
</tr>
<tr>
<td>October 2014</td>
<td>Prescribing and Tapering Benzodiazepines</td>
</tr>
<tr>
<td>November 2014</td>
<td>Importance of Integrated Healthcare</td>
</tr>
<tr>
<td>December 2014</td>
<td>Insomnia &amp; Sleep Hygiene</td>
</tr>
<tr>
<td>January 2015</td>
<td>Eating Disorders</td>
</tr>
<tr>
<td>February 2015</td>
<td>E-Consults</td>
</tr>
<tr>
<td>March 2015</td>
<td>Depression</td>
</tr>
<tr>
<td>April 2015</td>
<td>Smoking Cessation</td>
</tr>
<tr>
<td>May 2015</td>
<td>Bipolar Disorder</td>
</tr>
<tr>
<td>June 2015</td>
<td>PTSD</td>
</tr>
<tr>
<td>July 2015</td>
<td>Pregnancy and Psychotropic Medications</td>
</tr>
<tr>
<td>August 2015</td>
<td>Child and Adolescent Anxiety</td>
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<tr>
<td>September 2015</td>
<td>ADHD</td>
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<td>October 2015</td>
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<tr>
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<td>Depression</td>
</tr>
<tr>
<td>December 2015</td>
<td>Anxiety</td>
</tr>
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<td>January 2016</td>
<td>Insomnia and Sleep Hygiene</td>
</tr>
<tr>
<td>February 2016</td>
<td>Domestic Violence</td>
</tr>
</tbody>
</table>

These are also made available on our Virtual Guidance Provider Resource Page.
Two presentations each year focusing on common behavioral health issues found in Primary Care. Both are done in person and streamed on the internet

- Management of Anxiety in Primary Care
- Management of Depression in Primary Care
- Prescribing and Tapering Benzodiazepines - Guidelines in Primary Care

These are also made available on our Virtual Guidance Provider Resource Page
Bi-Directional Screening - 12 Month Remission Rates

Baseline: 11.1%
2015: 34.2%
Oct-15: 31.9%
Nov-15: 30.3%
Dec-15: 33.3%
Jan-16: 32.5%
Impact of Integrated Care at JPS

Reduced Psych ED Visits

DY3

DY4

Psych ED Visits Before

Psych ED Visits After
Impact of Integrated Care at JPS

Reduced Inpatient Utilization

DY3

DY4

Inpatient Admits Before
Inpatient Admits After
QUESTIONS?