



# Integrating Behavioral Health and Primary Care: The JPS Experience

# Presenters

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## **Chris Wall, RN-BC, BSN**

- Behavioral Health Project Director

## **Wayne Young, MBA, LPC, FACHE**

- Vice President of Behavioral Health
- Administrator, Trinity Springs Pavilion



# JPS Health Network (Tarrant County Hospital District)

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JPS Health Network is a 537-bed public hospital system with 43 associated ambulatory care and primary care outreach sites in Fort Worth serving all of Tarrant County (897 sq. miles), with a population of approximately 1.8 million residents.

As one of Texas' major urban public hospitals, JPS Health Network serves as the primary safety net provider of acute care for Tarrant County's Medicaid and uninsured populations.



# JPS Behavioral Health Service Line



1. Psychiatric Emergency Center (19,000+ visits annually)
  - 24-48 Hour Observation
2. Trinity Springs Pavilion (96 Psychiatric Inpatient Beds )
  - 16 adolescent, 60 adult, 20 state hospital alternative beds
3. Psychiatric Consultation/Liaison service
4. Neuro-Psych Consultation Service (Level 1 Trauma Center)
5. Three Partial Hospitalization Programs
6. Four co-located behavioral health outpatient clinics
7. "Urgent Care" type walk-in outpatient clinic
8. School based behavioral health clinic sites
9. Multiple Embedded Behavioral Health Specialists in primary care settings
10. Virtual Psychiatric and Clinical Guidance
11. Significant Peer Support Services in acute levels of care
12. Academic Medical Center
  - 16 Slot Psychiatric Residency
  - Behavioral Health Clinical Rotation/Internship Site annually for JPS Emergency Dept Residents, JPS Family Practice Residents, NP Students, PhD Psychology Interns, Medical Students, PhD Health Psychology, Nursing Students, MSW Students, PA Students, & EMT Students



## Behavioral Health

- Discharge Management Program
- Partial Hospitalization Program
- Extended Clinic Hours
- Integrated Care
- Virtual Psychiatric and Clinical Guidance
- Central Assessment and Referral Center
- Psych Day Rehab for Homeless

## Community Focused & Care Coordination

- Care Connections for the Homeless
- MedStar Patient Navigation
- Community Connect
- School Based Chronic Disease Care Model
- Journey to Life
- Palliative Care

## Infrastructure

- Innovation & Transformation Center
- Sepsis
- Outcome Based Payments

## Specialized

- Care Transitions
- Rehab Transition
- Coordinated Chronic Heart Failure
- Diabetes Chronic Care Management
- Expanded Pain Management (JPSPG)
- Expand Ophthalmology & Wound Care
- Patient Experience
- Call Center
- Patient Centered Medical Home

# Discharge Management Program

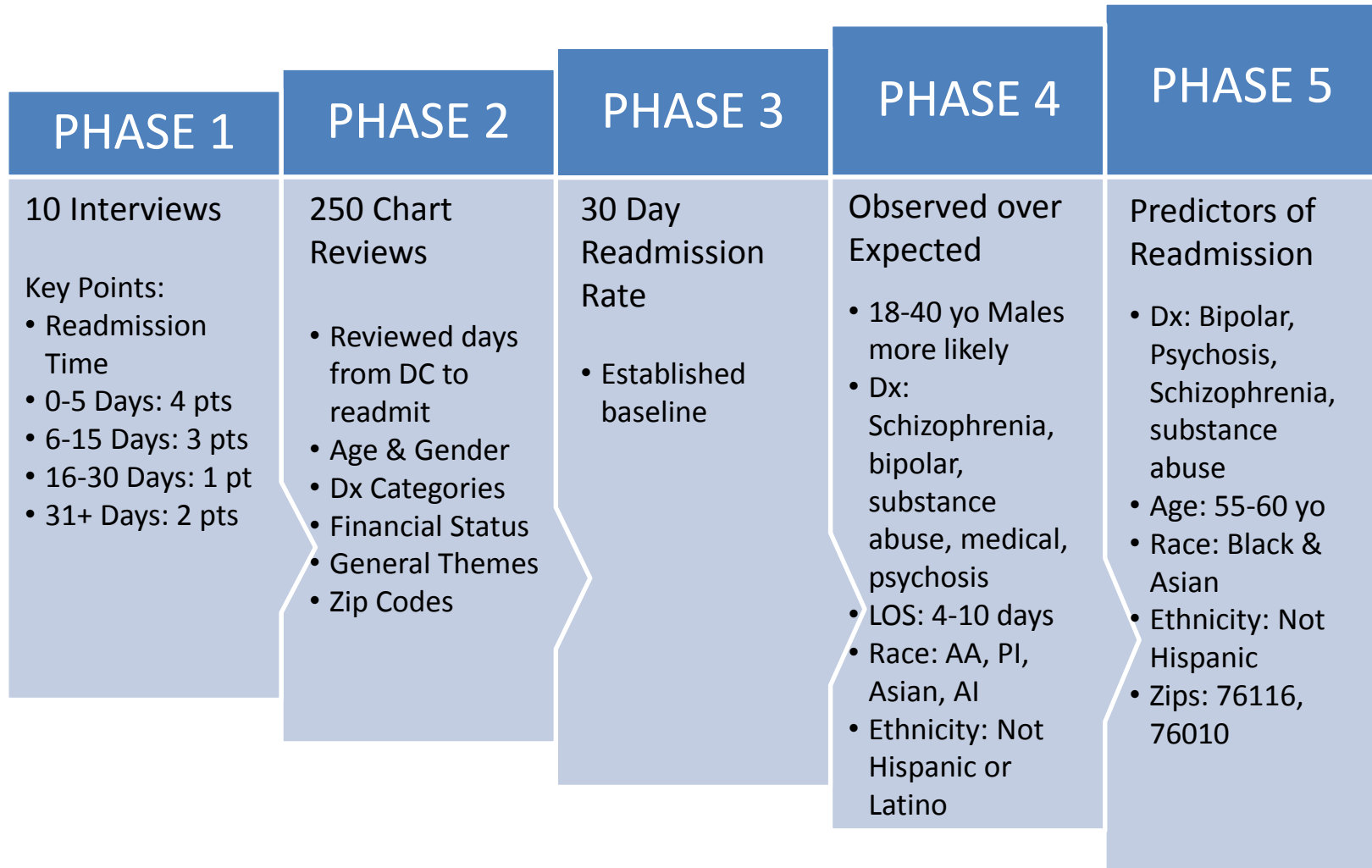
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This project created a comprehensive Behavioral Health Discharge Management Program.

Transition Managers are responsible for proactive pre- and post-discharge interaction, intervention, and coordination with patients discharged from Trinity Springs Pavilion as they return to the community. The engagement activities are stratified based on the assessed level of risk for readmission. Activities range from simple follow-up calls to home visits and transportation assistance.

We also utilize Peer Support Specialists throughout our continuum as well as a Patient & Family Advisory Council to better inform our discharge/transition practices.

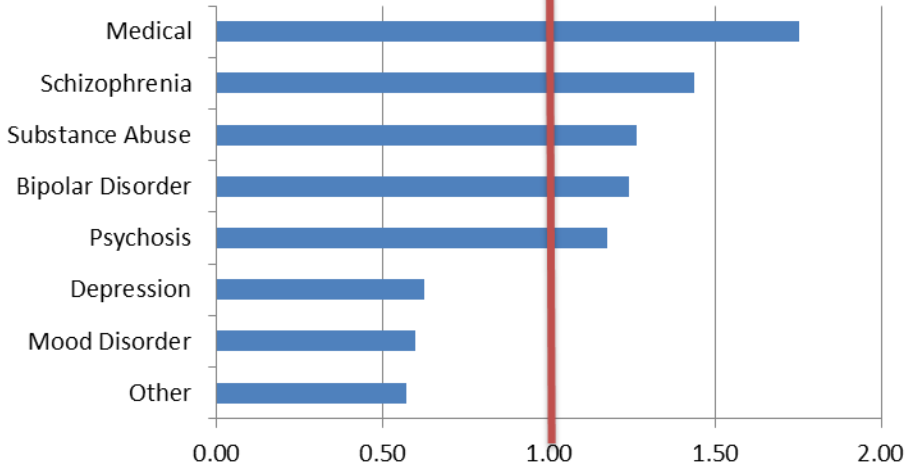
# Readmission Data Analysis Summary



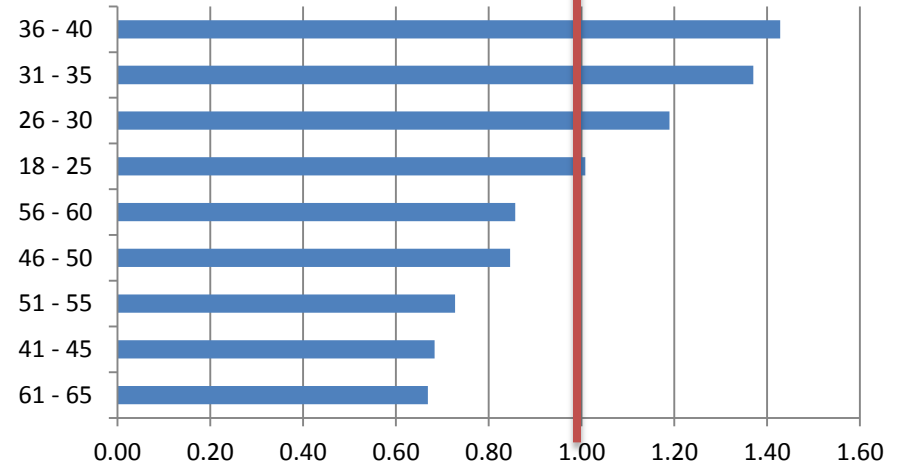
# Observed Over Expected



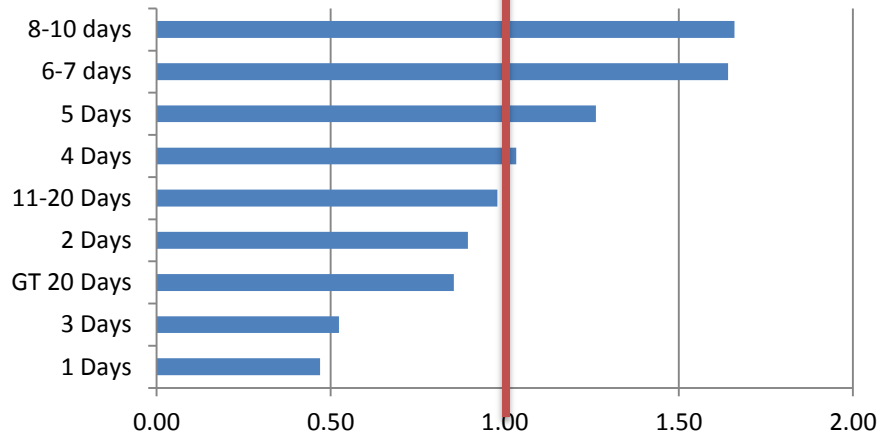
**DIAG CLASS: O / E Ratio**



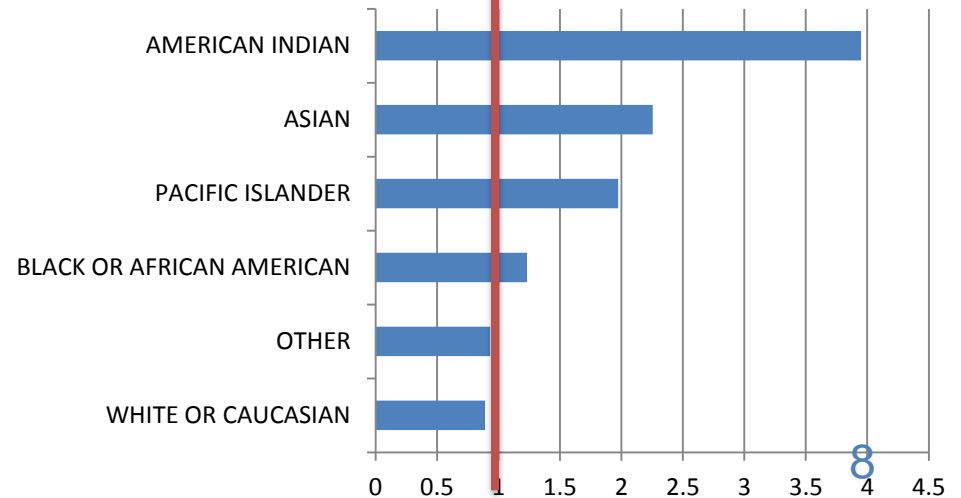
**AGE RANGE: O / E Ratio**



**LOS RANGE: O / E Ratio**



**Race: O / E Ratio**

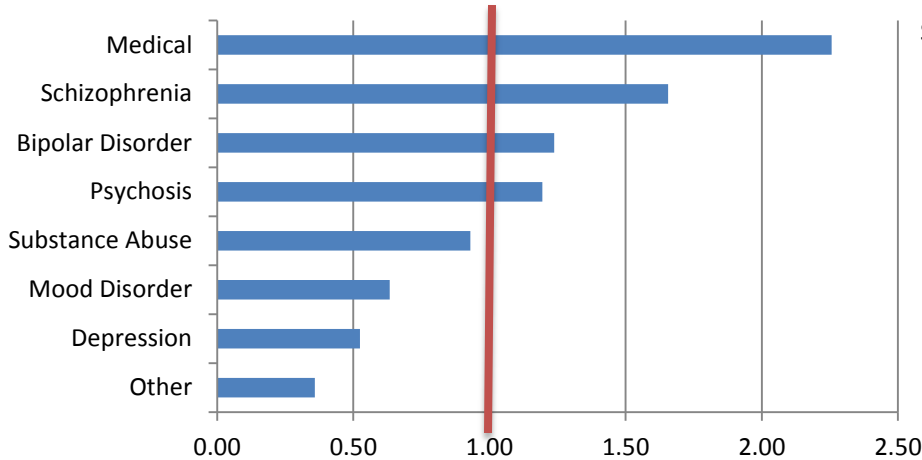




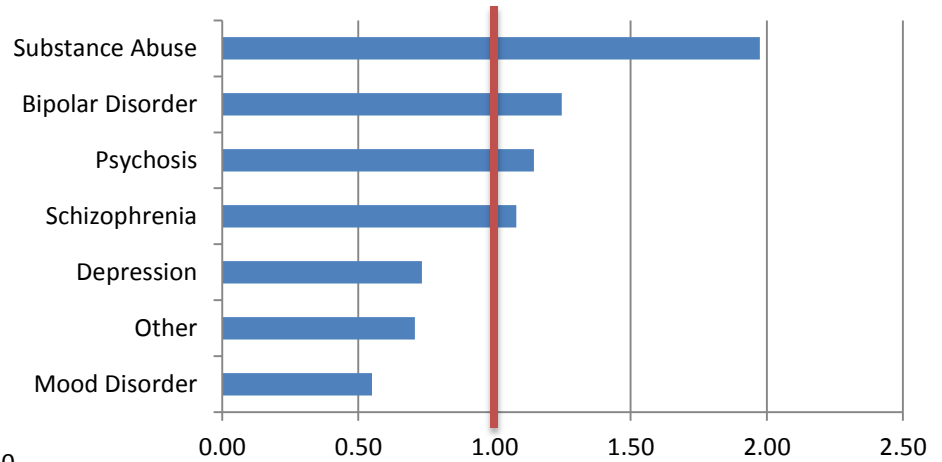
We then began to refine our analysis by looking at variables that appeared to be particularly high risk by gender.



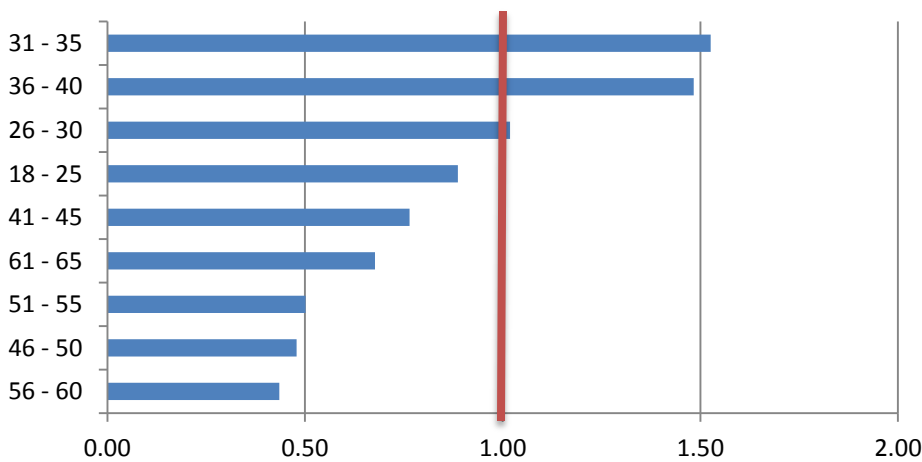
**DIAG CLASS: Female - O/E RATIO**



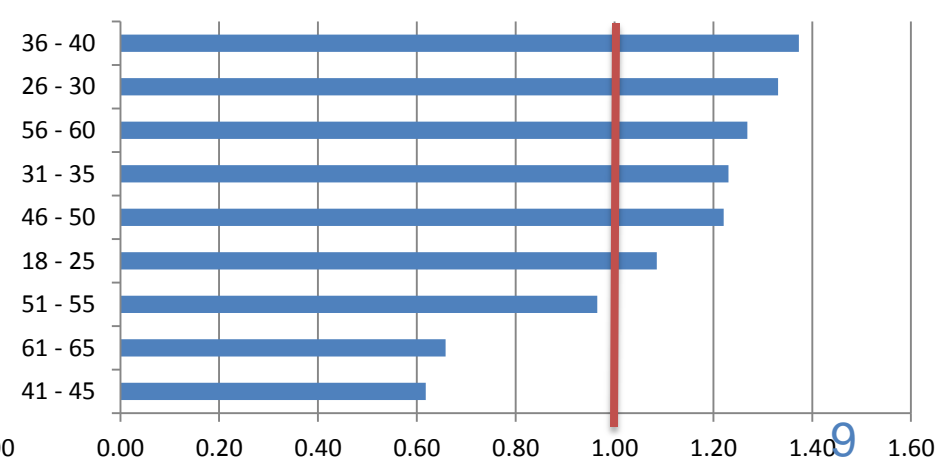
**DIAG CLASS: Male - O/E RATIO**



**AGE RANGE: Female - O/E RATIO**



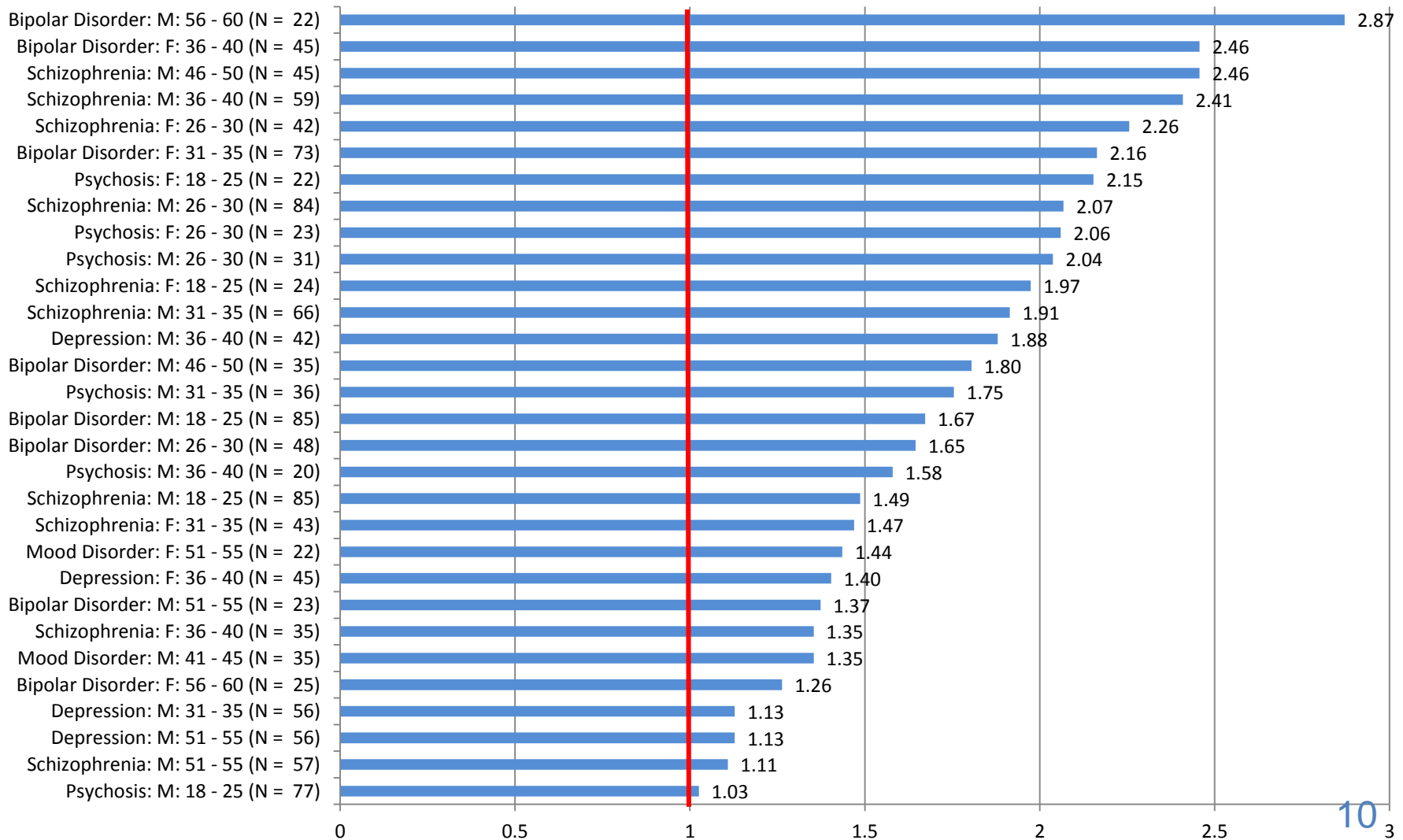
**AGE RANGE: Male - O/E RATIO**



# We then refined our analysis by looking at rates for readmission by multiple variables (gender, age range, & diagnosis).



**NOTE: Only included Categories 'More Likely' to Readmit that had 20 or more Index Discharges**



# PHASE 5: Predictors For Readmission



## The Predictive Model analysis process:

1. Identified the independent demographic and clinical variables that were present on admission of each Index visit:
2. Identified the dependent variable: “Index with 1 or more Readmits”
3. Segmented the values in each independent variable into meaningful groups that had sufficient volumes to make a statistically significant impact on the dependent variable
4. Identified the “Reference Group” for each independent variable as the group with the lowest Observed over Expected (O/E ratio)
  - Age Range: 61-65
  - Gender: Female
  - Zip Code: 76102
  - Race: Caucasian
  - Ethnicity: Hispanic
  - Diagnostic Class: Other

# PHASE 5: Predictors For Readmission



## The Predictive Model analysis process cont' d:

5. Ran a Logistic Regression analysis to determine the contribution coefficients – odds ratio (Exp(B)) - of each of the independent variable groups on the dependent variable

6. Assign a weighted risk score to each independent variable group with a contribution coefficient  $> 1$

- Exp(B) 1.0 to 1.49 = 1 point
- Exp(B) 1.5 to 1.99 = 2 points
- Exp(B) 2.0 to 2.49 = 3 points
- Exp(B) 2.5 or greater = 4 points

Reference Table 1: Readmission Risk Values by Variable

7. Determine the Risk classification scale based on total Risk Score per visit

8. Calculate the Percentage and Readmit Rates for each Risk Classification

# Predictors For Readmission



Readmission Risk Values by Variable

COLUMN	CRITERIA	POINT VALUE
DiagClass	Bipolar Disorder	2
DiagClass	Psychosis	2
DiagClass	Schizophrenia	2
DiagClass	Substance Abuse	2
AgeRange	56 - 60	1
Race_Name	BLACK OR AFRICAN AMERICAN	1
Race_Name	ASIAN	4
Ethnic_Name	NOT HISPANIC OR LATINO	2
patientzip	76116	1
patientzip	76010	1

# Predictors For Readmission



## OVERVIEW - READMIT RATE RISK

Risk Category	Readmit Risk Score	Count
Low	0	192
	1	34
	2	210
Medium	3	922
	4	450
	5	961
High	6	700
	7	85
	8	4
	9	26
	10	1
Total		3585

Statistics:

Average Readmit Risk Score: 4.16

Standard deviation: 1.698

# General Risk Category Engagement Windows



- Low Risk for Readmission – 30 day post discharge engagement window
- Moderate Risk for Readmission – 60 day post discharge engagement window
- High Risk for Readmission – 90 day post discharge engagement window

# Customized Discharge Educational Tools Based on Risk Level



Education Discharge Tools

Readmission Risk Level

Educational tools must be provided to the patient prior to discharge. 1. Low - Standard AVS and Social Services after care plan must be (required) provided to the patient 2. Medium -- Standard AVS and Social Services after care plan must be (required) provided to the patient at least one more educational tool 3. High - Standard AVS, Social Services after care plan must be (required) provided to the patient plus two or more educational tools are provided to patient.

Educational Tools for Med Risk for Readmission

Medium -- Standard AVS and Social Services after care plan must be (required) provided to the patient at least one more educational tool must also be provided to patient

Educational Tools for High Risk for Readmission

High - Standard AVS, Social Services after care plan must be (required) provided to the patient plus two or more educational tools are provided to patient prior to discharge. (also required)



# Customized Post Discharge Engagement activities Based on Risk Level



▼ Risk for Readmission

Risk for Readmission (Number)	0 - Low	1 - Low	2 - Low	3 - Moderate	4 - Moderate	5 - Moderate	6 - High	7 - High	8 - High	9 - High	10 - High
Readmission Risk Level	Low	Mod	High								
Low Risk Interventions	TC contacts PT 7 days after DC		FAU appointment w/ TC		TC contacts PT 14 days after DC		FAU contact after 30 days of DC				
Moderate Risk Interventions	TC meet w/PT before DC		Peer Support Specialist contacts PT 48hrs after DC			TC contacts PT 7 days after DC					
High Risk Interventions	TC assigned after admission to TSP			Peer Support Specialist meets w/ pt within 24 hrs			TC meets w/ pt 24 hrs before DC				
Additional Interventions	Appt w/ EBHS	Group Therapy w/ EBHS	Appt for counseling	Appt with psychologist	Group Therapy session w/ TC						

# Risk Based Intervention Examples



## Interventions

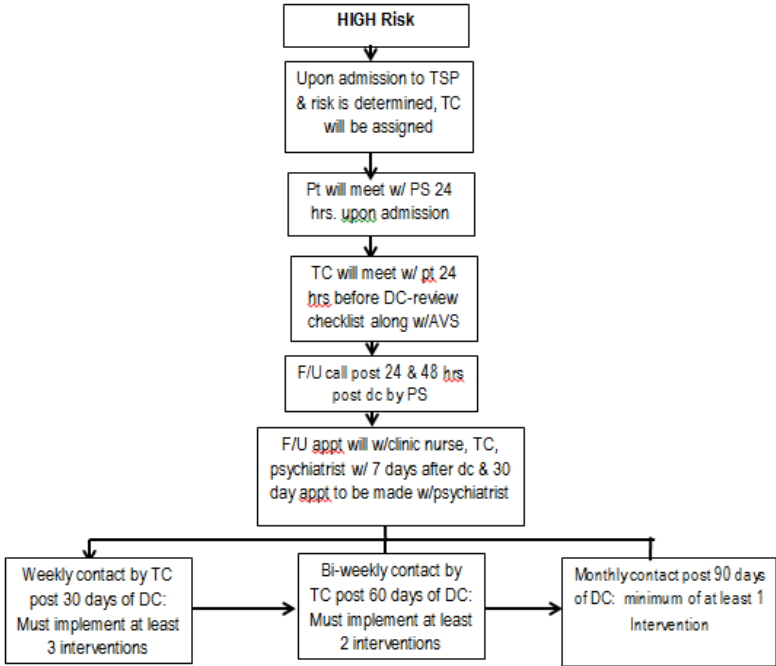
- |  |  |
|--|--|
| <ul style="list-style-type: none"><li>• Appointment with an Embedded Behavioral Health Specialist (EBHS)</li><li>• Group Therapy with an EBHS</li><li>• Appointment for counseling</li><li>• Appointment with psychologist</li><li>• Group Therapy Session with Transition Coordinator (TC)</li><li>• Telephonic Supportive/Mentoring 10-15 minutes phone appointment</li><li>• Telephonic Supportive/Mentoring 20-30 minutes phone appointment</li><li>• Attend appointment with patient at their 1<sup>st</sup> visit with psychiatrist</li><li>• Assist w/navigation of DC meds</li><li>• Family Education/Consultation Support</li></ul> | <ul style="list-style-type: none"><li>• Disease Management Education</li><li>• Recovery Messages sent by mail or email</li><li>• Setup appointment for home visit</li><li>• Consultation w/Pharm D regarding meds</li><li>• Assistance with establishing a Primary Care Appointment</li><li>• Assistance with establishing with JPS Connection Programs</li><li>• Facilitate process with aftercare at a Substance Abuse Treatment Center</li><li>• Facilitate process with other community support groups</li><li>• Referral to Partial Hospitalization Program</li></ul> |
|--|--|

\*LIST IS NOT ALL-INCLUSIVE

# Sample Workflow - High Risk for Readmissions



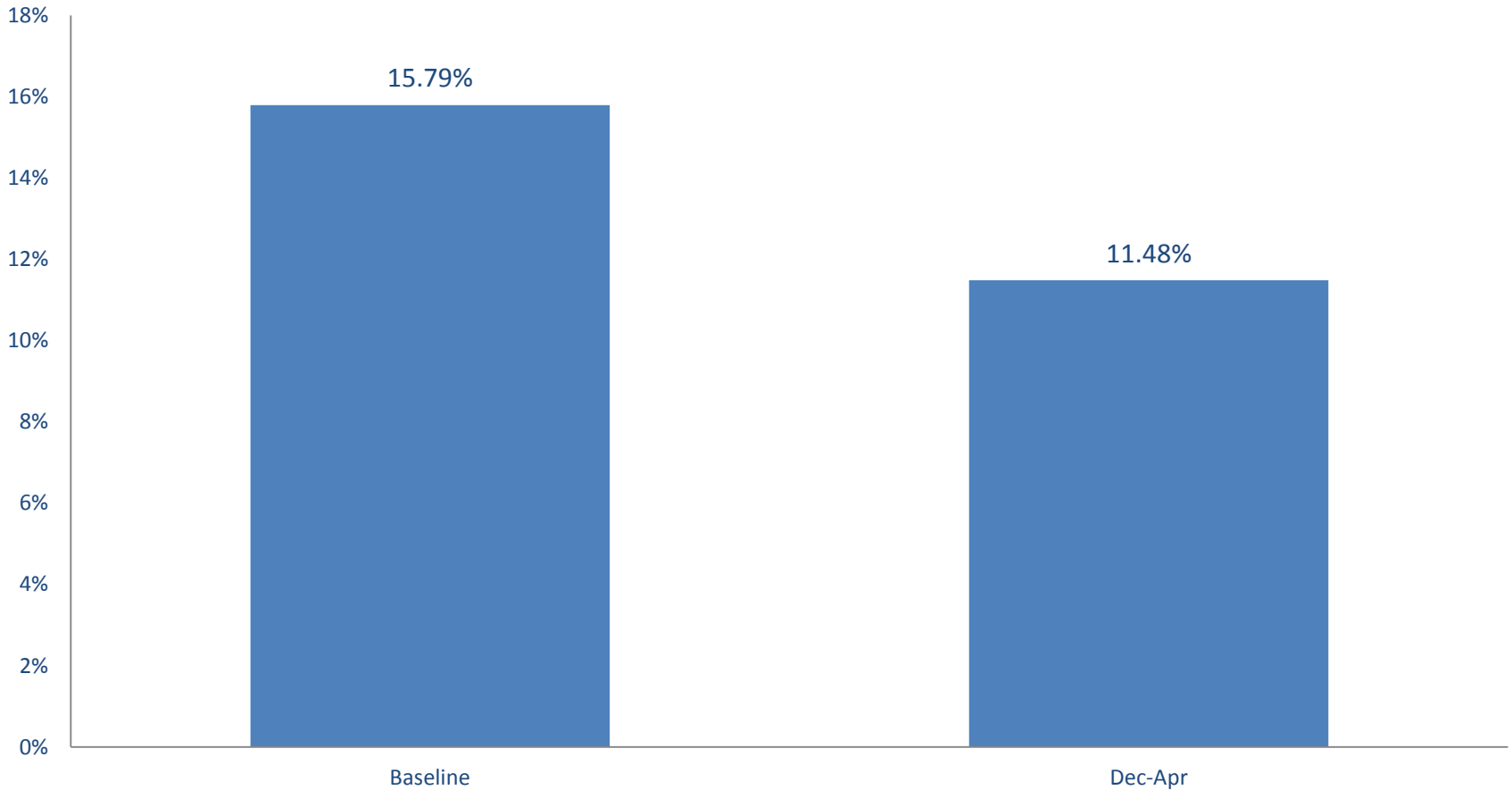
## Level of Intervention Process with HIGH Risk for Readmission



### Additional Interventions

<ul style="list-style-type: none"> <li>• Appointment with an Embedded Behavioral Health Specialist (EBHS)</li> <li>• Group Therapy with an EBHS</li> <li>• Appointment for counseling</li> <li>• Appointment with psychologist</li> <li>• Group Therapy Session w/Transition Coordinator (TC)</li> <li>• Telephonic Supportive/Mentoring 10-15 minutes</li> <li>• Telephonic Supportive/Mentoring 20-30 minutes</li> <li>• Attend appointment w/ patient at 1<sup>st</sup> visit w/ psychiatrist</li> <li>• Medication Navigation of process &amp; assistance programs</li> <li>• Referral to IST Team</li> </ul>	<ul style="list-style-type: none"> <li>• Family Education/Consultation Support</li> <li>• Disease Management Education</li> <li>• Recovery Messages sent by mail or email</li> <li>• Setup appointment for home visit</li> <li>• Consultation w/Pharm D regarding meds</li> <li>• Assistance w/ establishing a Primary Care Appointment</li> <li>• Assistance with establishing JPS Connection Programs</li> <li>• Facilitate process with after care at a Substance Abuse Treatment Center</li> <li>• Facilitate process with other community support groups</li> <li>• Referral to Partial Hospitalization Program</li> <li>• Collaborate with community case manager</li> </ul>
<p>This is not an all-inclusive list for interventions. Interventions will be added per the needs of the care plan.</p>	

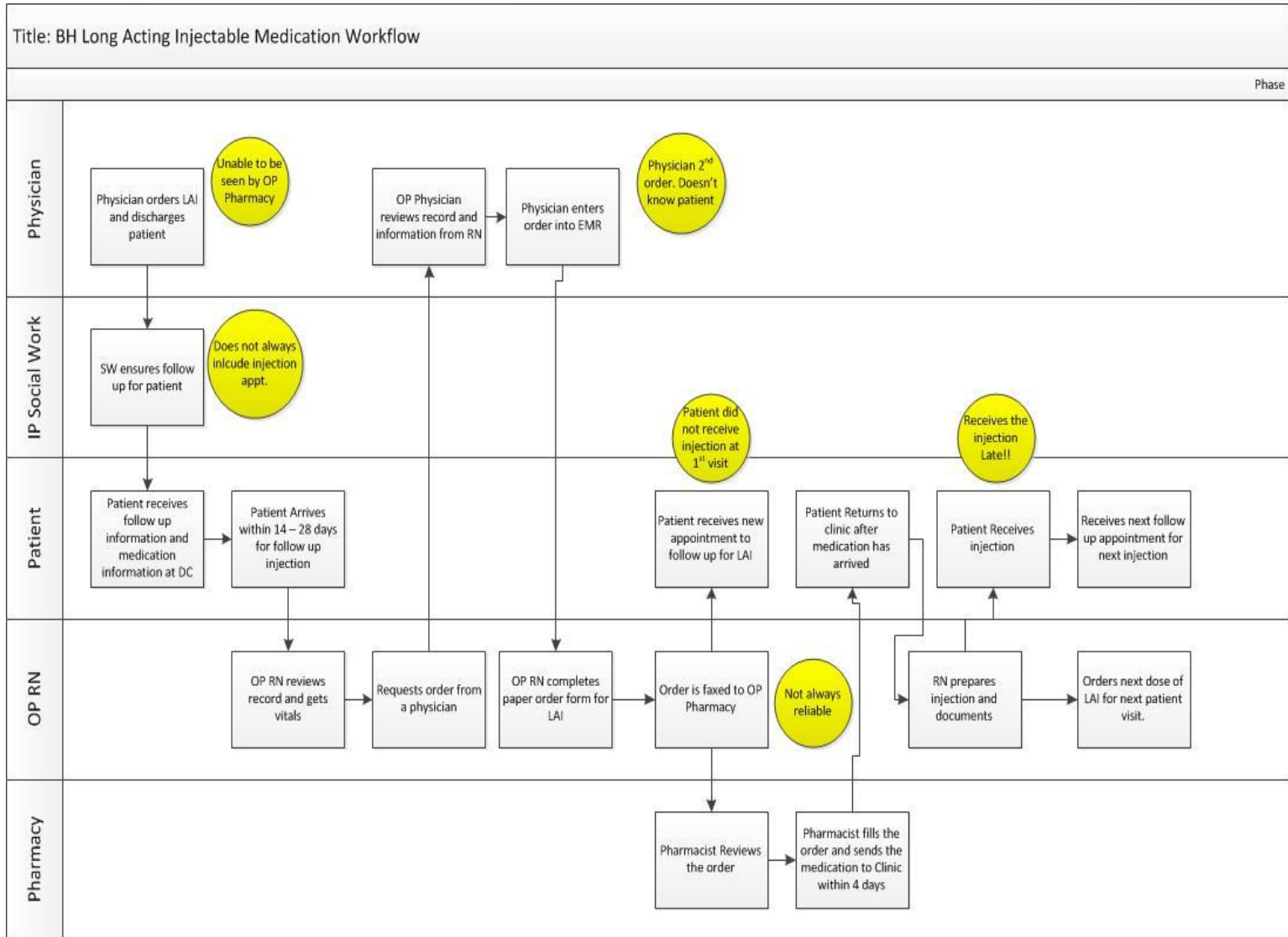
## Readmission Rate - HIGH RISK GROUP



# LEAN Methodology



# Long Acting Injectable Workflow - Initial

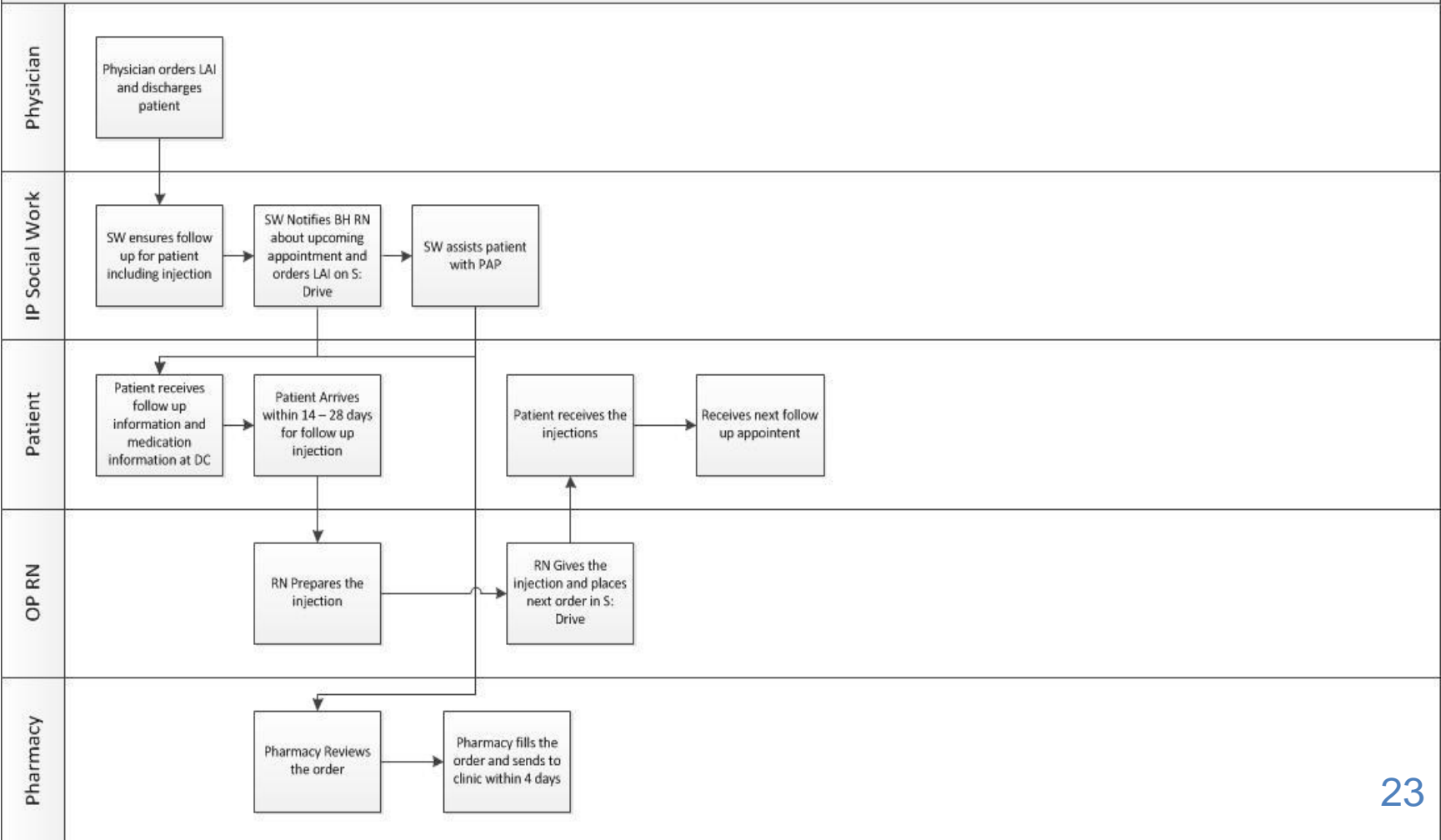


# Long Acting Injectable Workflow - Refined

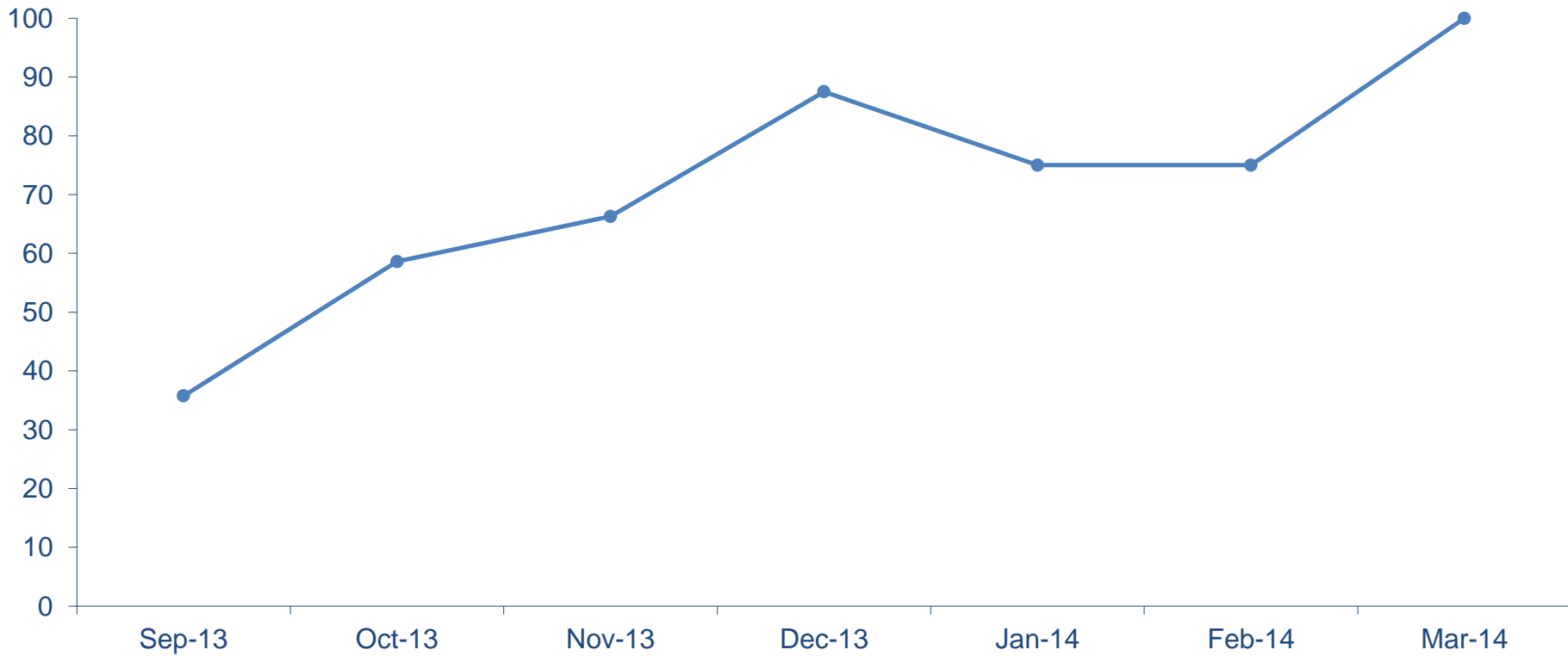


Title: BH Long Acting Injectable Medication Workflow - NEW

Phase

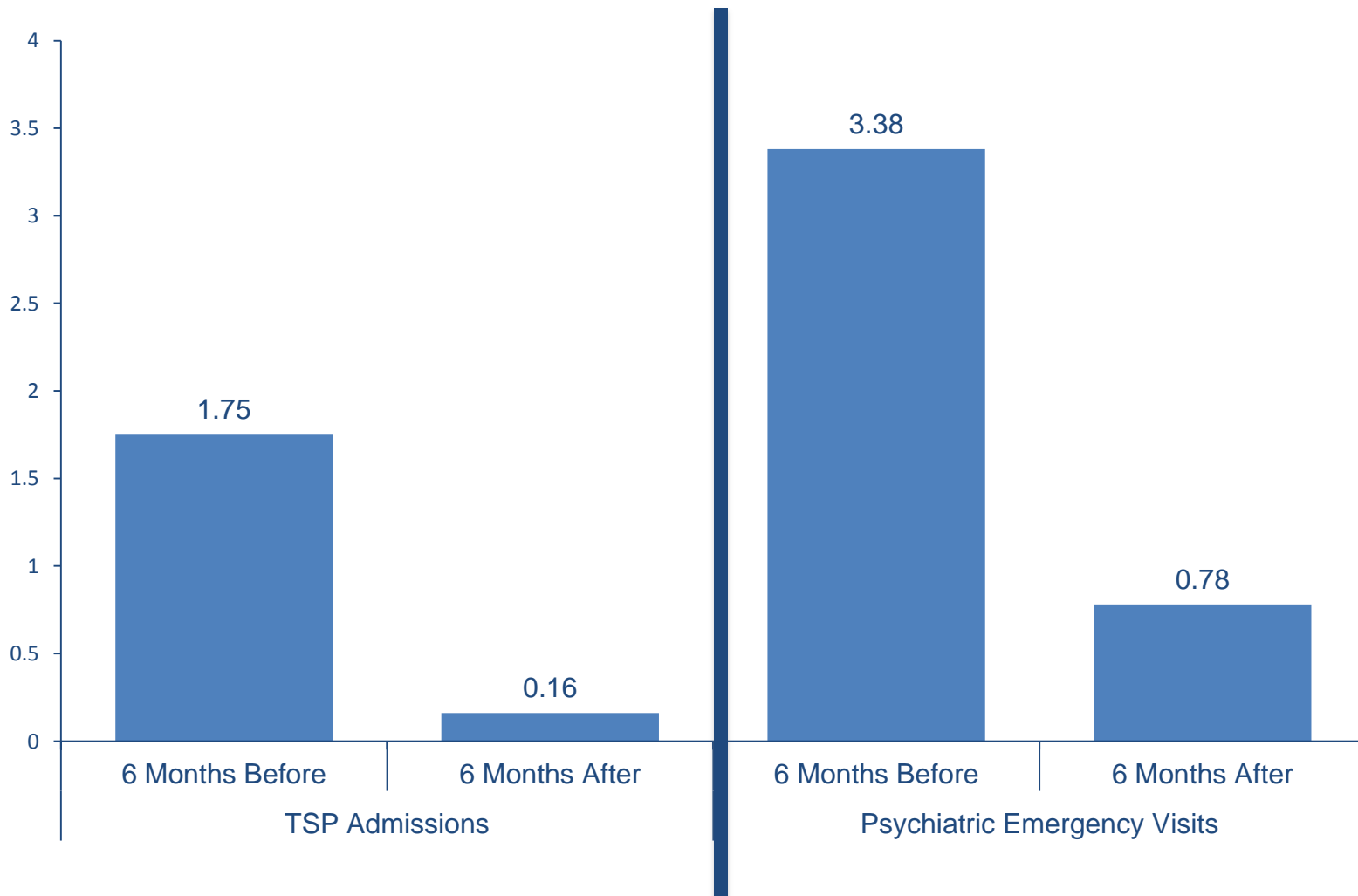


# Long Acting Injectable Administration Rate





# Workflow Improvement Results (n=41)



Historically, JPS has utilized a recorded message and “snail-mail” notice to remind patients of their follow-up appointments.

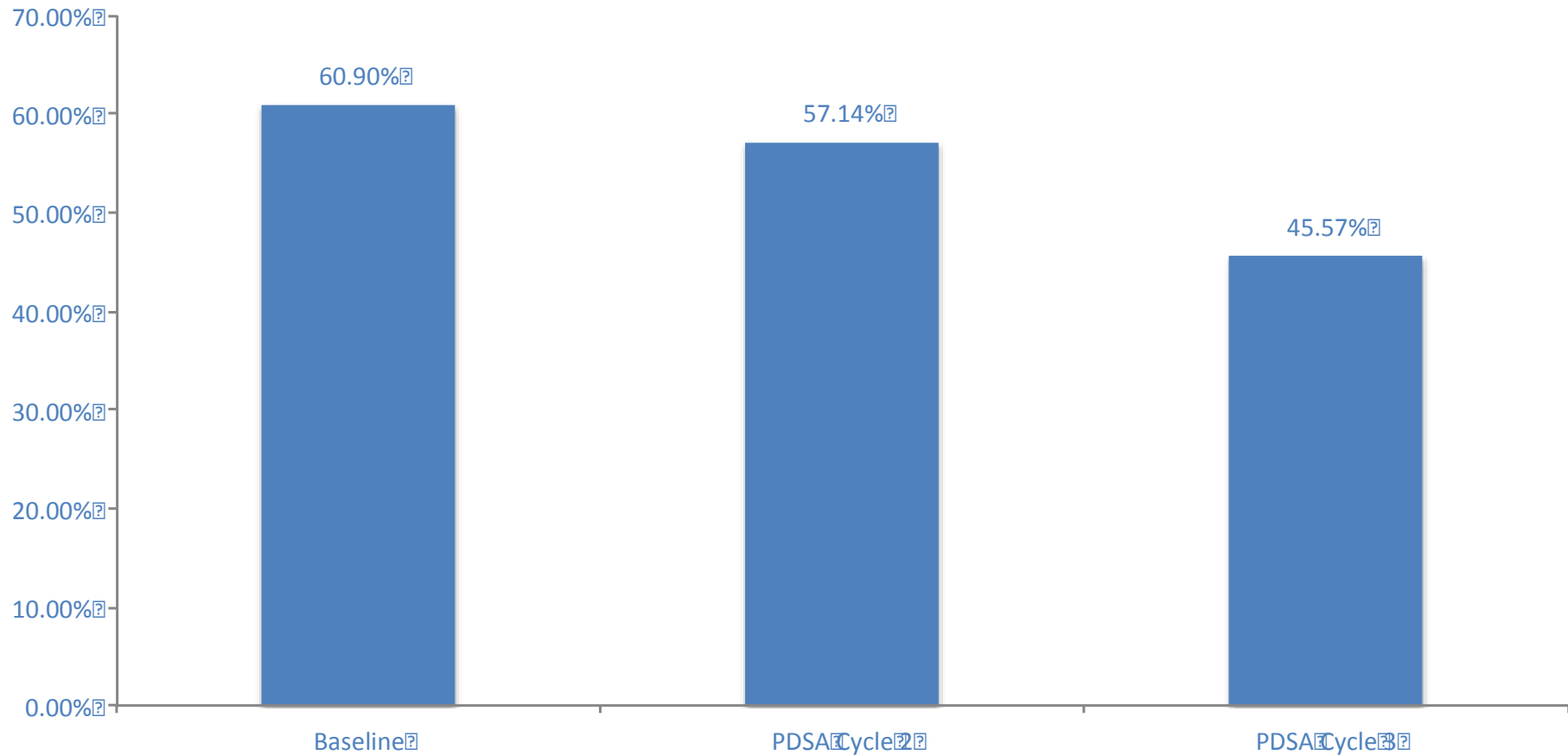
We undertook an effort to determine if utilizing more current methods to remind patients might have an impact on attendance at the first post-discharge appointment.

We met with patients prior to discharge and solicited their preference for either email or text message appointment reminders. The early results indicate there is benefit to electronic appointment reminders.

# Electronic Contact Data



## First Post-Discharge Missed Appointment Rate



# Peer Facilitated Groups

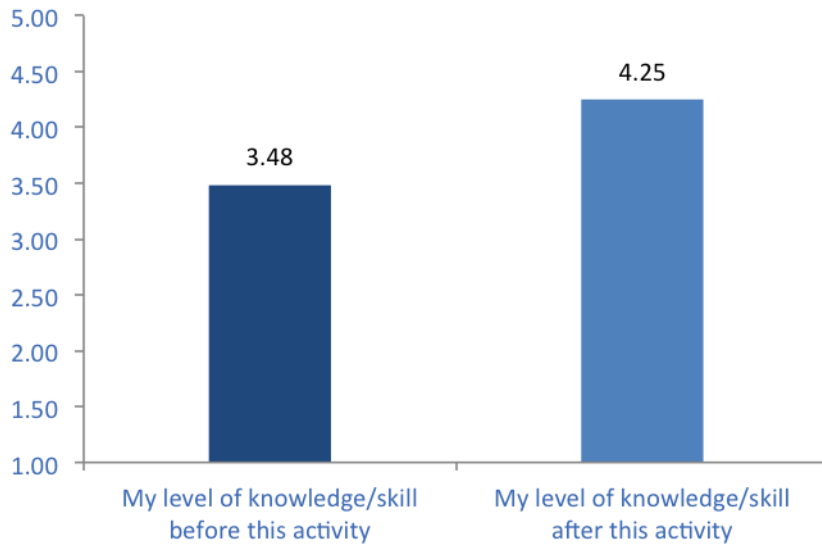


- Group were facilitated by Peer Support Specialist on NW and SW units
- LCSW was present at all groups as an additional resource
- Groups focused on presenting discharge planning/relapse prevention information
- Patients were asked to complete a survey at the end of each group

# Pilots: Peer Facilitated Groups

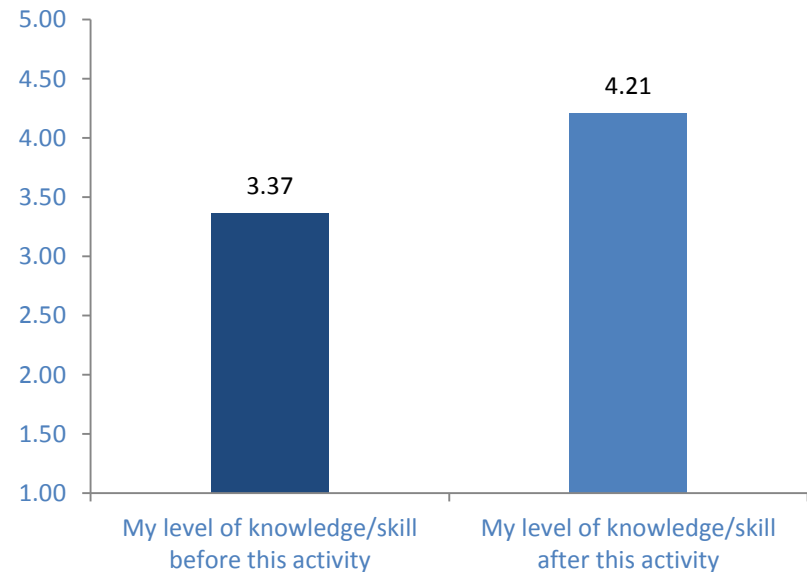


Patient level of knowledge/skill before and after activity



**NW Unit**

Patient level of knowledge/skill before and after activity



**SW Unit**

## Pilots: Peer Facilitated Groups

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Patient Comments from completed surveys regarding benefit of Peer facilitated group

- Giving me more hope that I'm not alone, and that with dedication and hard work. I will be better and successful.
- Join groups that will benefit my mental illness.
- Set goals.
- Help remember to take meds.
- Remember that I need to access my resources before I go to crisis mode.
- Understanding of how important goal setting is in life but especially in recovery. Plan appropriate and stick to your plans and place fail safe back up plans in your overall plan.
- I think these groups are a great addition to the group schedule. It is very informative and enjoyable.
- The advantages/ disadvantages of explaining our illness to people and also triggers is extremely beneficial.
- This group will assist in my recovery greatly because I was given the tools to realize a relapse and stop it before it happens

# Integrated Care

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Our strategy includes four main components:

- Utilization of Practice/Referral Agreements
- Depression Screening in Primary Care
- Embedded Behavioral Health Specialists
- Virtual Psychiatric and Clinical Guidance



- Perception of Time
- Understanding the purpose of integration and its value
- Organizational culture and sensitivity
- Practice agreements and standardization of care.



# Treatment Guidance – PHQ-9 Results



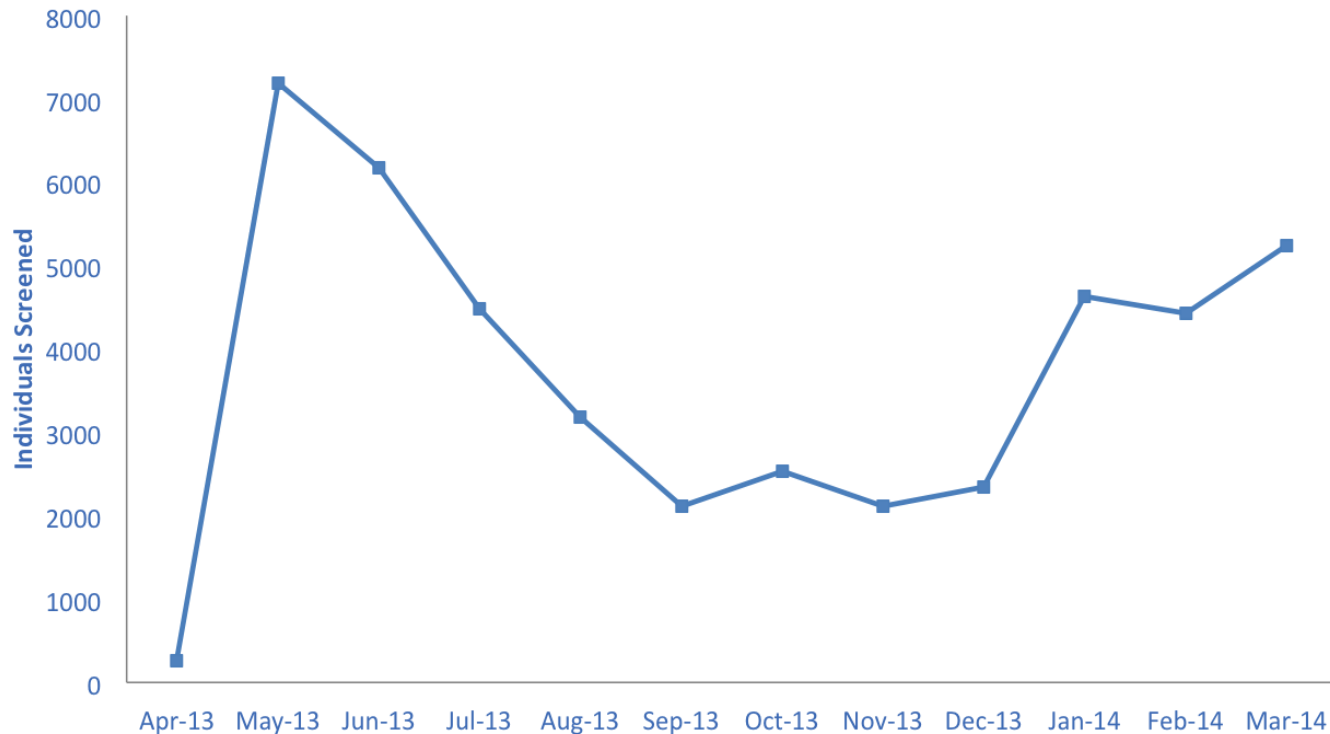
Score:	Interpretation:	Treatment Recommendation
0-9	Mild to Minimal Risk	<ul style="list-style-type: none"> <li>• Support, educate to call if worsens, follow up as needed.</li> </ul>
10-14	Moderate Risk	<ul style="list-style-type: none"> <li>• Antidepressant therapy and/or psychotherapy</li> <li>• Behavioral health specialist provides resources, initiates treatment planning and motivational therapy as needed</li> <li>• Conduct suicide risk assessment</li> <li>• Virtual Psychiatric Guidance</li> <li>• Follow up in 4-8 weeks</li> </ul>
15-19	Moderately Severe Risk	<ul style="list-style-type: none"> <li>• Antidepressant and/or psychotherapy</li> <li>• Behavioral health specialist provides resources, initiates treatment planning and motivational therapy as needed</li> <li>• Conduct suicide risk assessment</li> <li>• Virtual Psychiatric Guidance</li> <li>• Referral to Psychiatry if warranted</li> <li>• Follow up in 2-4 weeks.</li> </ul>
20 or higher	Severe Risk	<ul style="list-style-type: none"> <li>• Antidepressant, Possible augmentation</li> <li>• Behavioral health specialist provides resources, initiates treatment planning and follows up with patient.</li> <li>• Conduct Suicide risk assessment</li> <li>• Follow up in 2-4 weeks</li> <li>• Referral to Psychiatry</li> </ul>

# Key Accomplishments

## Depression Screening at JPS



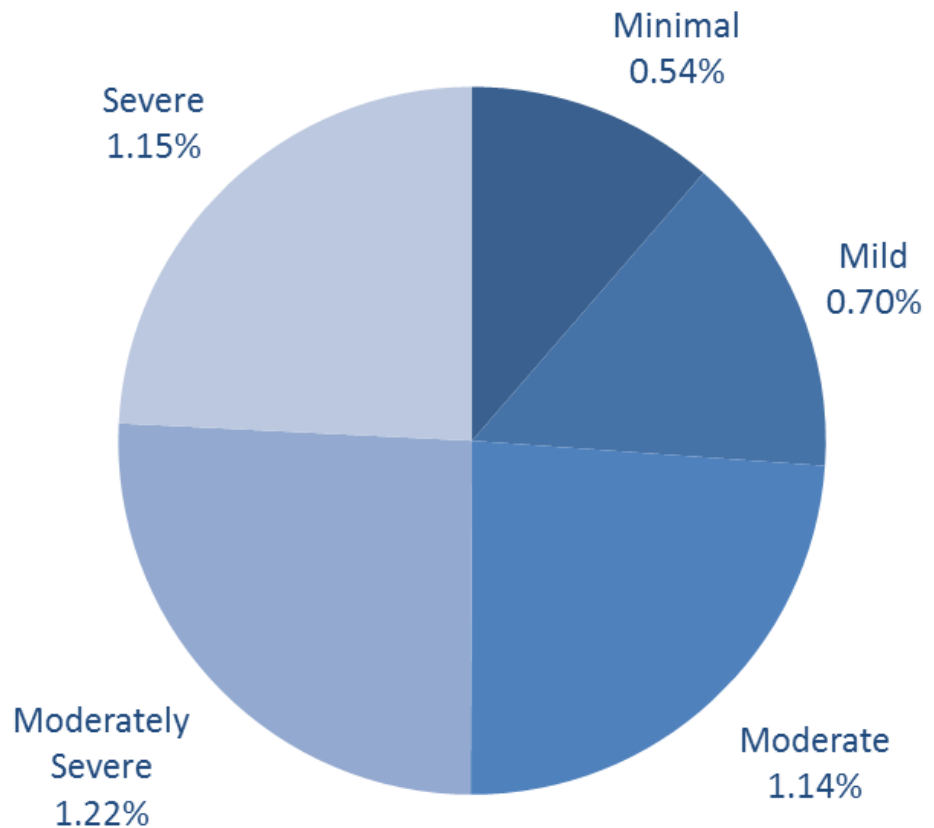
In the last 12 months, we screened 44,694 primary care patients for depression



# Depression Screening in JPS Primary Care



Depression risk identified by PHQ-9 in primary care patients not already being seen in JPS Behavioral Health Services



We currently have embedded behavioral health expertise into multiple settings:

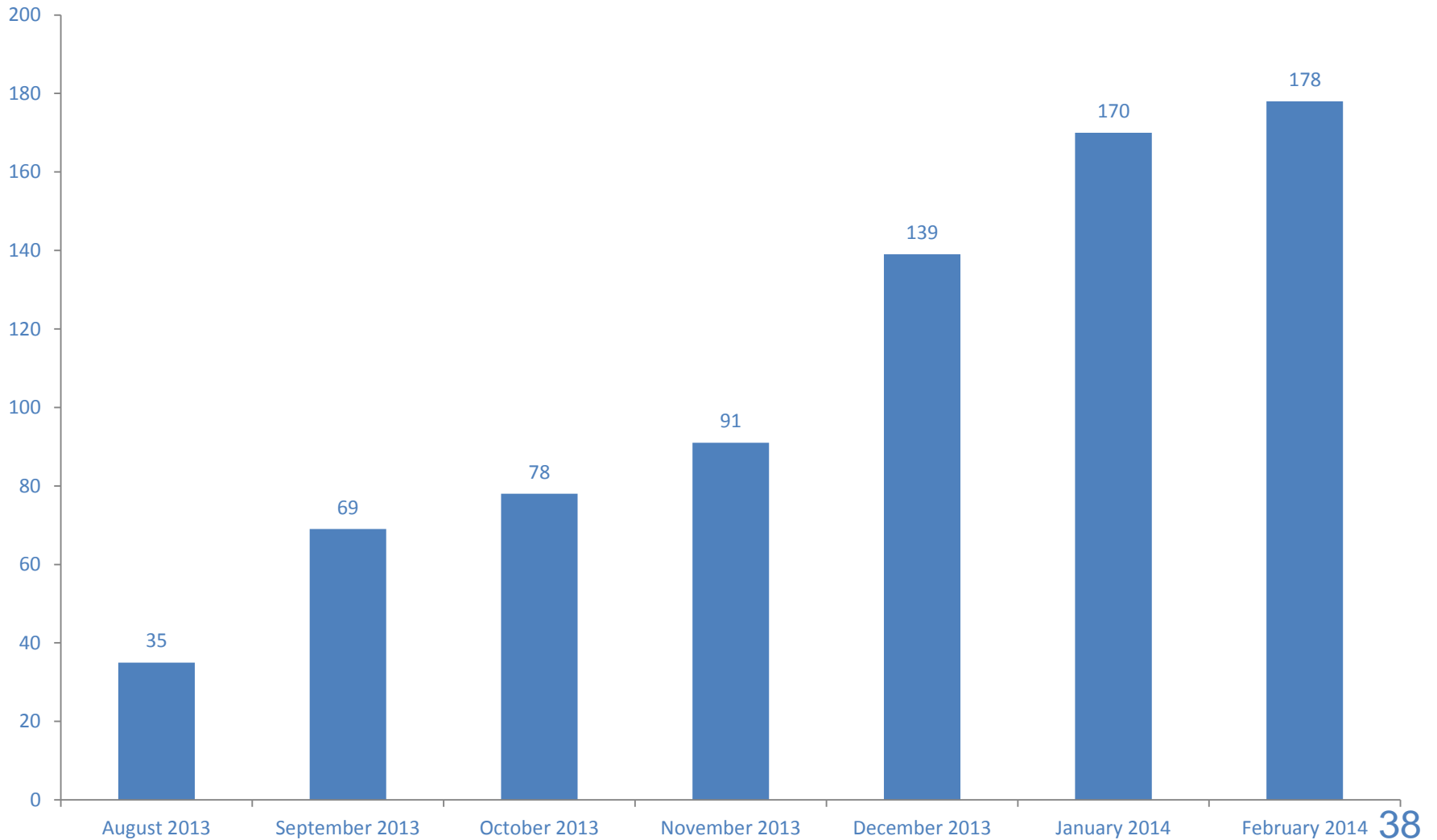
- Primary Care Clinics
- Trauma Services
- AIDS/HIV Medical Home
- Diabetes Groups
- Co-Facilitating General Medical Condition Groups Throughout System

Education

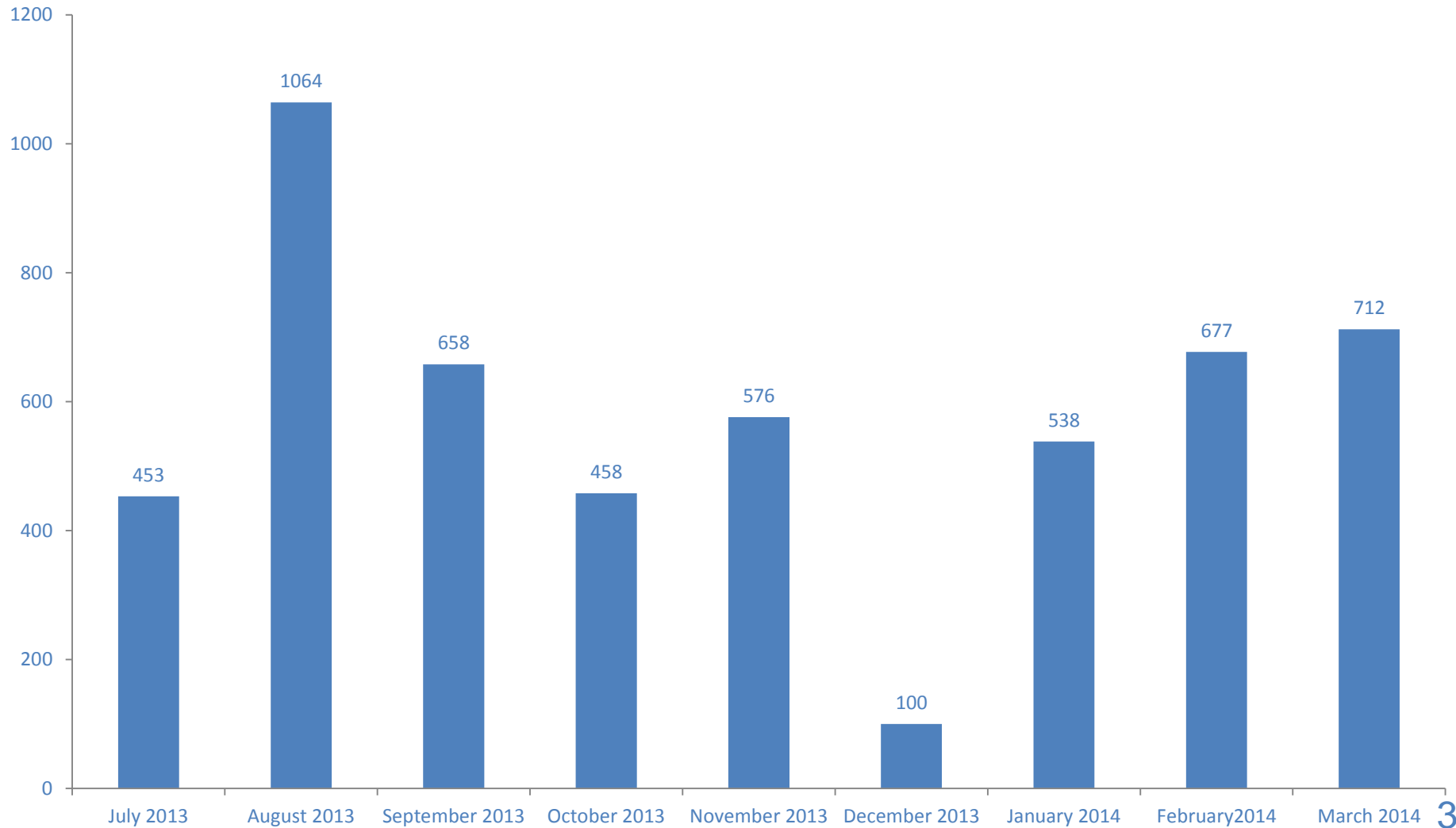
Evidence base practice

Case specific consultation

# Virtual Guidance Services by Month



# Virtual Guidance Services Website Visits



# Region 10 Learning Collaborative

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The Learning Collaborative model organizes multiple groups with varying needs into a process of group learning, where all teams use the Model for Improvement and learn from each other's successes and challenges. The main elements of the program model are the following:

- A pre-work period in which teams get organized to improve care,
- A series of Learning Sessions where experts share information and approaches to improvement changes (participating teams will serve as experts later in the collaborative),
- Action periods, following each learning session, in which changes are tested and implemented by the teams, and
- A congress where teams share results and lessons learned of the collaborative.



# Improve Screening Rates



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

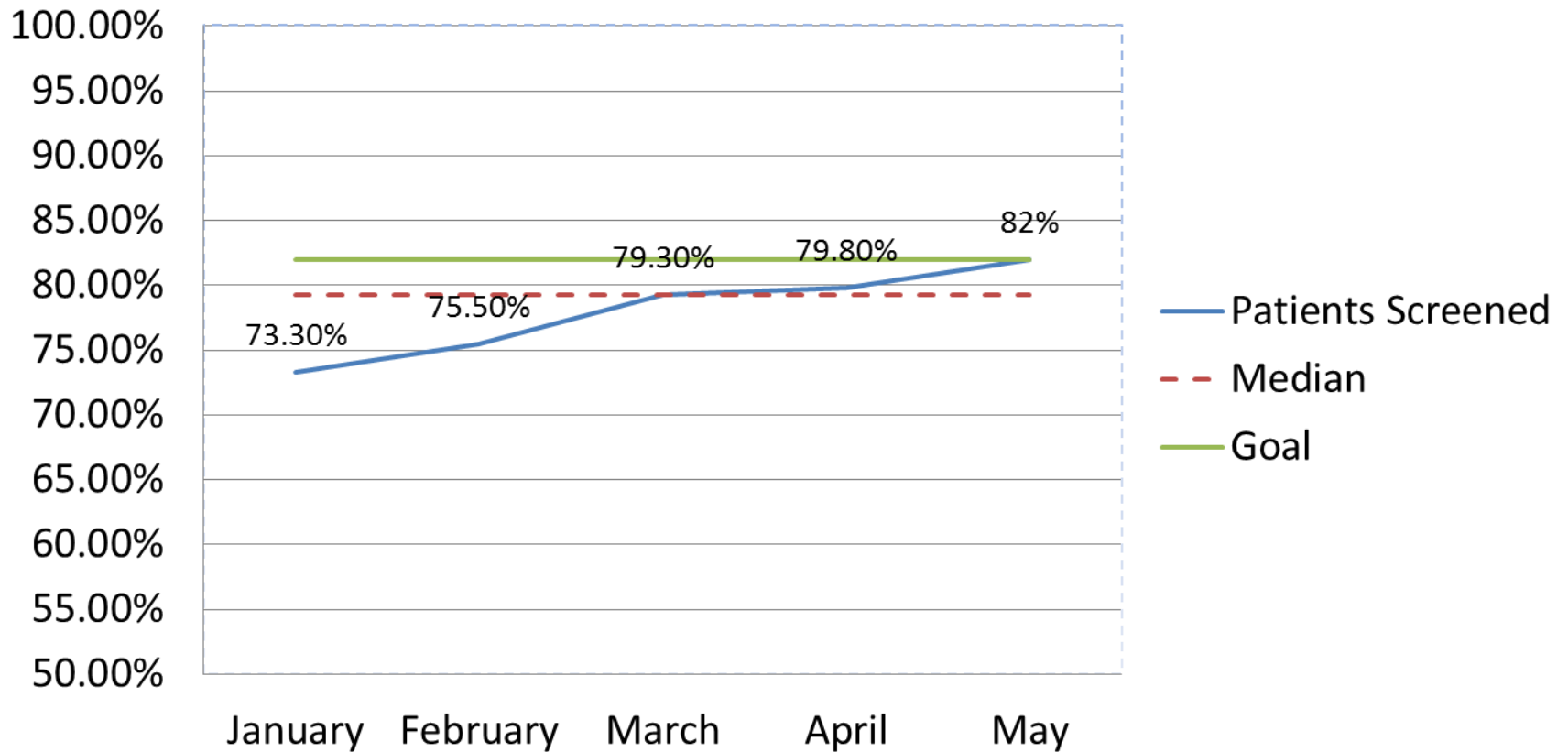
**Behavioral health** screenings for **primary care** settings

- 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

## Patients Screened for Depression at Integrated Locations



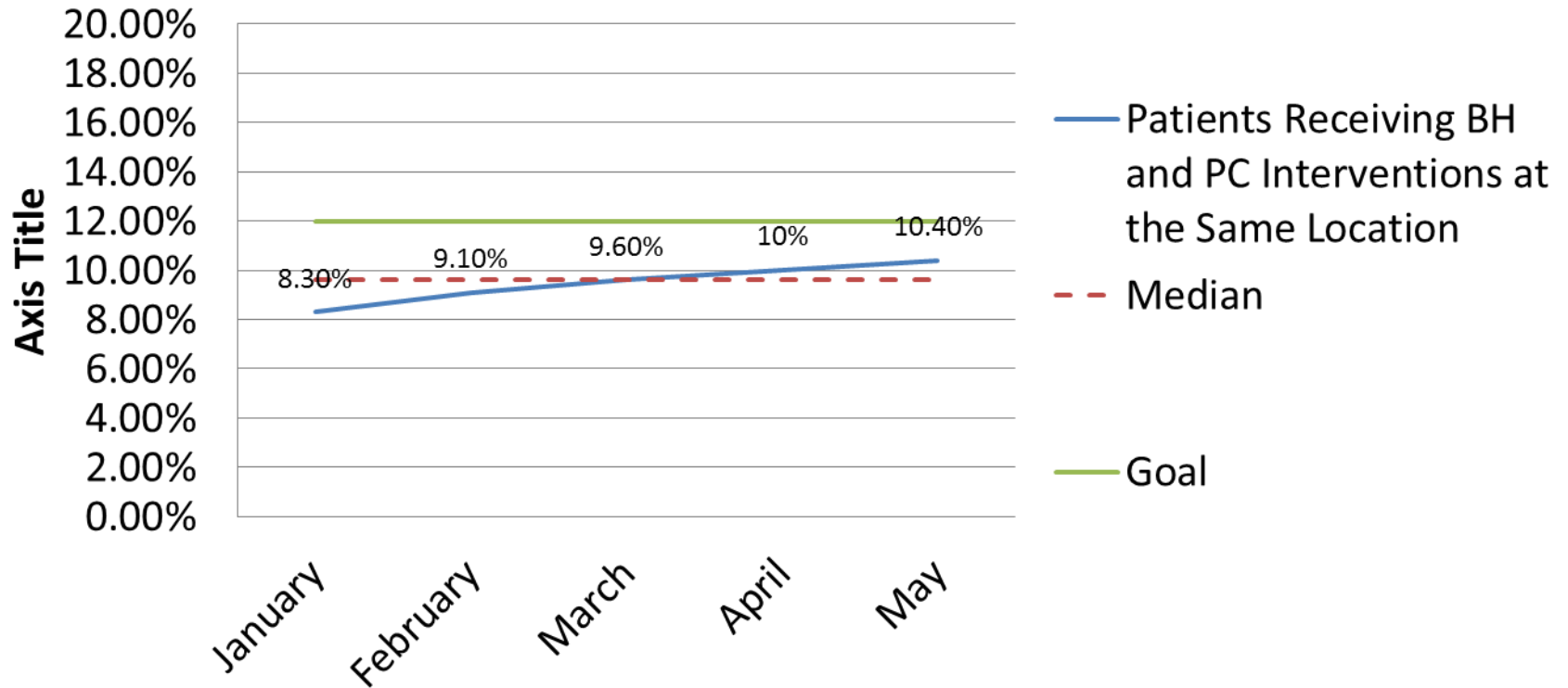
# Improve Coordination



<b>Percentage of patients who received the teams' selected integrated care intervention in past 12 months.</b>	<b>Numerator:</b> Number of patients in the population of focus who have received the selected integrated care intervention in the past 12 months
	<b>Denominator:</b> Total patient population of focus for improved care integration at your site.

- 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)

## Patients Receiving BH and PC Interventions at the Same Location



# Improve Outcomes



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

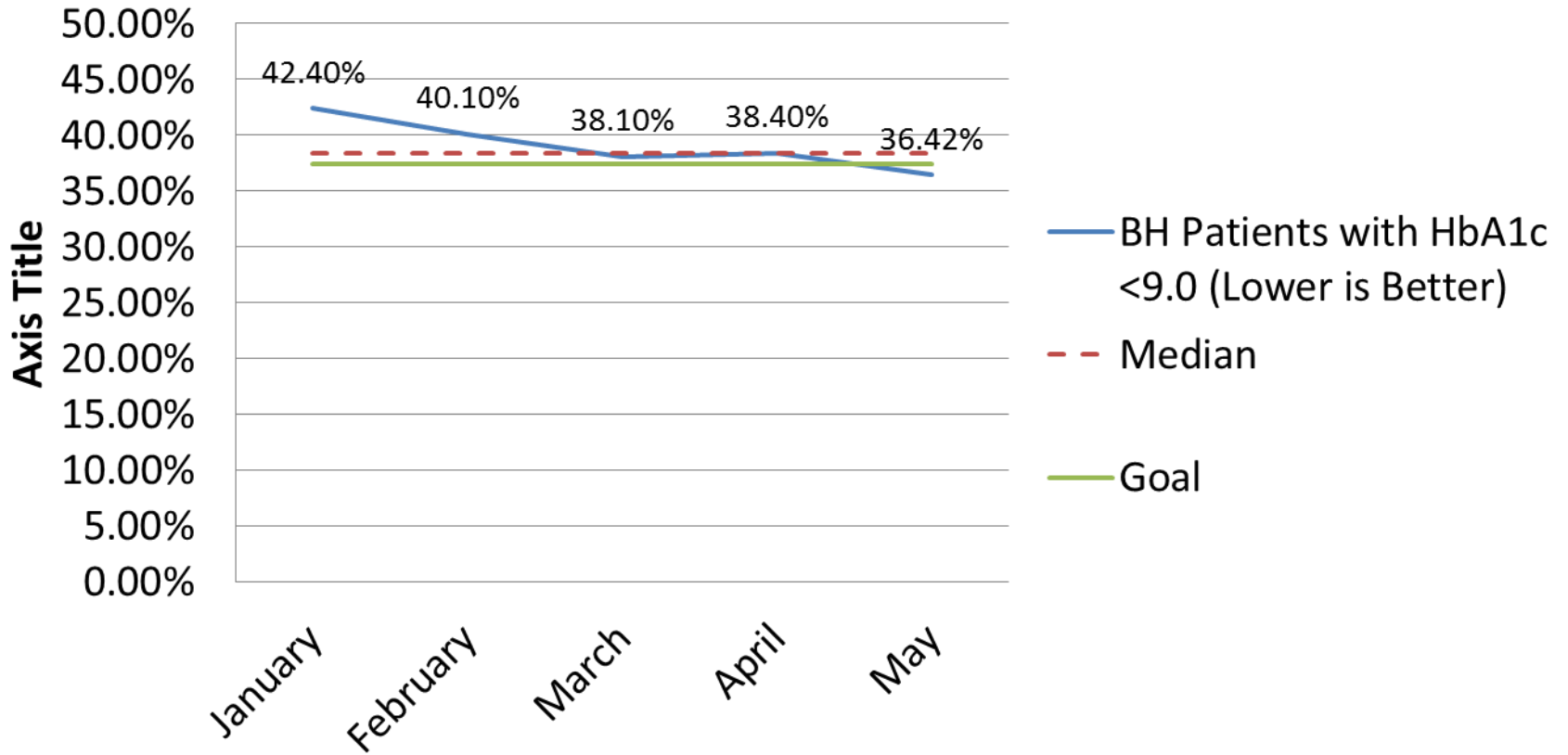
Examples of improvement in **behavioral health** conditions in **primary care** settings

- 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

### Patients with HbA1c >9.0



# Learning Collaborative Data Reporting



## Data reporting instructions

Report all shared measures you are tracking each month, between the 1st and the 15th of the month, for the prior month.

For example, your numbers for the full month of February are due between March 1st and March 15th. All measures reported will be benchmarked against all other providers reporting that measure, and shared back to you.

For any questions about monthly reporting, please contact Gillian Franklin at [rhp@jpshealth.org](mailto:rhp@jpshealth.org) and (817) 702-3580.

Facility name: \*

Email address: \*

Data month: \*

### Percentage of patients screened with team's selected cross-specialty screening

Numerator:

Total number of patients in the population of focus who have received screening with the selected tool within the past 12 months.

Denominator:

Total patient population of focus for improved care integration at your site.

### Percentage of patients who received the team's selected integrated care intervention in past 12 months

Numerator:

Number of patients in the population of focus who have received the selected integrated care intervention in the past 12 months.

Denominator:

Total patient population of focus for improved care integration at your site.

### Percentage of patients receiving integrated care whose condition improved

Numerator :

Number of patients in the population of focus whose care has been documented as improved in past 12 months, as measured by the selected indicator.

Denominator:

Total patient population of focus for improved care integration at your site.

Thank you

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Questions?





# Sign In Sheet

RHP 10 Learning Collaborative On Site Visit

	Name	Signature	Organization
1	Chris Wall		JPS
2	Debbie Goggans		LAKes Regional
3	Barbara Murphy		MHR
4	NAKIA SIMPSON		"
5	Claire Simpson		JPS
6	Candice Patterson		MHR
7	Robert Johnson		Lakes Regional
8	Katie Mosteller		Methodist Mansfield
9	Melanie Whittle		Wise Regional Health Systems
10	Mahie Ghazvini		MHR
11	Charisse Huey		THSC
12	CESLEEN SMITH		JPS
13	Daral Swach		JPS
14	Katherine Hauke		CME - Dallas
15	Vincent Do		JPS
16	Beverly Post		JPS
17	Jamie Hixson		THR
18	Aubrie Augustus		JPS Network
19	Shelly Cooperon		JPS Network
20	JESSICA ALEXANDER		MHR - ADS
21	Stevie Hansen		MHR - ADS
22	Zeba Salim		MHR - Research
23			
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