TACC

Technology Assisted Care Coordination

for Substance Use Treatment

Text Messaging and Telecoaching for High Need Populations

Ed Riedel
Missouri Institute of Mental Health

Mary Quandt
Behavioral Health Network of Greater St. Louis

Briana Wheatley
Preferred Family Healthcare

Emily Srygley
Epharmix

Spring Training Institute, 31 May 2019

TACC Funding

SAMHSA Expand Care Coordination Targeted Capacity Expansion (TCE) through the Use of Technology Assisted Care (TAC) in Targeted Areas of Need
Short Title: TCE-TAC, # TI-16-001

- 3-year grant, Oct. 2016-Sept. 2019
- Approximately $280,000 per year

Project Goals

1. Increase engagement of persons in treatment and in their healthcare

2. Increase monitoring and tracking of the mental and physical health status of individuals

3. Improve recovery and resiliency rates

4. Share effective treatment models and results among providers for future integration into treatment modalities
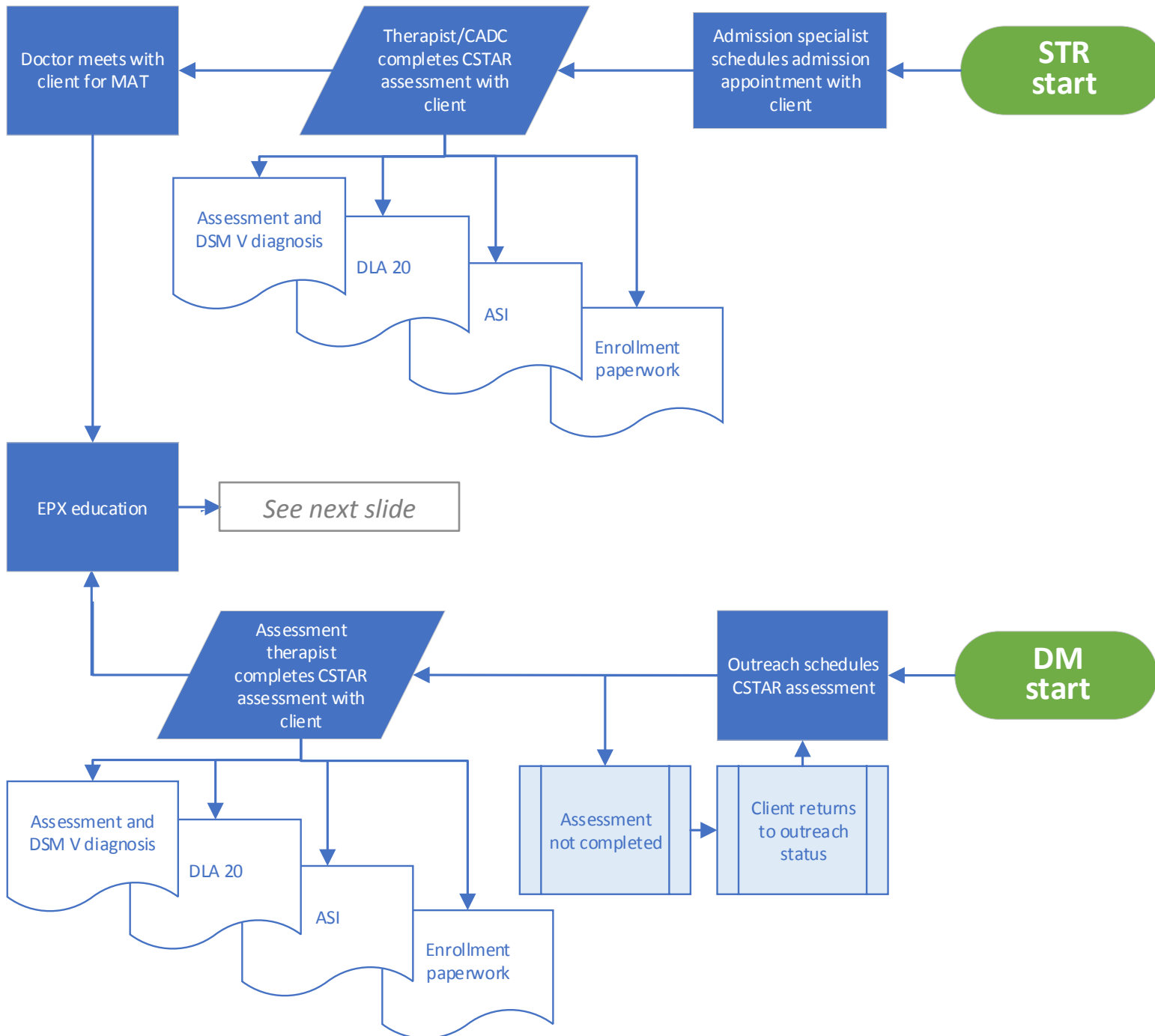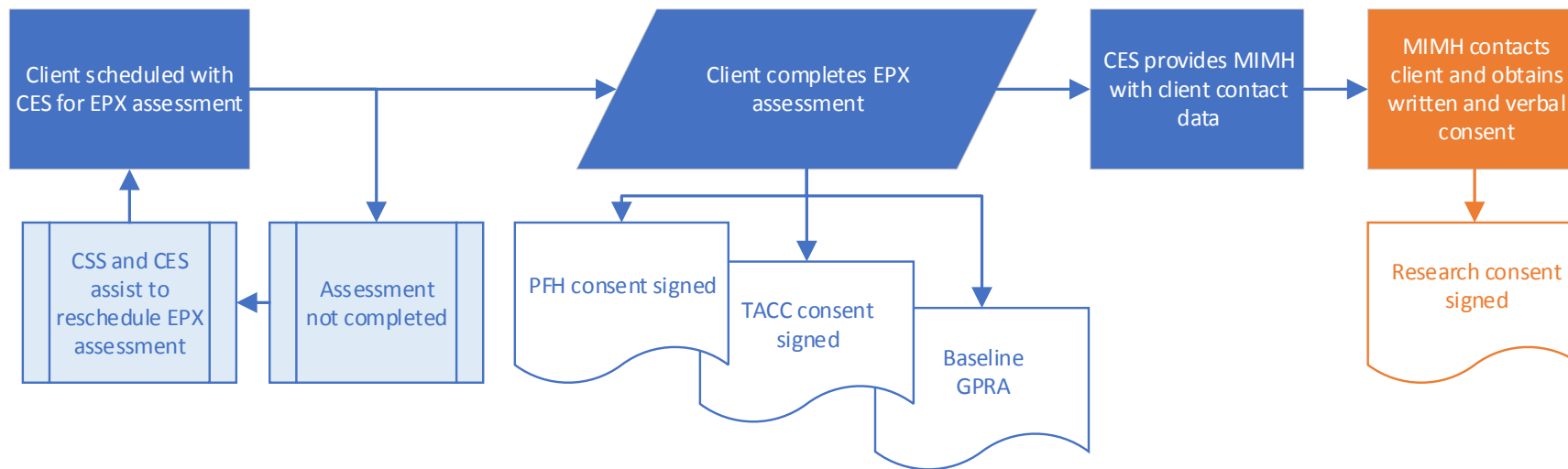
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Target Population

- Entire Eastern Region of Missouri
- DM3700
  - Medicaid eligible adults
  - SUD diagnosis
  - >$20,000 in annual medical costs
- Missouri Opioid State Targeted Response
  - Uninsured/non-Medicaid eligible
  - Diagnosis of OUD
- Majority are:
  - Low SES
  - Male
  - Unemployed/not in labor force
  - African-American or Caucasian

Client Enrollment Pathways

Client scheduled with CES for EPX assessment

CSS and CES assist to reschedule EPX assessment

Assessment not completed

Client completes EPX assessment

PFH consent signed

TACC consent signed

Baseline GPRA

CES provides MIMH with client contact data

MIMH contacts client and obtains written and verbal consent

Research consent signed

Client Enrollment Pathway (con't)

Client begins to receive EPX intervention and CSTAR standard services, including:

Community Support Services:
    Transportation assistance
    Employment/Education Assistance
    Wellness Coaching
    Inpatient/Outpatient Substance Use Assistance
    Primary Care/Dental/OB/Medication/Vision Assistance
    Assistance maintaining/obtaining housing (DM only)
    Assistance with obtaining food
    Financial planning assistance
    Assistance with obtaining utility resources
Therapy/Counseling
    Coping skills
    Trauma
    Family Therapy
    Group Therapy
    Co-Occurring
    Depression/anxiety/stress/PTSD
    ARTC (Art Therapy)
Nursing
    Medication education
    Assisting with medication refills
    Physician advocacy (DM only)
    Annual Metabolic Panel (DM only)
    Extended day treatment

Client is monitored by CES through daily EPX alerts

TACC end

MIMH conducts discharge GPRA

PFH or MIMH conduct 6-month GPRA

EPX assists in outreach and engagement calls

Client Services in TACC

What is Epharmix?

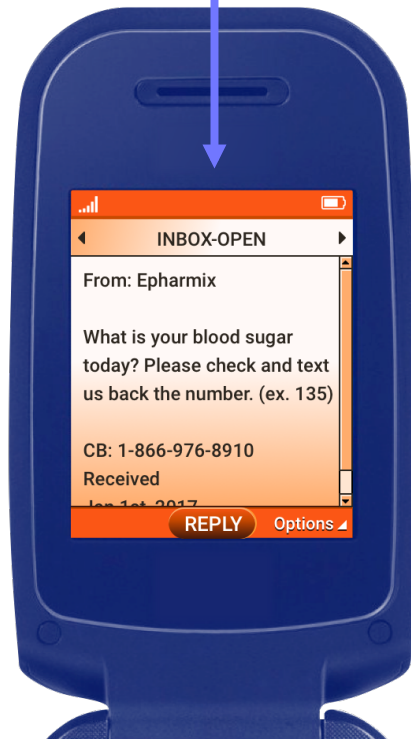*Remote Patient Monitoring*

- Library of clinical interventions
  - EpxDiabetes, EpxSubstanceAbuse, EpxDepression

- Automated to send SMS text or calls

- Clinically proven to improve patient outcomes
  - Epharmix Research Center – Washington University

- Real time patient alerts triggered

- Quickly identify high and rising risk patients

Epharmix®

Works for <u>ANY</u> patient

- Easy-to-read messages
- Toll-free phone calls
- Free-to-end-user text messages

Condition-specific messages are written at 4ᵗʰ - 6ᵗʰ grade reading level

INBOX-OPEN

From: Epharmix

What is your blood sugar today? Please check and text us back the number. (ex. 135)

CB: 1-866-976-8910
Received

REPLY   Options

Free texts for pay-as-you-go phones:
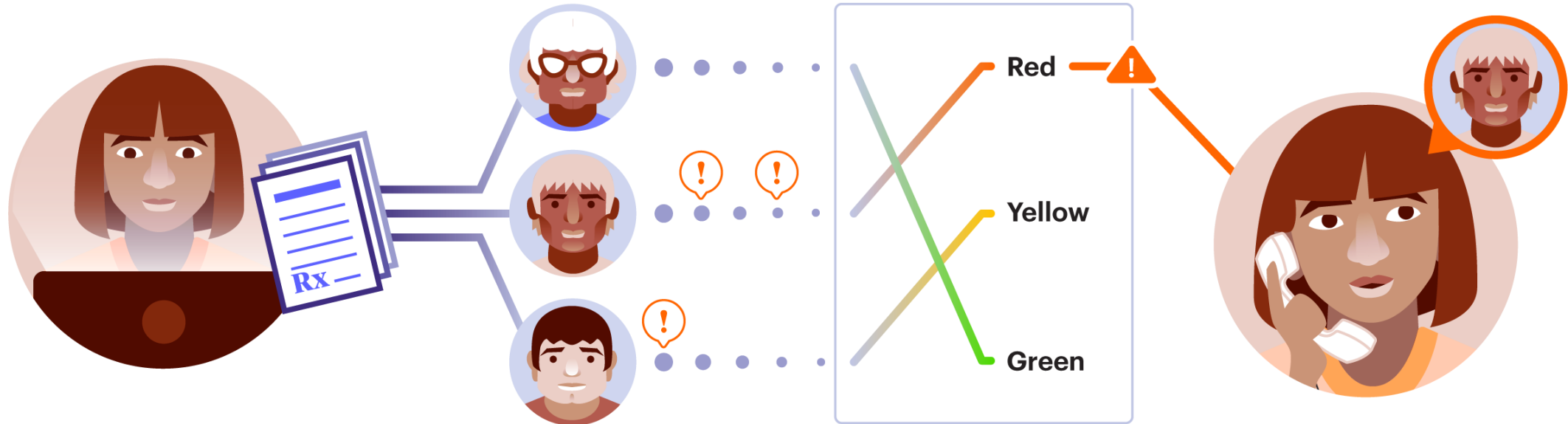
verizon   Sprint

T··Mobile   at&t

Virgin mobile   metroPCS

boostmobile

Epharmix ®

Epharmix, Inc. [US] | https://www.epharmix.com

Search by Name or Phone #

Prescribe Account

Overview

Export

All Patients

You are viewing statistics for every patient in this account. Create a Patient Group to easily view patients by contact, intervention, or tag.

1 🔔
Alerts
🔕 0

40 ⭕
Unengaged
⭕ 30 🚫 10

72 ⬤
Engaged
⬤ 0 ⬤ 2 ⬤ 70

1 ⏸
Paused
⏸ 1

1 🌙
Snoozed
🔔 1 ⏰ 1

Patients View All Newly Enrolled

Most Alert Count ▾

⬤ **Red Patients (0)** Expand

🟡 **Yellow Patients (2)** Collapse

| Harry Potter | 📄 | DOB 7/31/1980 | 🌙 Snooze ✔ 2+ Weeks Ago |

⭕ **EpxBasicNeeds** 📈 Fewer than 30% of message/call sequences answered

🔔1 🟡 **EpxReferral** 📈 Has unresolved alerts

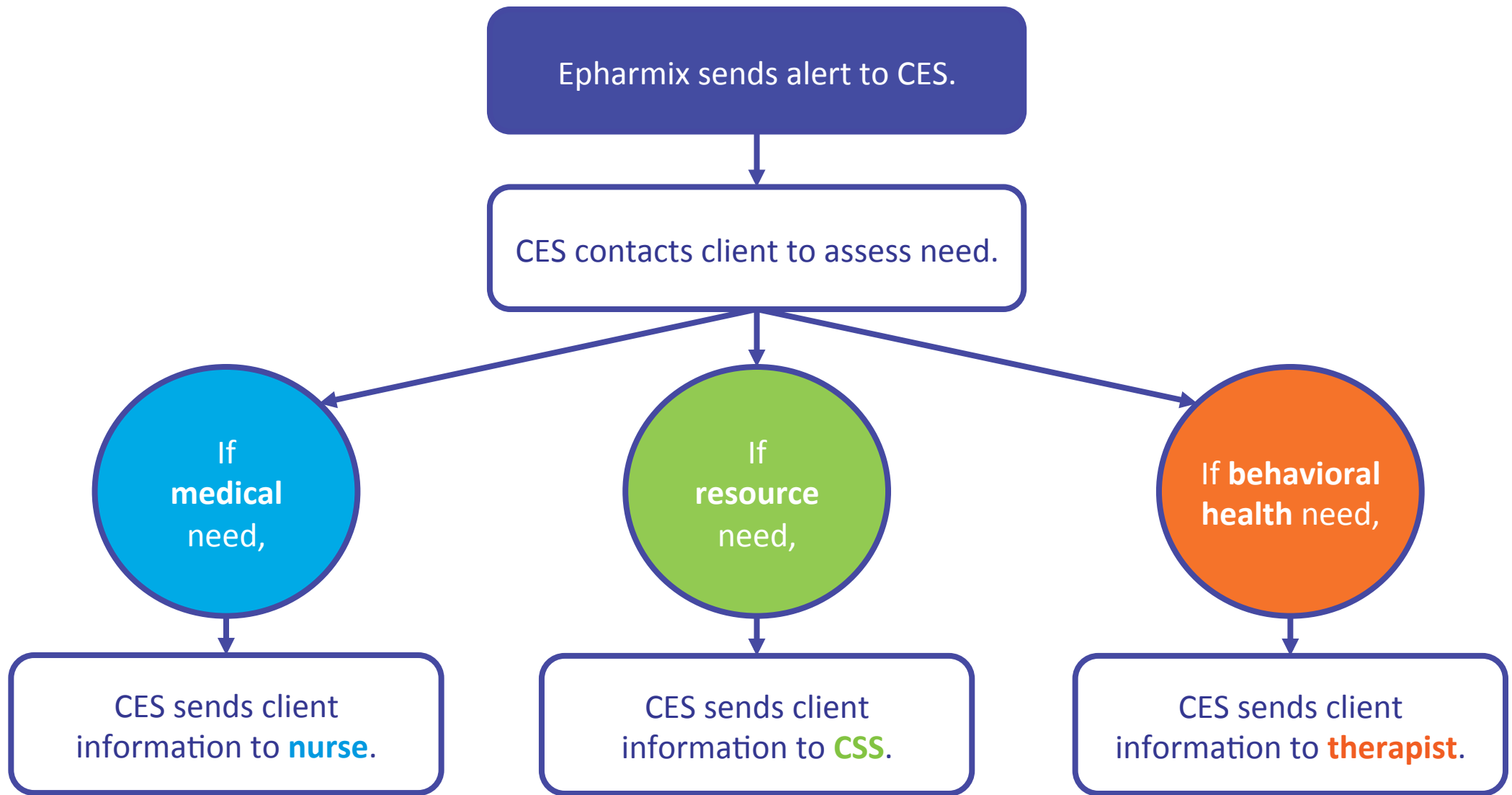| Hermione Granger | 📄 | DOB 9/19/1979 | 🌙 53 Mins Left ✔ 3 Days Ago |

🟢 **EpxBasicNeeds** 📈 No unresolved issues reported recently

🟡 **EpxSubstanceUse** 📈 Has unresolved alerts

🟢 **Green Patients (70)** View All

Alerts View All

Newest First ▾

🔔 **Today** 2:45pm EpxReferral 📈 🌙 ✔

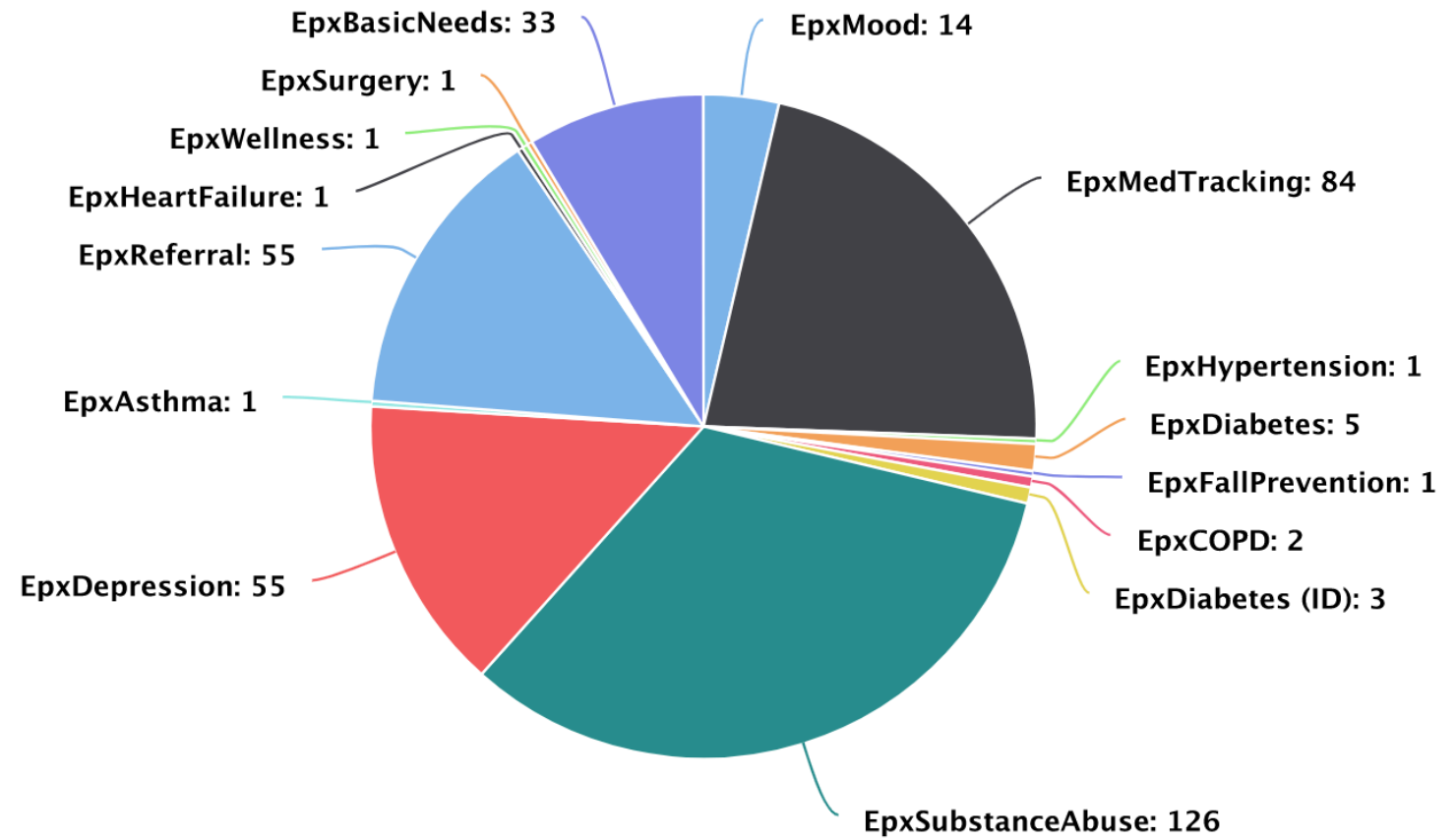**Harry Potter** Patient **Harry** missed the upcoming appointment at 04/10.

❓ Support

TACC Utilization of Epharmix:

TACC Most Used Interventions:

- EpxReferral

- EpxDepression

- EpxSubstanceAbuse

- EpxMedTracking

Active Patients by Interventions

EpxBasicNeeds: 33
EpxSurgery: 1
EpxWellness: 1
EpxHeartFailure: 1
EpxReferral: 55
EpxAsthma: 1
EpxDepression: 55
EpxMood: 14
EpxMedTracking: 84
EpxHypertension: 1
EpxDiabetes: 5
EpxFallPrevention: 1
EpxCOPD: 2
EpxDiabetes (ID): 3
EpxSubstanceAbuse: 126

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TACC Patient Utilization:

Highlights:

- 60 % patient engagement

- Since January 1, 2017 over 26,000 calls have been made

- Since January 1, 2017 over 74,000 texts have been sent

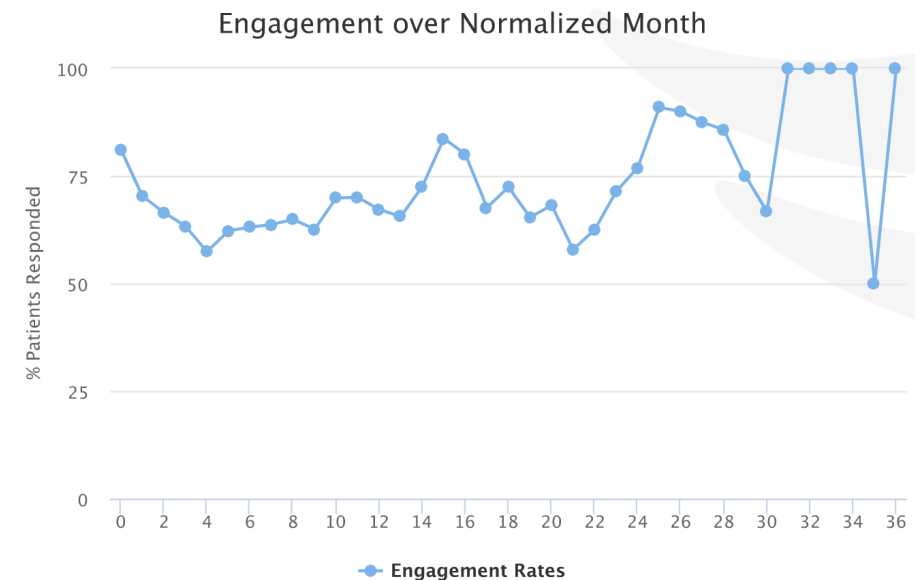- Caught over 1,500 instances of patients reporting worsening symptoms

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233

Active Patients

26207

Automated Calls Made

74629

Automated Texts Sent

1540

Alerts Triggered

Overall

Engagement over Normalized Month
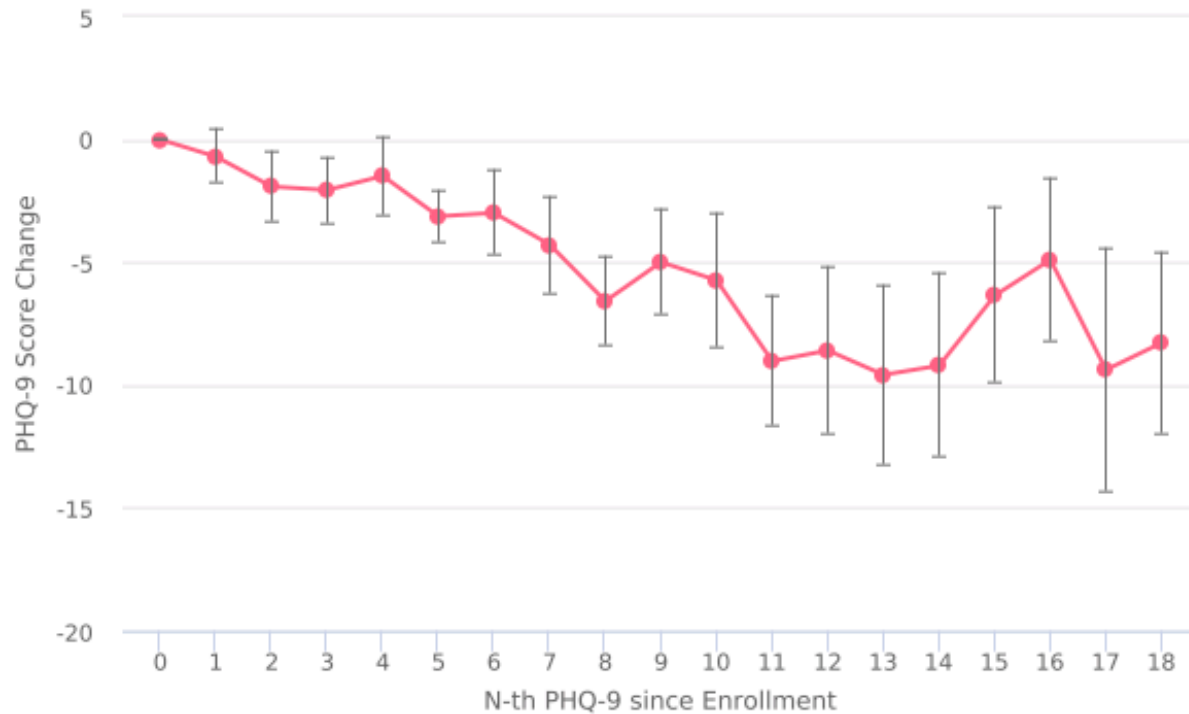
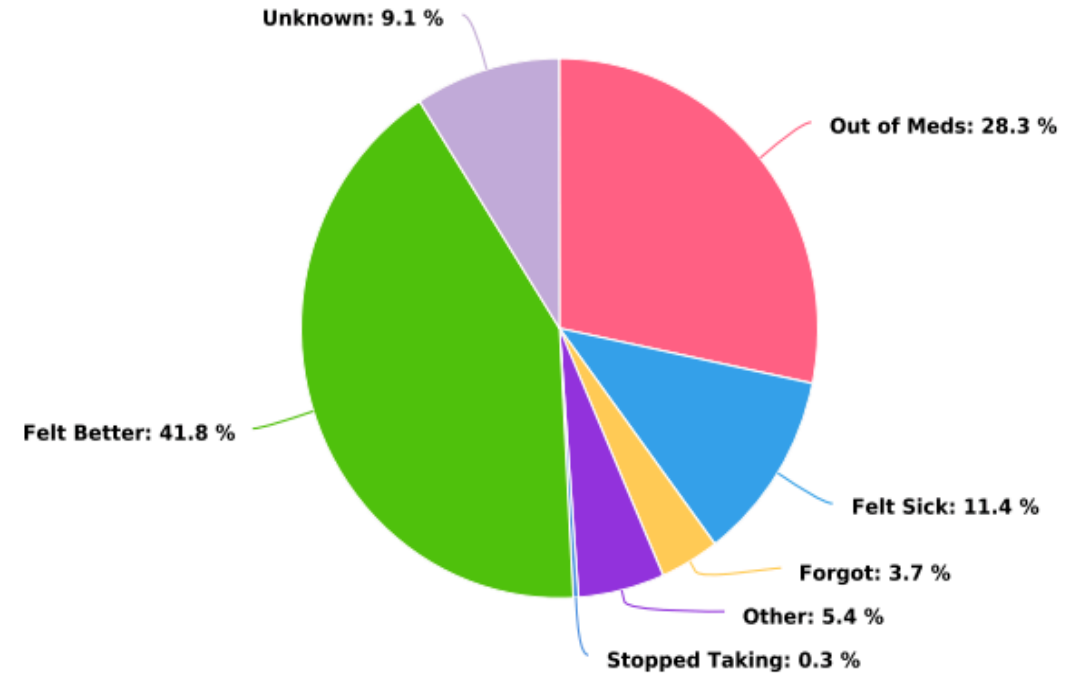# TACC Patient Outcomes:

Avg. PHQ-9 Score Change over Normalized Time (Incomplete Surveys are Scaled)

PHQ-9 Score Change (y-axis) vs. N-th PHQ-9 since Enrollment (x-axis)

PHQ-9 Score Change vs. First Survey

Non-Compliance Reason Breakdown

- Unknown: 9.1 %
- Out of Meds: 28.3 %
- Felt Better: 41.8 %
- Felt Sick: 11.4 %
- Forgot: 3.7 %
- Other: 5.4 %
- Stopped Taking: 0.3 %

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TACC Patient Outcomes:

"Keeps me on track and gives me hope every time it says I've been clean for another week."

"Caring & friendly. I don't feel like I'm lost & alone anymore. To me this service is a life saver."

"I really like the service because it gives me a chance to stop and be self-aware of how my mood is. It also helps me with my medications."

Patient Surveys

8.3 (n = 150)

Rate Your Care by Provider (1 = terrible, 9 = excellent)

1 - Terrible   Excellent - 9

6.7 (n = 146)

Rate Communication Improvement (1 = significantly worsened, 9 = significantly improved)

1 - Significantly Worsened   Significantly Improved - 9

5.8 (n = 144)

Rate Message Frequency (1 = too few, 5 = perfect, 9 = too many)

1 - Too Few   5 - Perfect   Too Many - 9

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Why It Works – Provider's Perspective

- Designated "triage" staff:
  - reduces CES response time (which increases client engagement).
  - saves CESs 15 minutes per client check-in per week.

- Real time data tracking:
  - leads to quicker client pattern identification.
  - allows for continuous quality improvement.

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Why It Works – Client's Perspective

- Client has consistent staff (CESs) to contact.

- CES outreach is relevant and timely to client's needs.

- Client is connected directly to relevant service provider.

- Reliable, quick responses to client alerts reaffirms CES-client connection.

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TACC Client Testimonials

Saundra

Evaluation Plan

Quantitative

- **Daily Living Activities (DLA-20)**
  - Baseline, 3-month, and 6-month
- **Epharmix**
  - Interventions assigned, number of contacts, response time to alerts, consumer satisfaction
- **Government Performance and Results Act (GPRA)**
  - Standardized survey tool from SAMHSA
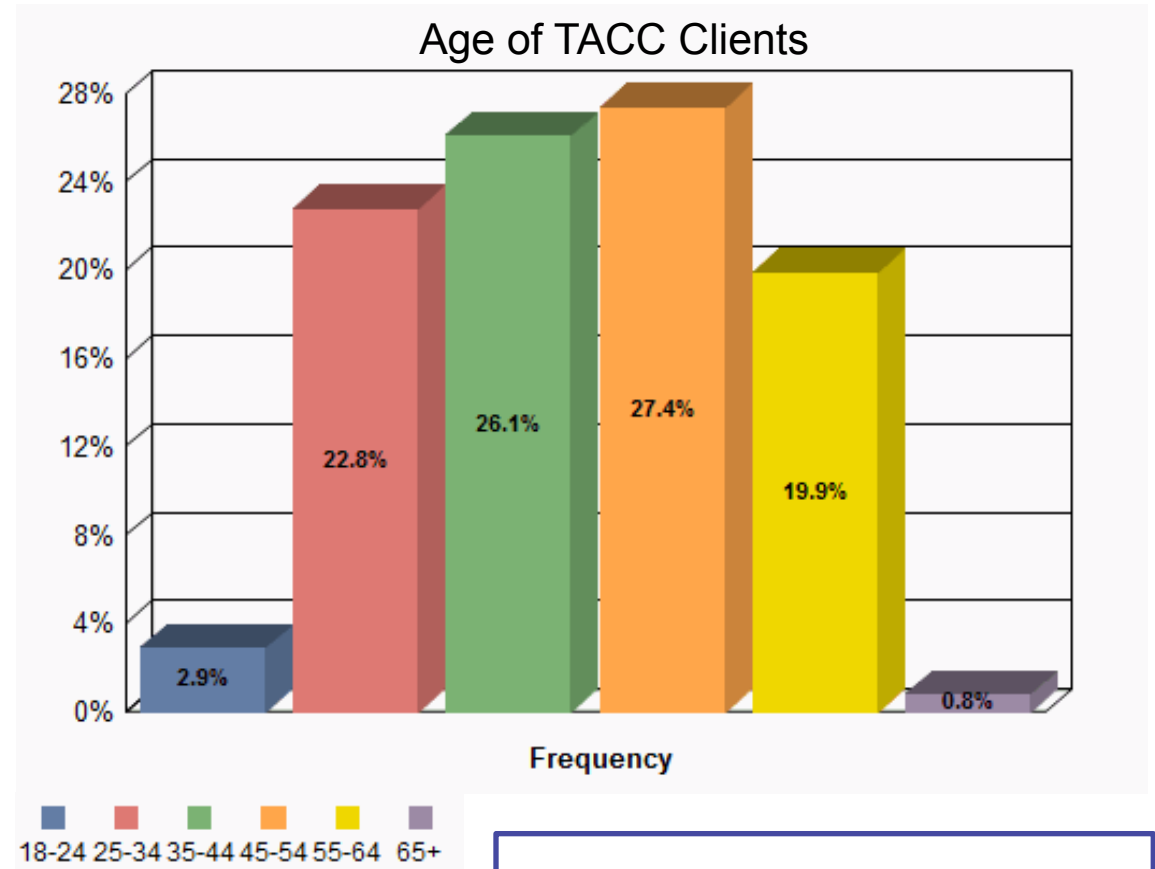 - Baseline and 6-month
- **ROI evaluation using claims data**

Qualitative

- **Epharmix satisfaction surveys**
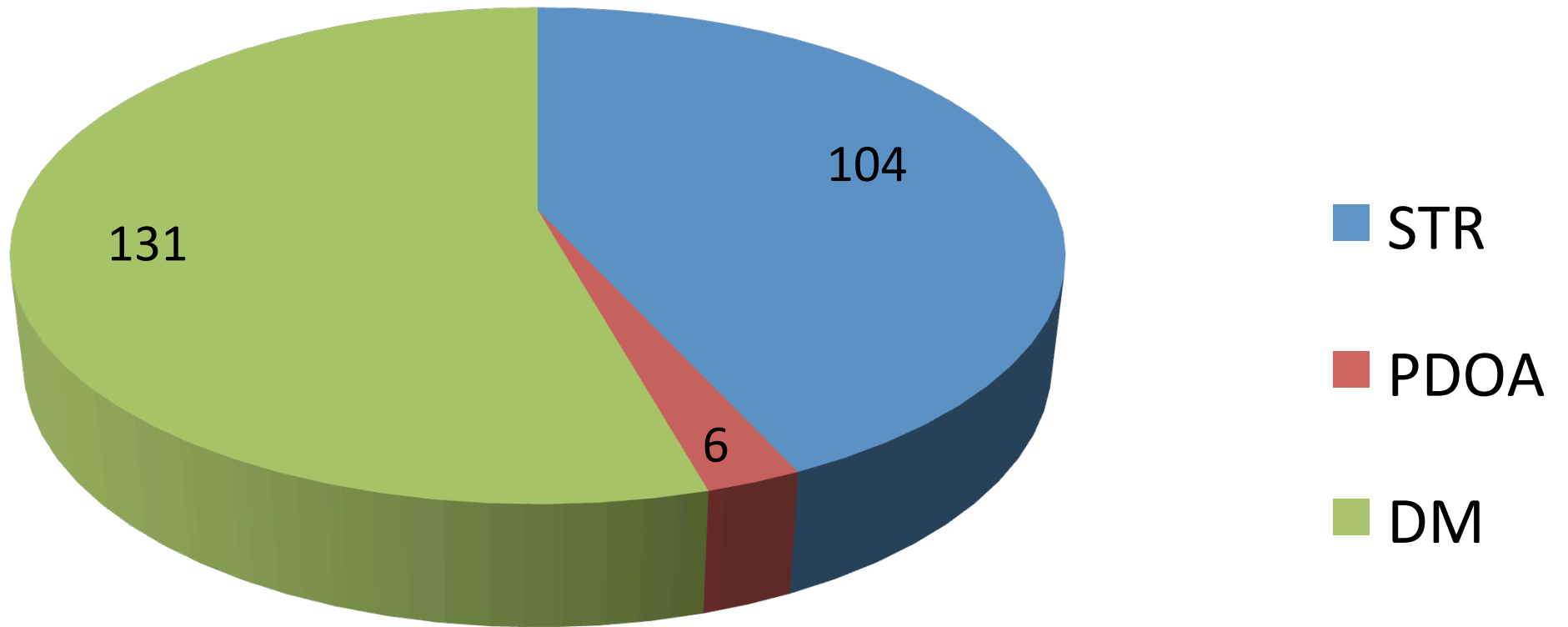- **Consumer Focus Group**

Some Basics

- 52% African American, 45% White

- 28% Female, 71% Male

- 31% Less than 12th grade

- 16% Employed, 47% Disabled
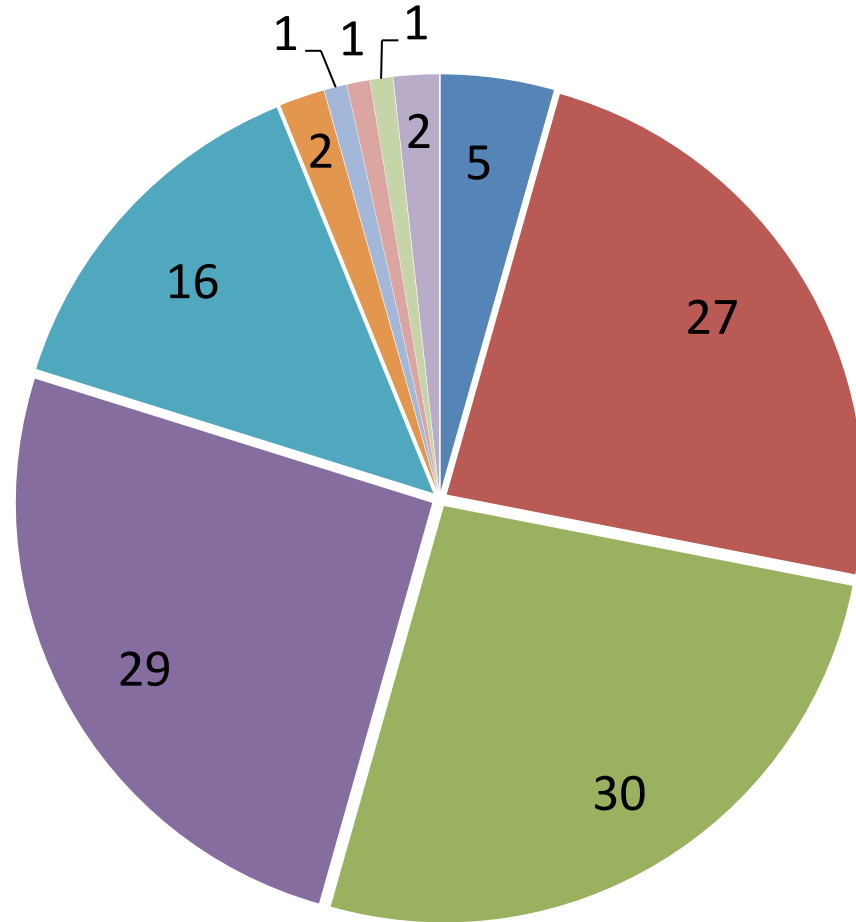
- 92% Heterosexual

- All English Speaking

Age of TACC Clients

2.9% 22.8% 26.1% 27.4% 19.9% 0.8%

Frequency

18-24 25-34 35-44 45-54 55-64 65+

Client Program
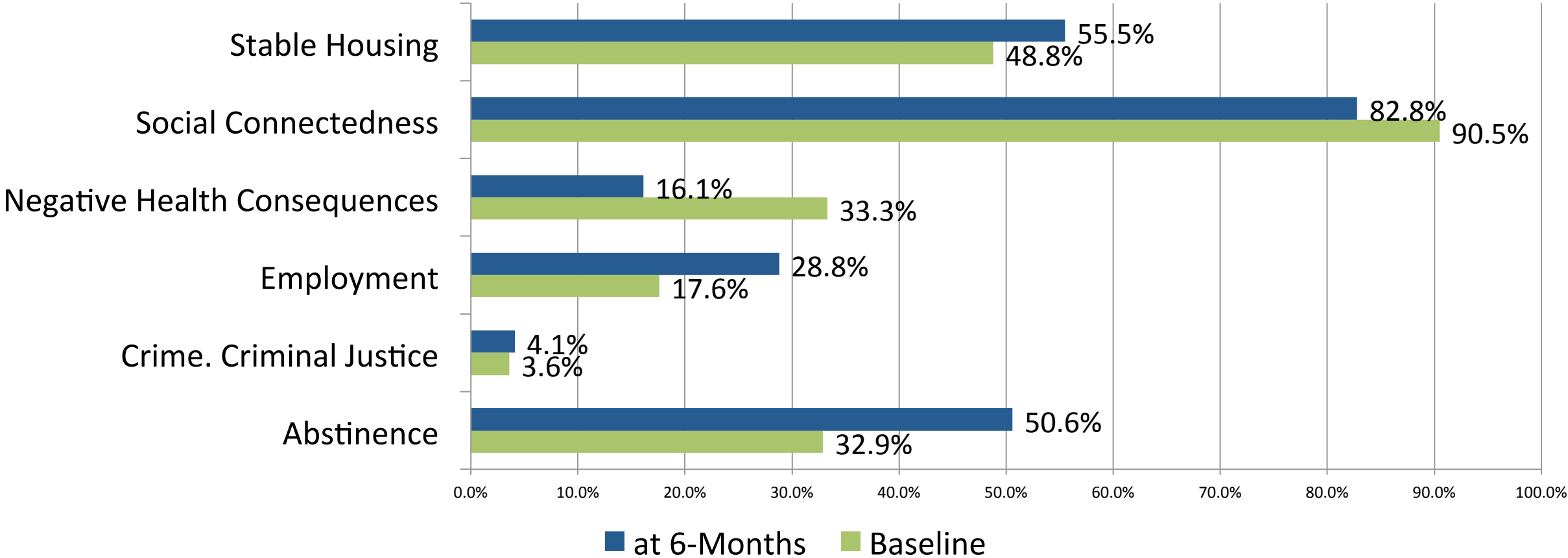
What's Up With Social Connectedness?

Social Connectedness Past 30 Days

Legend:
- Traditional Recovery Groups (AA/NA)
- Faith Based Recovery Groups
- Other Groups
- Contact with Family Supportive of Recovery
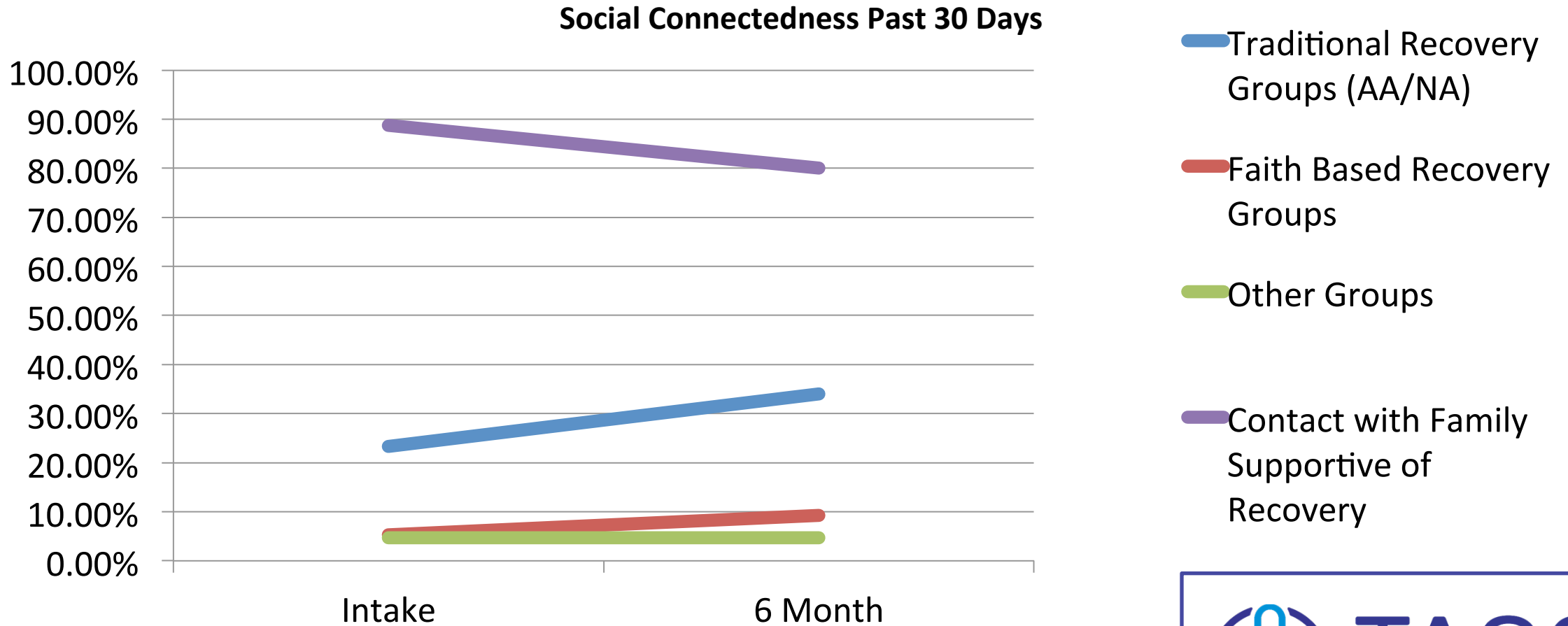
Who Changed the Most

Abstinence by Age and Gender

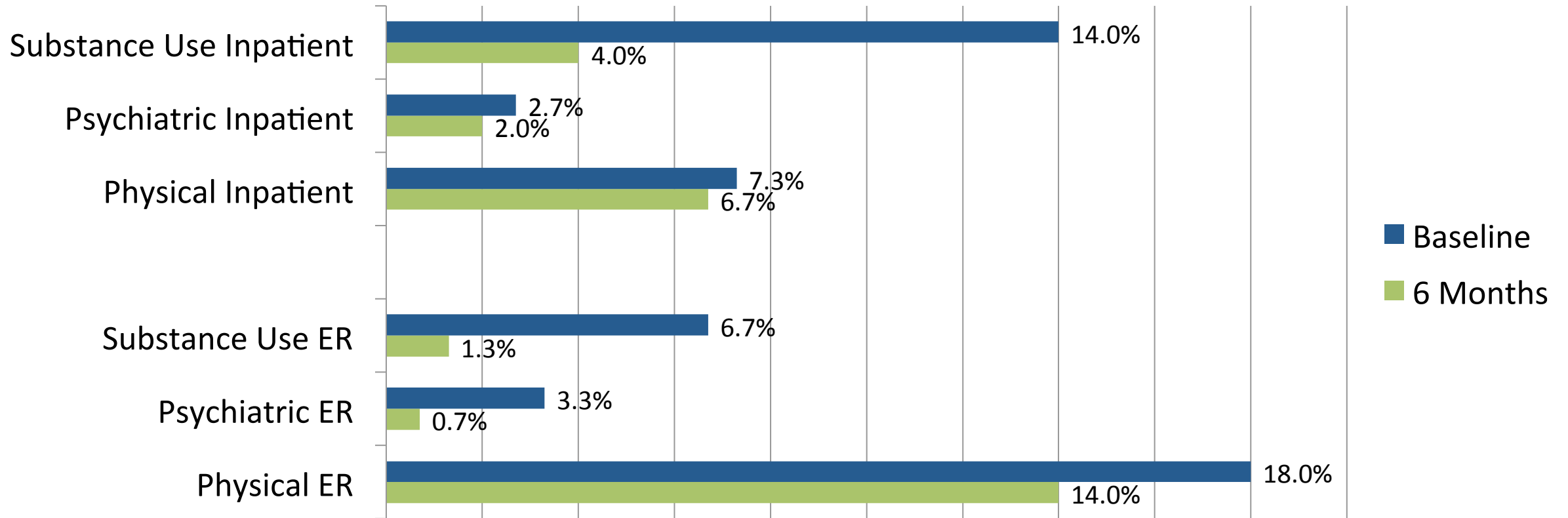|	
■ All Ages	
■ Age 25-34	
■ Age 35-44	
■ Age 45-54	
■ Age 55-64	
■ Male	
■ Female	
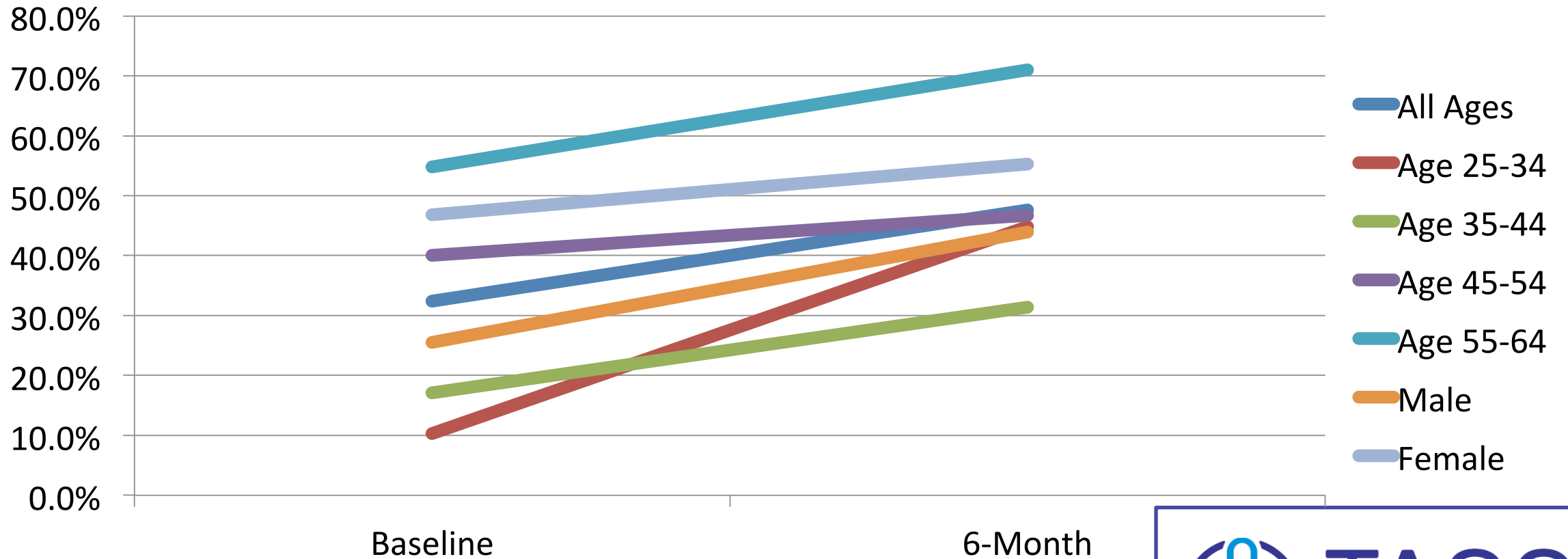
Outcomes Functioning-DLA

- 1- Extremely Severe Impairment
- 2- Severe Impairment
- 3-Moderate to Severe Impairment
- 4-Moderate Impairment
- 5-Mild Impairment
- 6-Very Mild Impairment
- 7-No Impairment

DLA Scores
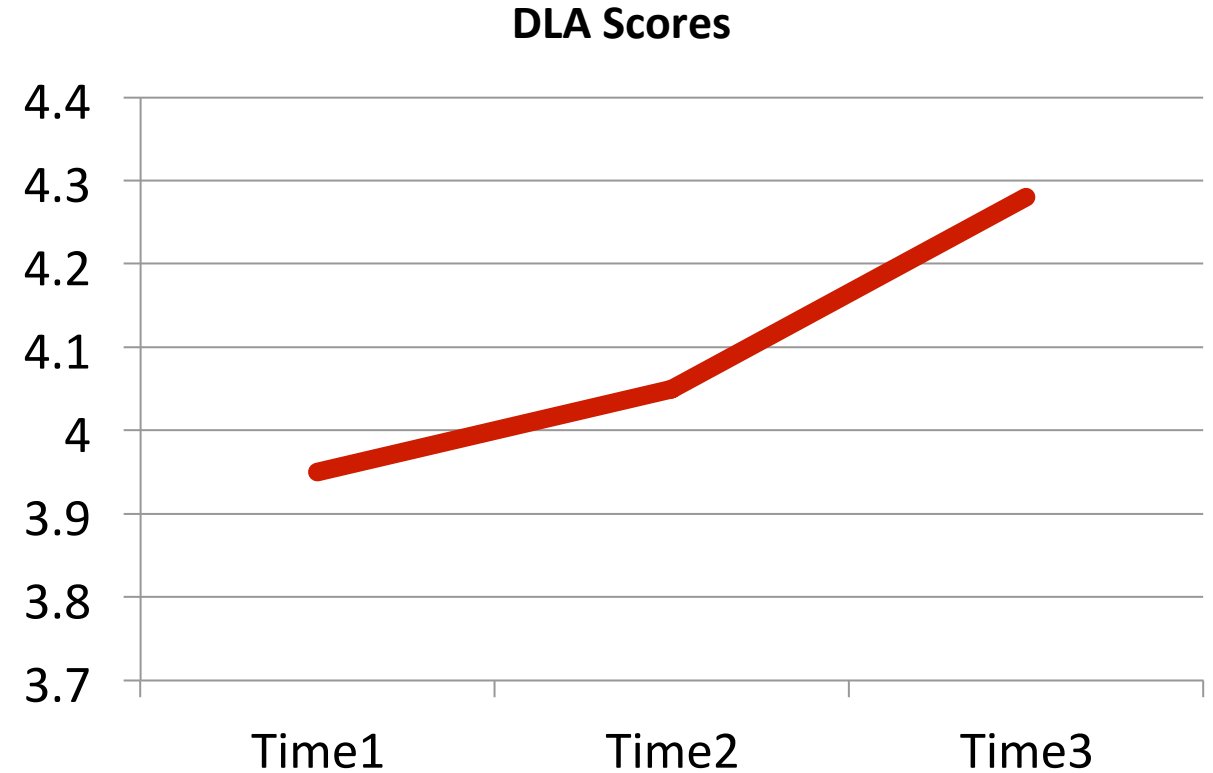
Use of Really Expensive Services

Service	Baseline	6 Months
Substance Use Inpatient	14.0%	4.0%
Psychiatric Inpatient	2.7%	2.0%
Physical Inpatient	7.3%	6.7%
Substance Use ER	6.7%	1.3%
Psychiatric ER	3.3%	0.7%
Physical ER	18.0%	14.0%

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Progress Towards Project Goals

1. *Increase engagement of persons in treatment and in their healthcare.*

   - Clients report improved relationships with healthcare providers
   - Alerts and service records demonstrate increased engagement

2. *Increase monitoring and tracking of the mental and physical health status of individuals.*

   - Alerts for health changes, substance use risk factors, and mood changes are reported in real time
   - Frequency of contact with tele-coaches

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Progress Towards Project Goals

3. *Improve recovery and resiliency rates.*

    - Increased abstinence, health outcomes, and housing stability

4. *Share effective treatment models and results among providers for future integration into treatment modalities.*

    - Policy and Procedure Manual, workflows, video, and other marketing materials
    - Evaluation plans and data

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Strengths & Challenges

Strengths

- Smooth implementation
- Partners meet regularly to problem solve
- Increased enrollment targets to serve more people
- High engagement and satisfaction rates with the technology
- Addition of new Epharmix modules (Mood, Basic Needs)

Challenges

- Some consumers incurred texting charges or have limits on minutes
- Situationally difficult to track phone calls and follow-ups through Epharmix
- Follow-up rates for STR clients' 6-month GPRA dipped below 80% goal

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Questions?

Ed Riedel	Mary Quandt	Bri Wheatley
Missouri Institute of Mental Health	**Behavioral Health Network**	**Preferred Family Healthcare**
ed.riedel@mimh.edu	mquandt@bhnstl.org	briana.wheatley@pfh.org
314-516-8463	(608) 333-4429	(314) 669-4656

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