



Road Home Program: Center for Veterans and Their Families at Rush

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**WARRIOR
CARE NETWORK**

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Overview

Local Problem

- Posttraumatic Stress Disorder Prevalence
- Utilization of Evidence-Based Treatments
- Assessment of Treatment Outcomes

Design and Implementation

- Stakeholder Meetings
- Development of the Post Encounter Form
- Development of the Pre-Intake Form
- Implementation of Qualtrics Surveys

Utilization of Health IT

- Epic Specialty Forms
- Self-Report Assessments

Value Derived

- Continued Funding for the Road Home Intensive Treatment Program
- Use of Additional Technology to Evaluate and Enhance Treatment

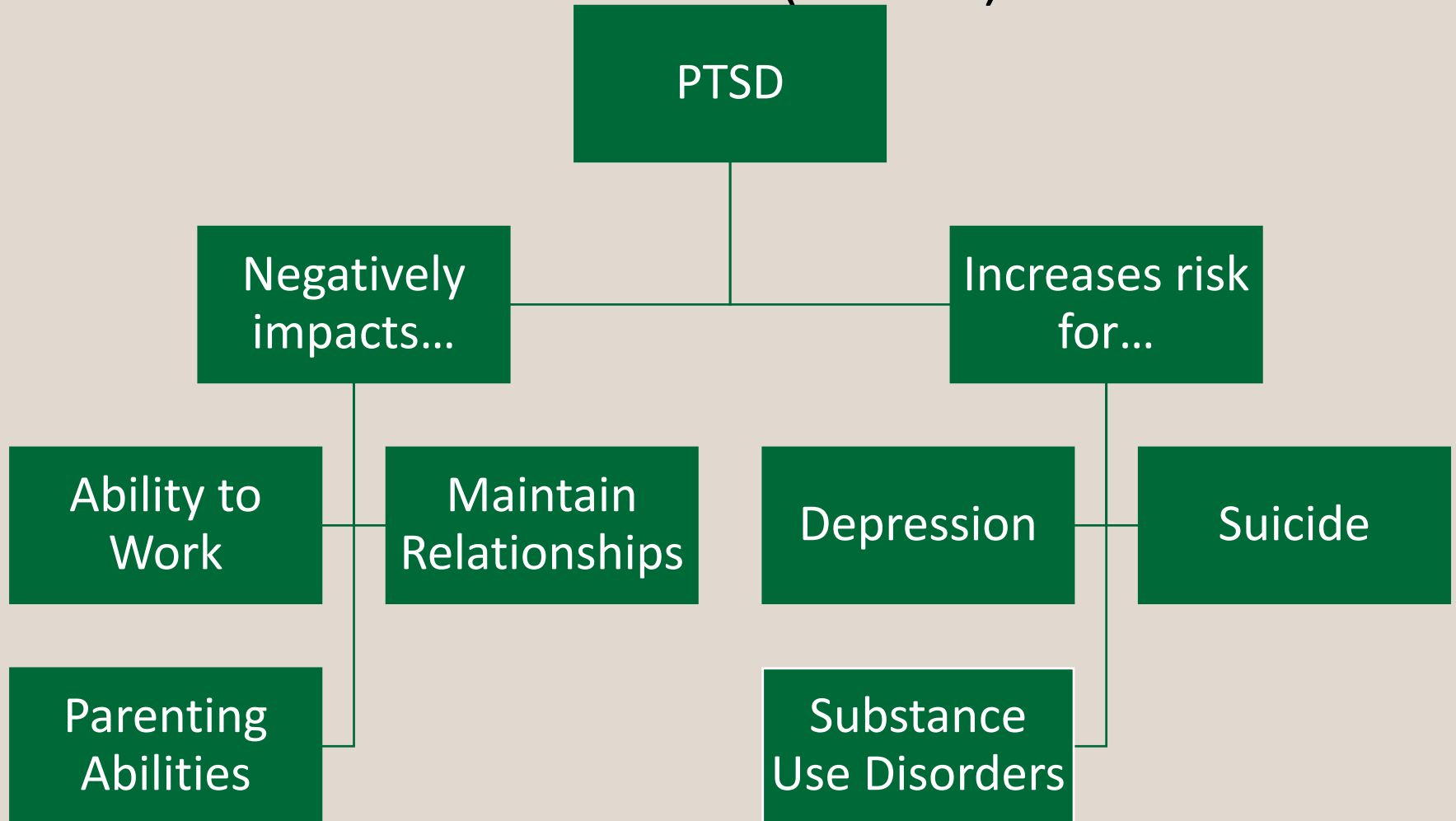


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- Assessment of Treatment Outcomes

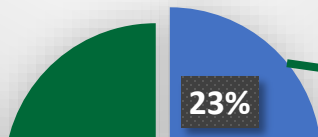


Impact of Posttraumatic Stress Disorder (PTSD)

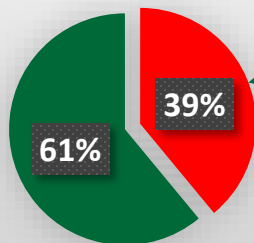


PTSD and Treatment

PTSD Prevalence among Returning Veterans

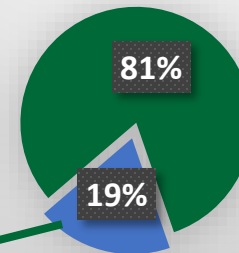


Veterans with PTSD who Complete Evidence-Based Treatments



■ Did not complete Treatment ■ Completed Treatment

Veterans with PTSD who receive Evidence-Based Treatments



■ Receive EBTs ■ No/Other Treatment



Barriers to Receiving and Completing Evidence-Based PTSD Treatment

Concerns
about
Treatment

Mental Health/
Treatment Stigma

Logistical
Issues

Perceived
Emotional
Readiness
for
Treatment

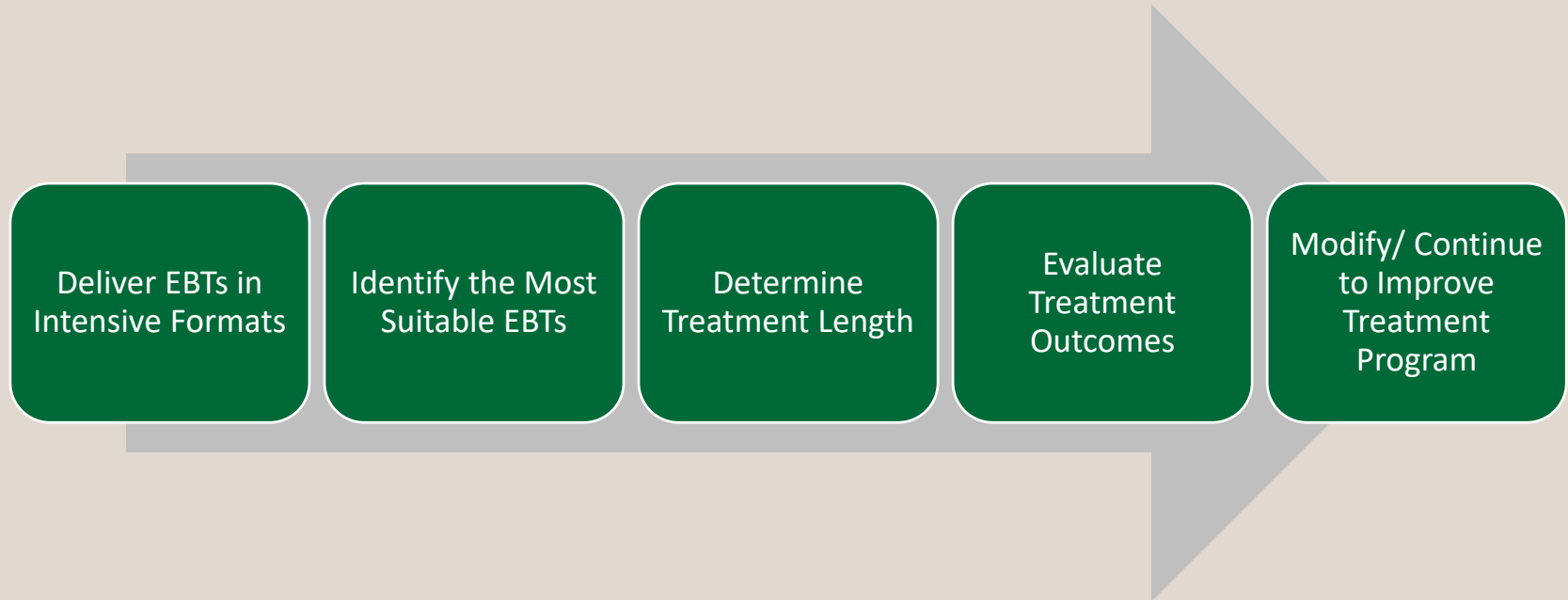
Provider
Training in
Evidence-
Based
Treatment

Provider
Confidence
in Evidence-
Based
Treatment

Treatment
Cost



Proposed Solution



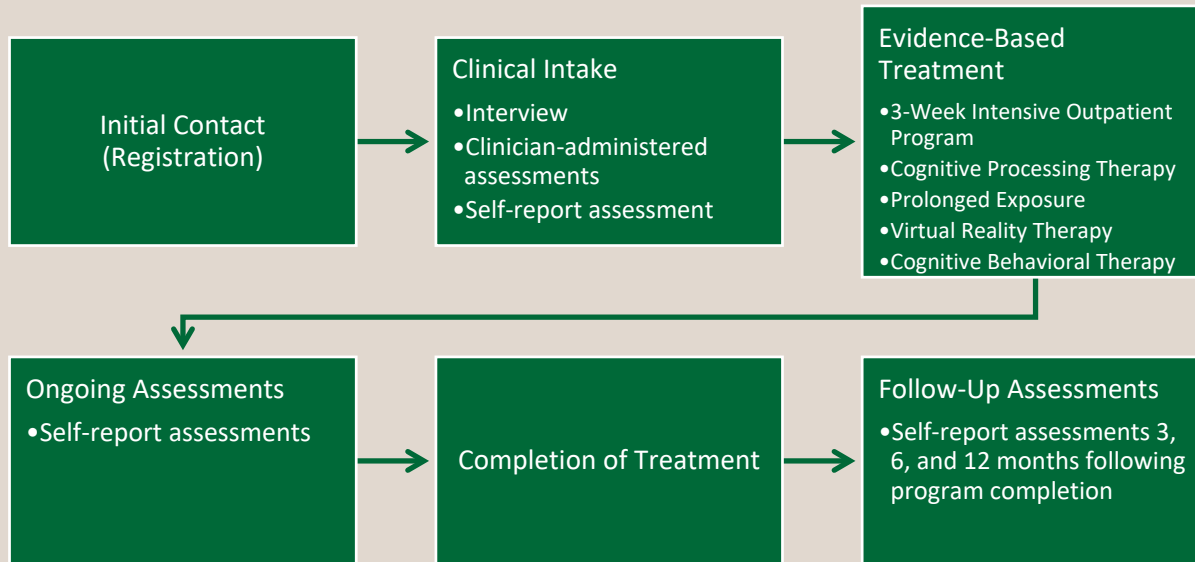
The goal was to create a program that can ultimately be transported into other settings to increase the availability of high quality care for veterans.



Design and Implementation

- Stakeholder Meetings
- Development of the Post Encounter Form
- Development of the Pre-Intake Form
- Implementation of Qualtrics Surveys

Clinical Workflow



Each timepoint contains important information that can be used to evaluate the program. This data can help improve the effectiveness of the clinical operations and ultimately lead to improved care for veterans and their family members.



Status in 2015: Pre-Utilization of Health IT

Progress Notes

Veteran was seen for 60 minutes of supportive therapy and case management.

S/O: Veteran served in the US Army from [REDACTED] and received a General discharge under Honorable conditions. Veteran deployed to Iraq x2 and MOS is [REDACTED]. Veteran is service connected 50% for PTSD. Time in session was spent discussing current stressors contributing to veteran's overall functioning. Veteran was asked to bring list of current stressors and states he did not remember to bring them. Veteran also voiced forgetting other appts and tasks and expressed frustration with himself for "being this way. I never used to be like this." During session, MSW introduced a day planner for veteran to use to continue to work on organizing appts and daily schedule. MSW and veteran spent time identifying ways to begin thinking of using calendar as a tool and veteran expressed appreciation. Time in session was also spent utilizing motivational interviewing and encouraging veteran to consider maladaptive ways of coping with his stress (e.g. Changing the subject, isolating, anger outbursts etc). Time was also spent following up on referrals from outreach coord that included peer veteran organizations, which veteran plans to pursue.

A: Veteran was 25 minutes late for his appt, was oriented x4 and was neatly groomed and casually dressed. No evidence of psychotic disorder noted. Veteran affect was within normal range and mood was anxious. Veteran was in an upbeat mood and disorganized thinking at times. Vet was assessed for risk and deemed at baseline with no current SI/HI. Veteran continues to experience symptoms of PTSD that seem to impact veteran's functioning. Veteran will benefit extra support to assist in identifying and organizing his stressors. Veteran remains motivated for treatment but continues to struggle with commitment to follow through.

Following each session, clinicians would document all clinical information in Epic in the form of Clinical Progress Notes

PROs:

- Detailed information about every patient, including demographics, interventions provided, intervention length, referrals, clinical outcomes, etc.

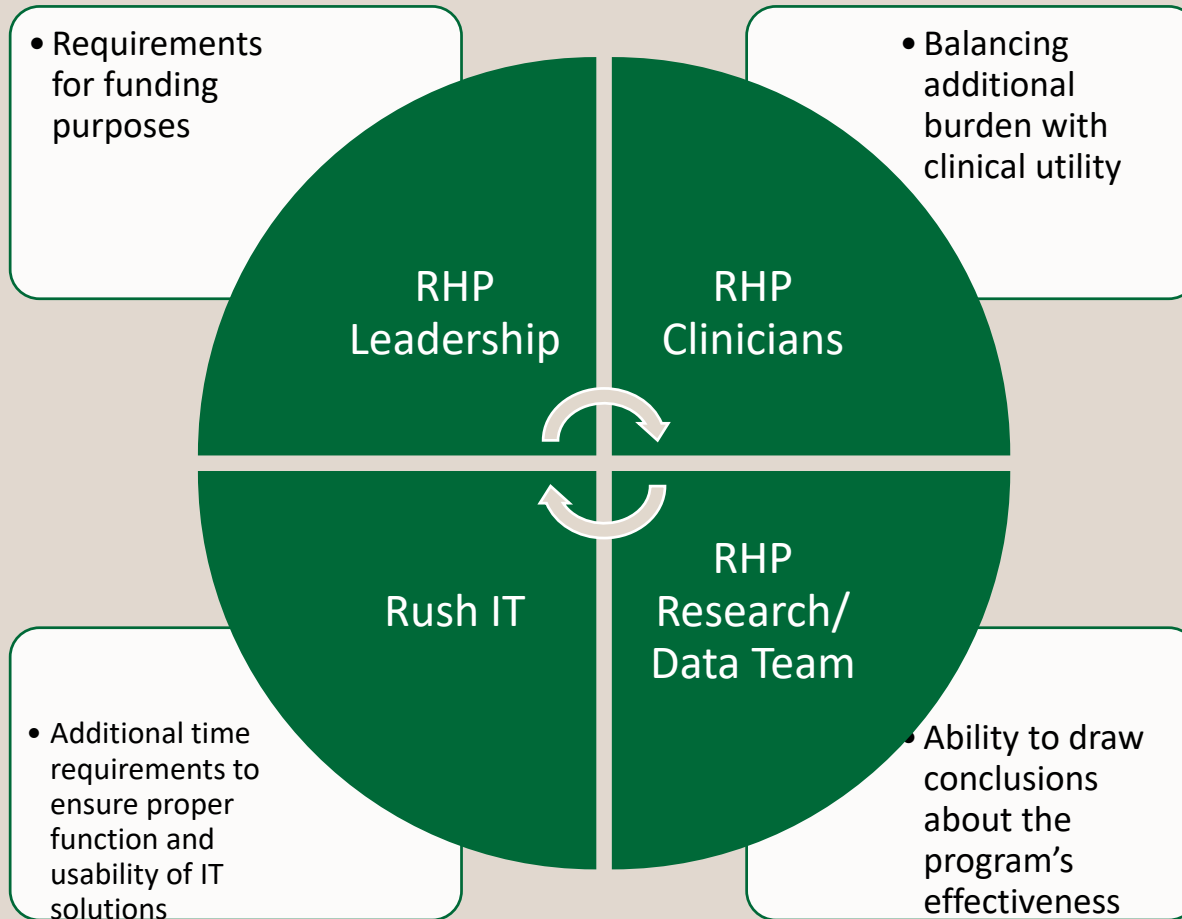
CONS:

- Clinical data not extractable easily
- Unable to generate program data for funders, determine whether treatment is effective, etc.

GOAL:

- Develop a system that allowed for comprehensive data collection and enabled the Road Home Program to easily access its data

Stakeholder Meetings





Requirements for Proposed Solution



Efficient

- Clinicians have limited time for documentation
- 90 seconds or less



Comprehensive

- Capability to collect all necessary information



Accessible

- Capability to aggregate all necessary data
- Ability to share collected data with funders and other academic medical centers



Cost-Effective/Easy-to-use

- Limited funds and time to learn new tools



Utilization of Health IT

- Epic Specialty Forms
- Self-Report Assessments



Capturing Data via Epic

Challenge: Getting clinicians to use new Epic forms to document encounters

Solution: Demonstrate the usefulness of the new Epic forms; show clinicians how much information they can get about their clients

Result: Organizational change; all Road Home Program clinicians are now using Epic forms

Benefits of Using Epic Forms

- Existing system (Epic)
- Cost-effective, easy-to-learn
- Forms completed in 90 seconds or less
- Modifiable/adaptable content
 - System can change with growing program needs
 - Capturing demographic information, clinical session content, symptom improvements
- Ability to aggregate information
 - Collected information can easily be sent to funders



Capturing Data via Qualtrics

Validated psychological symptom measures

- Ensure accurate assessment of various symptoms

Easy-to-use tools and devices

- Surveys sent via email and administered via iPads in-clinic

Results need to be easily interpretable by clinicians

- Survey results are automatically summarized upon completion
- Automatic suicidality alert



 RUSH

Road Home Intensive Outpatient Program - Daily PCL-5 and PHQ-9
8/6/2018

PCL-5 Score: 60

PHQ-9 Score: 19

PHQ-S Score: 3

PHQ-9 Patient Health Questionnaire

Developed by Drs. Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke and colleagues, with an educational grant from Pfizer Inc. No permission required to reproduce, translate, display or distribute

Over the last **2 weeks** how often have you been bothered by any of the following problems?

	Not at all	Several days	More than half the days	Nearly every day
Little interest or pleasure in doing things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Feeling down, depressed, or hopeless	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Trouble falling asleep, staying asleep, or sleeping too much	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Ongoing data collection enables us to track clients progress in all clinical programs and make adjustments to the treatment provided to offer the most effective care to the veterans based on their unique needs.

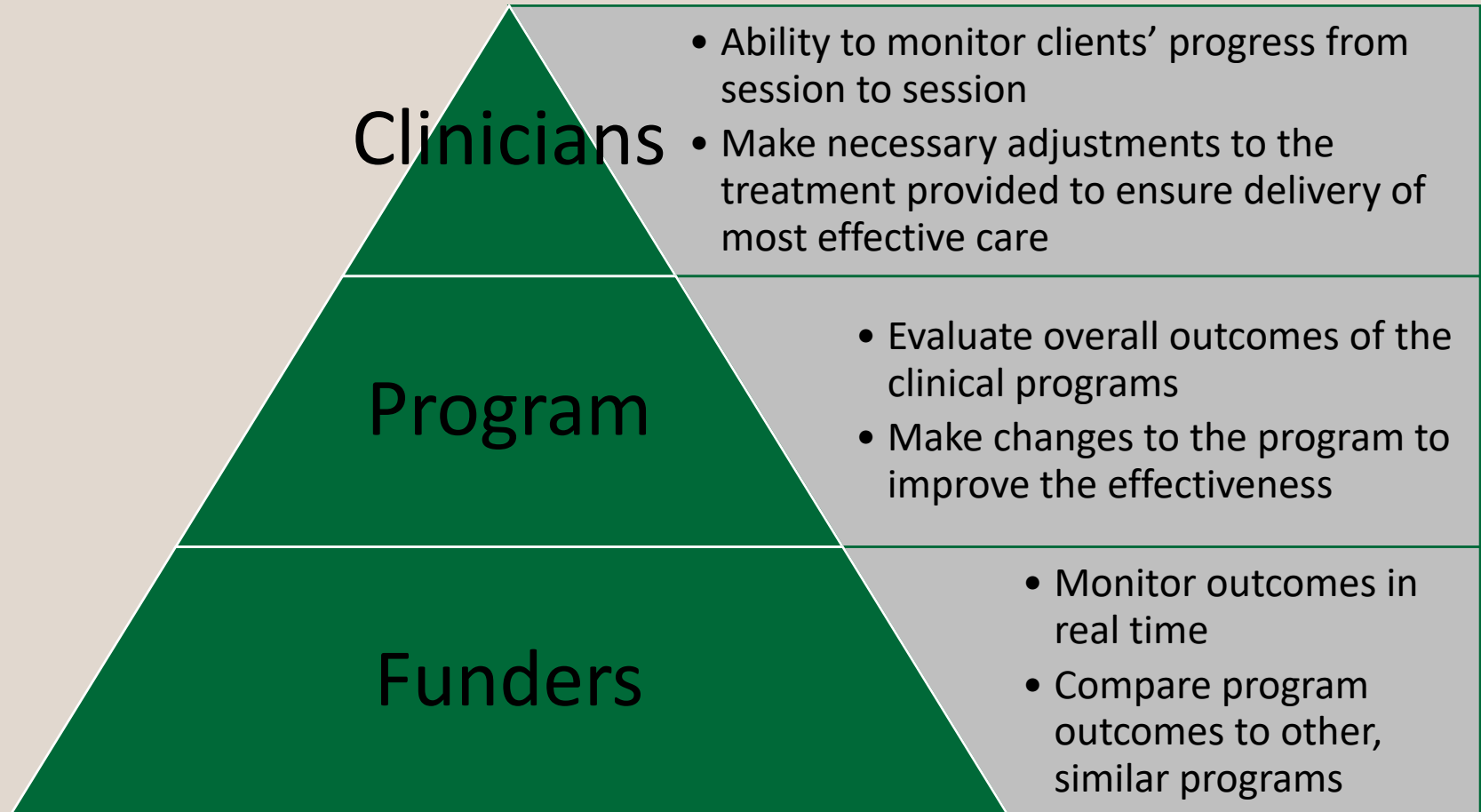


Value Derived

- Continued Funding for the Road Home Intensive Treatment Program
- Use of Additional Technology to Evaluate and Enhance Treatment

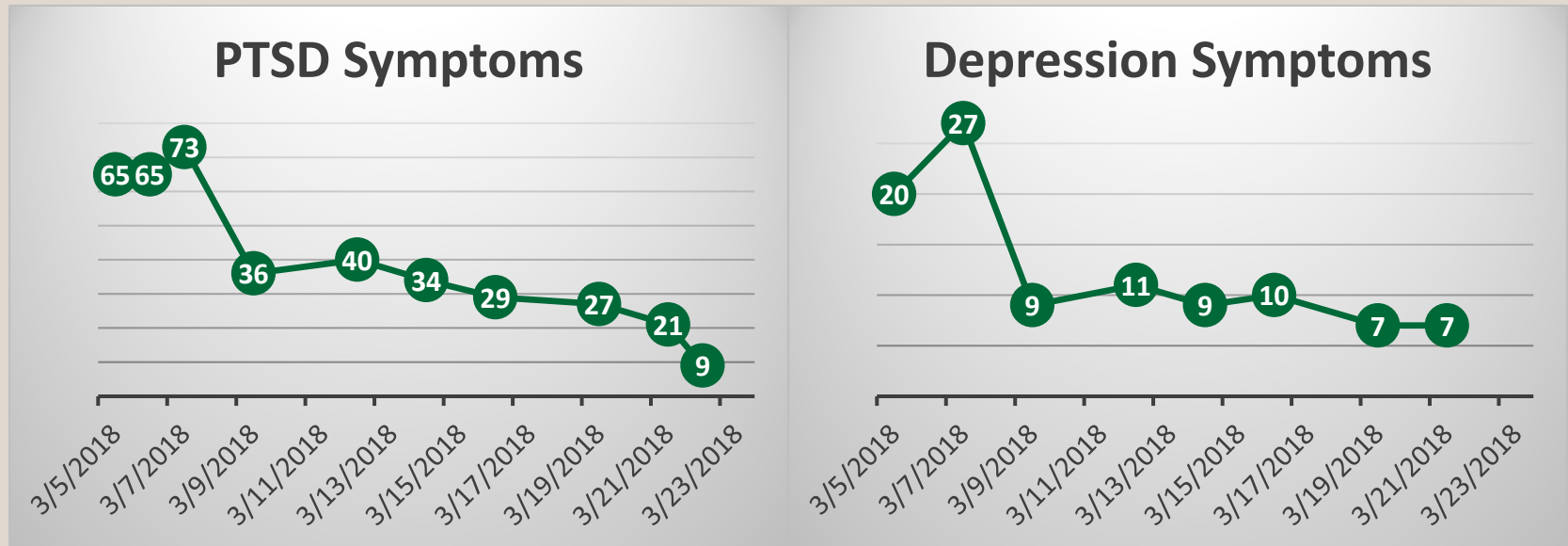


Value Derived on Many Levels





Value Derived – Clinician Level

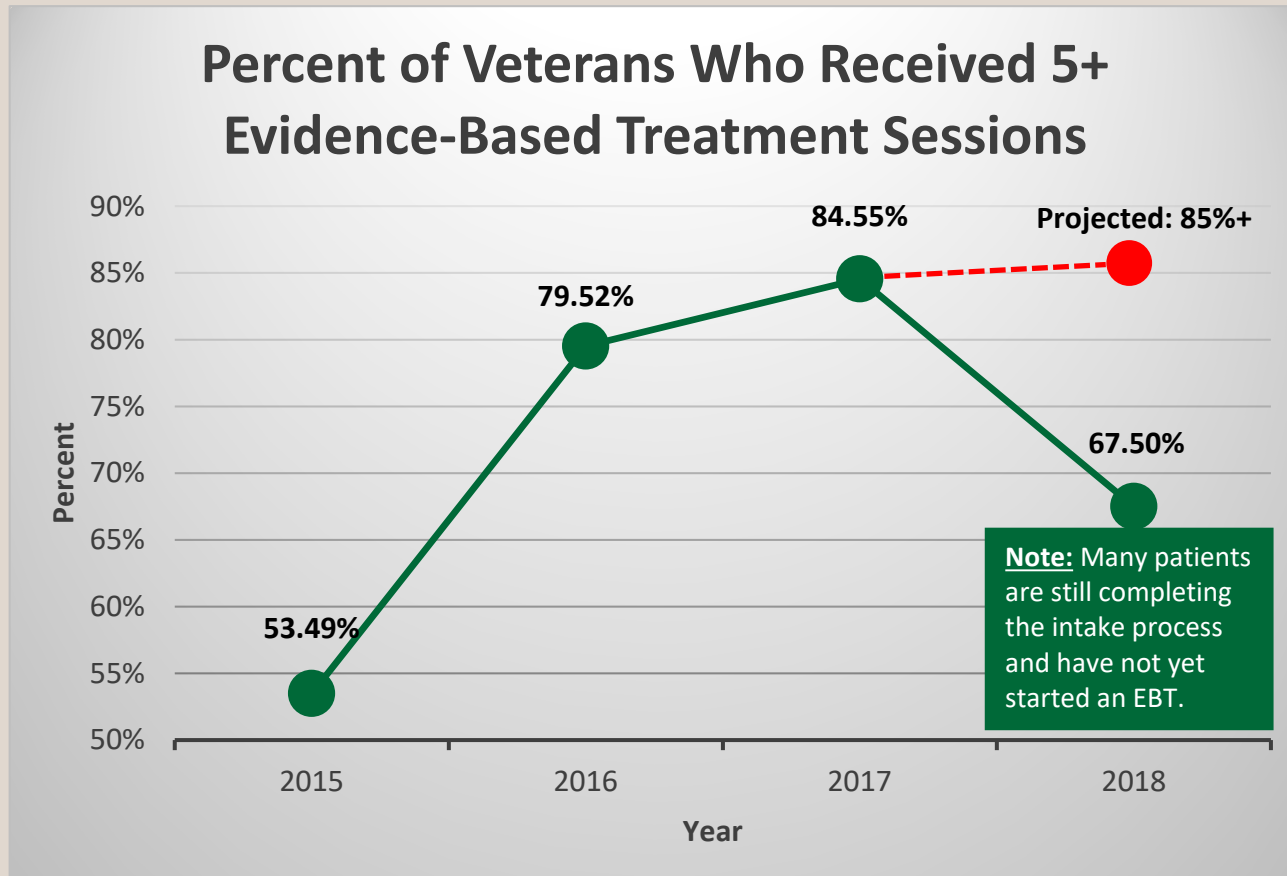


Clinicians are able to monitor their clients symptoms every day over the course of the 3-week Intensive Outpatient Program (IOP).

Continuous symptom monitoring allows clinicians to adjust their treatment approach based on the veteran's specific clinical needs.



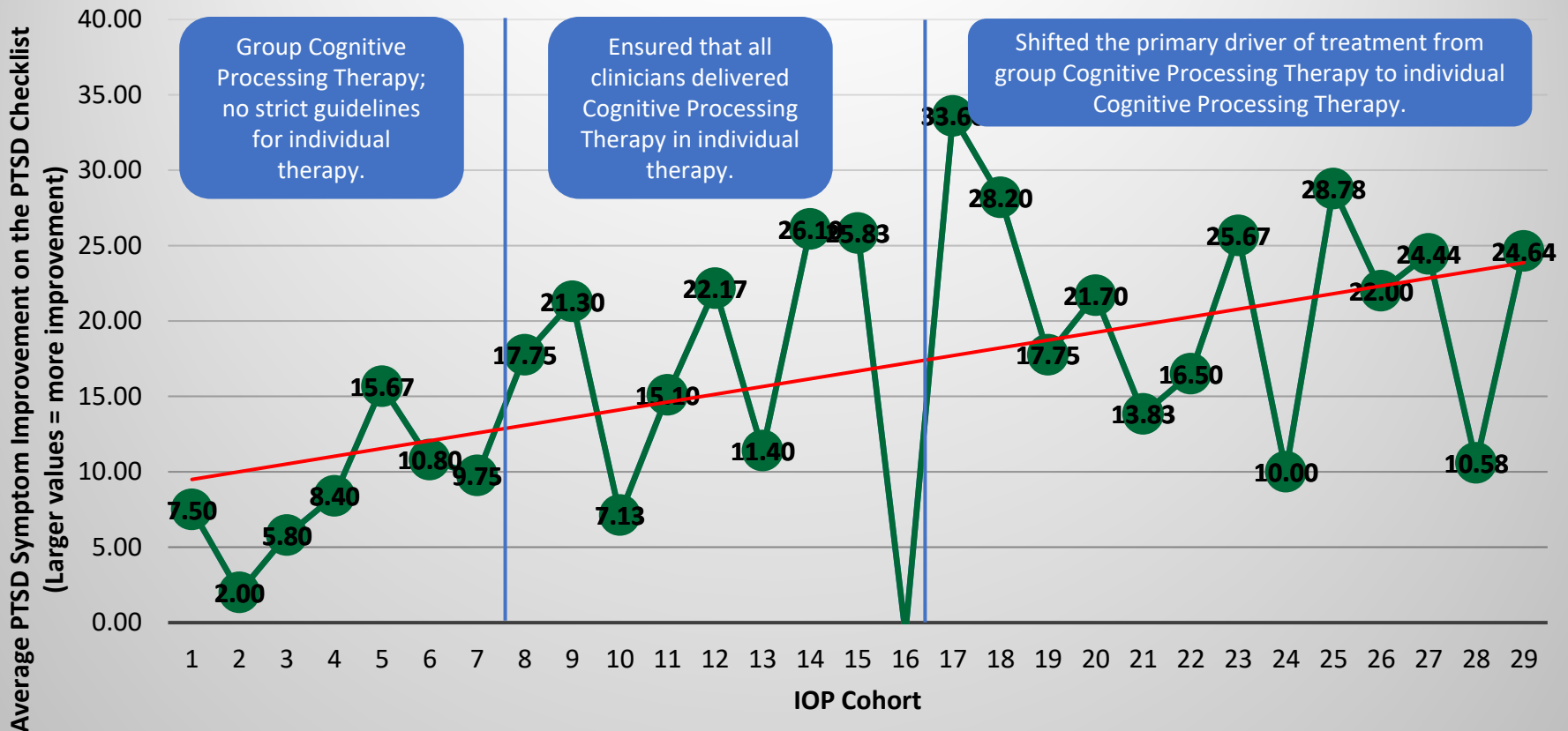
Value Derived – Program Level





Value Derived – Program Level

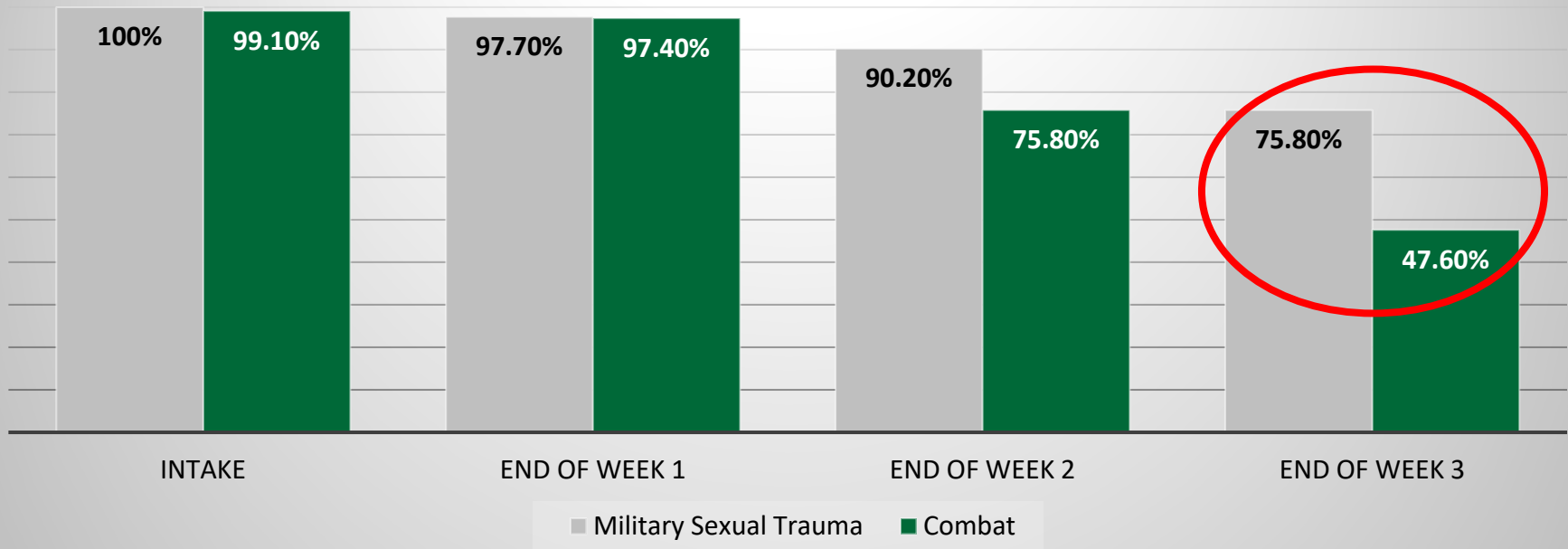
Average PTSD Symptom Improvement During the 3-Week Intensive Outpatient Program by Cohort





Value Derived – Program Level

PTSD Diagnosis by Week - Cohorts 18 and earlier

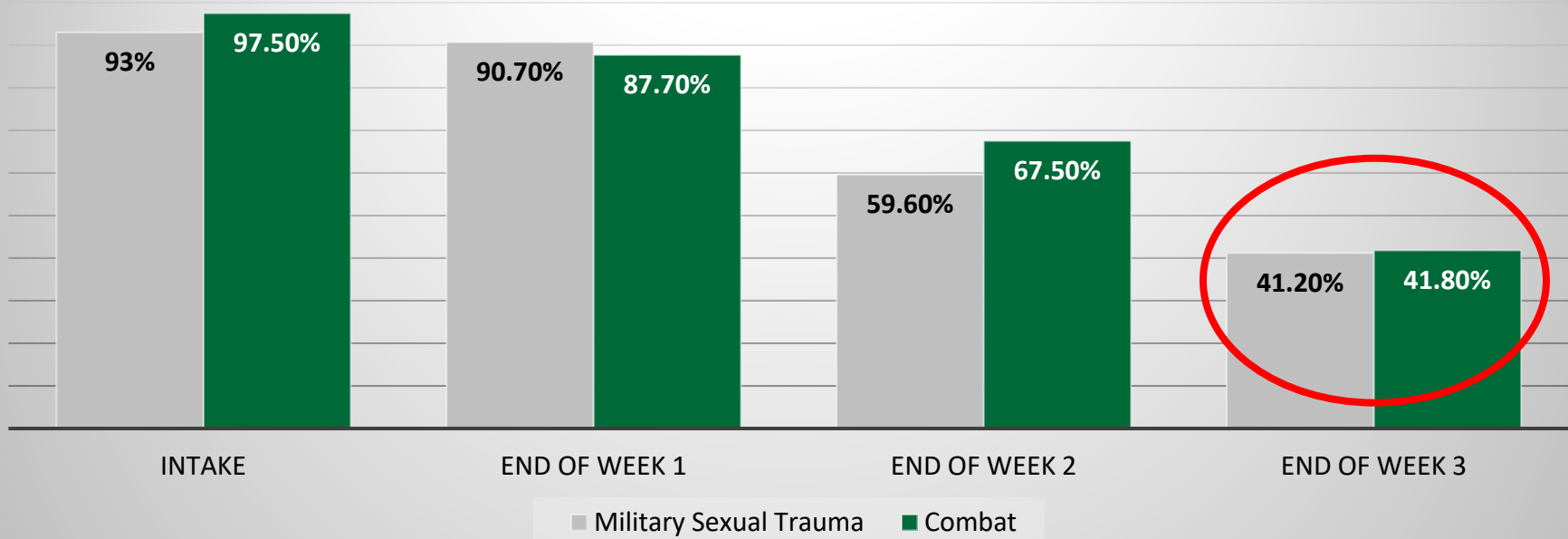


Being able to regularly evaluate our data enable us to identify areas for improvement and make programmatic changes to help us further improve our outcomes.



Value Derived – Program Level

PTSD Diagnosis by Week - Cohorts 19 and later

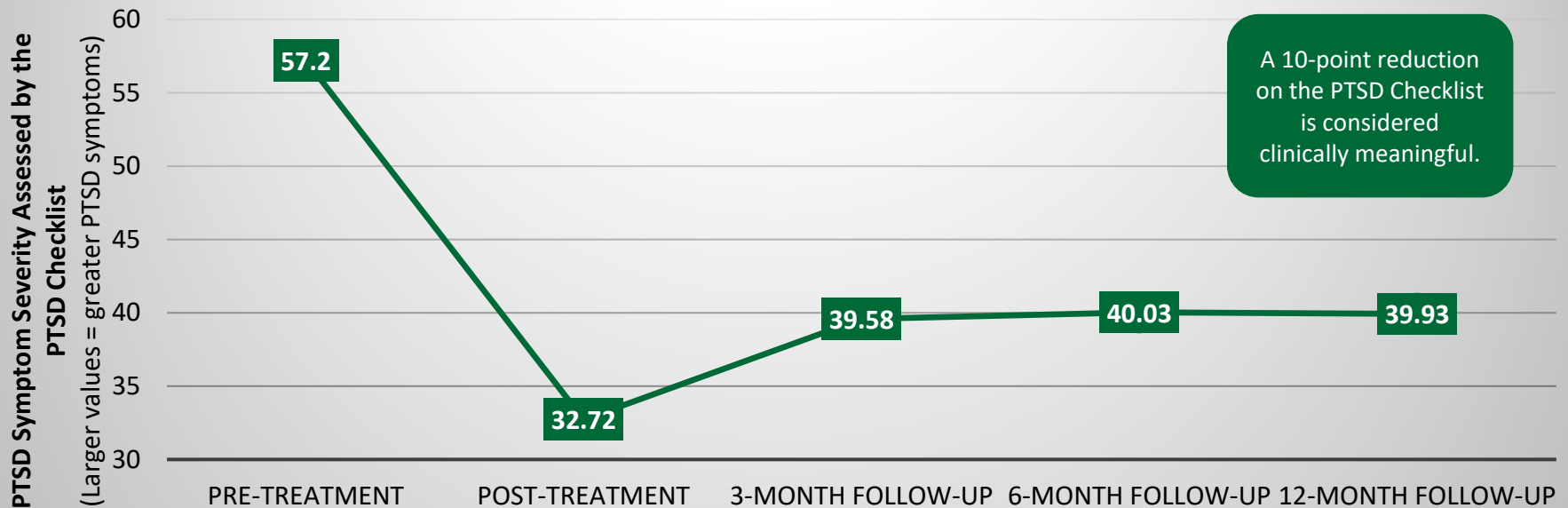


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Value Derived – Program Level

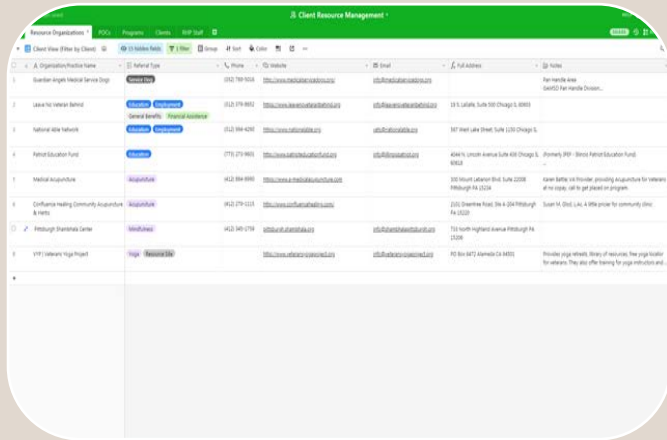
Long-Term PTSD Symptom Improvements Resulting from the 3-Week Intensive Outpatient Program



Following veterans long-term following the completion of the 3-week Intensive Outpatient Program enables the Road Home Program to draw conclusions about the program's effectiveness.

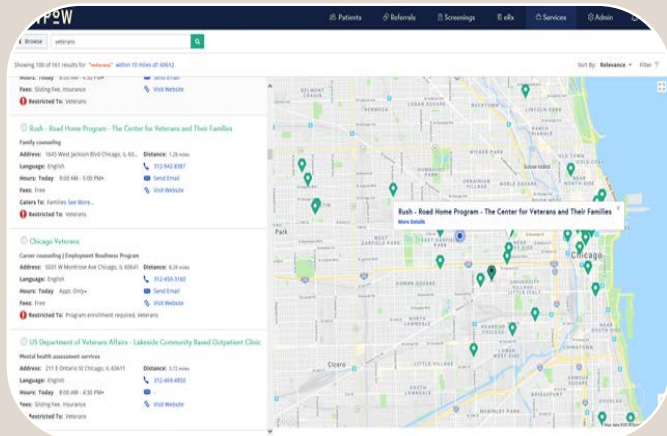


Using Technology to Ensure Veterans Continued Connection to Care



• **Airtable:**

- Road Home Program-generated resource list for complementary and follow-up care
- Collaborative internet-based database tool that can house separate databases from resources for veterans to outreach tracking numbers, program data, etc.



• **NowPow:**

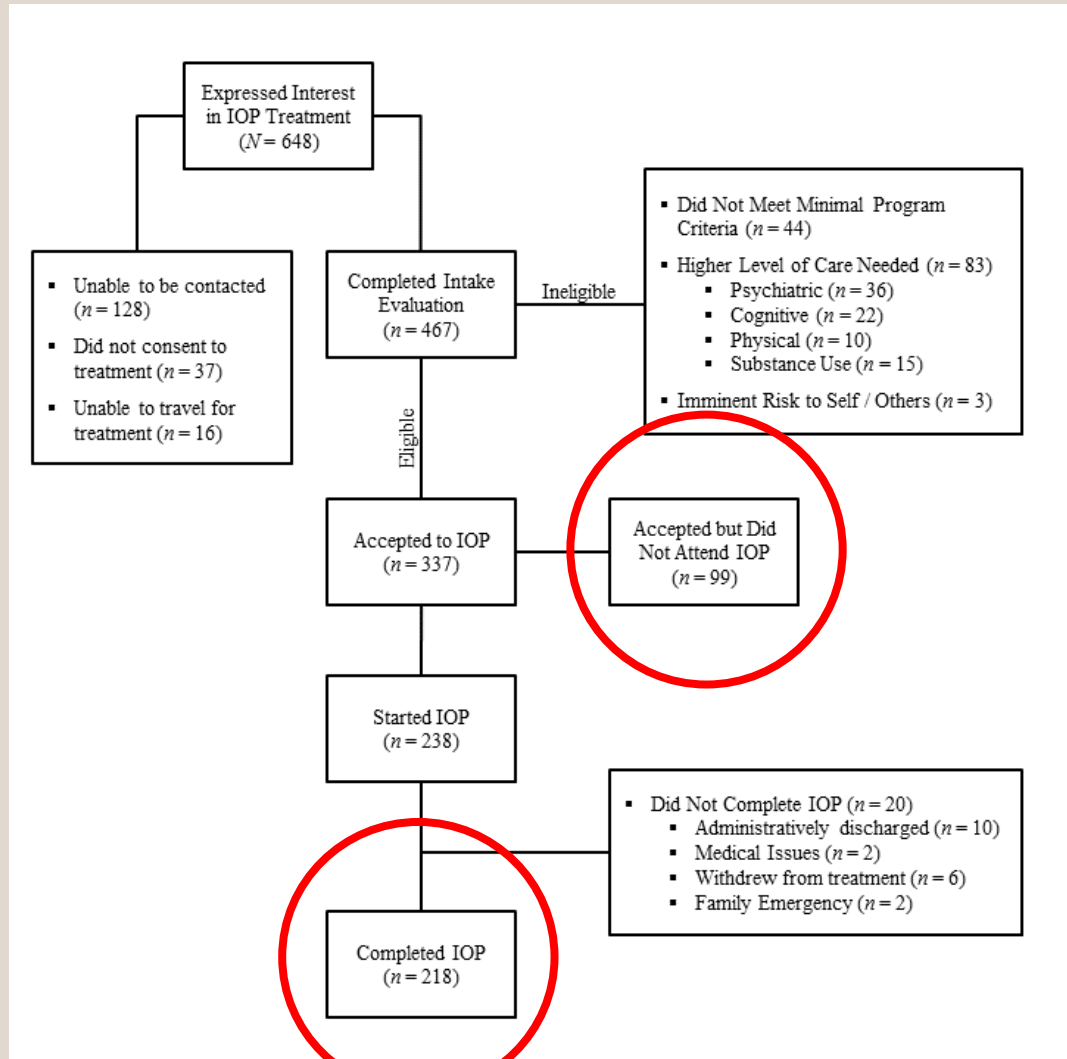
- NowPow is a local Chicago-based organization that has developed an automated resource tool
- The resource tool automatically provides resources based on a presenting concern
- For example: A veteran with PTSD will automatically receive resources on mindfulness and yoga services, as well as peer-based support groups in the Chicagoland area

Value Derived – Program Level

Without the vast amount of data that is being collected at every timepoint, we would not be able to determine areas for intervention or further inquiry.

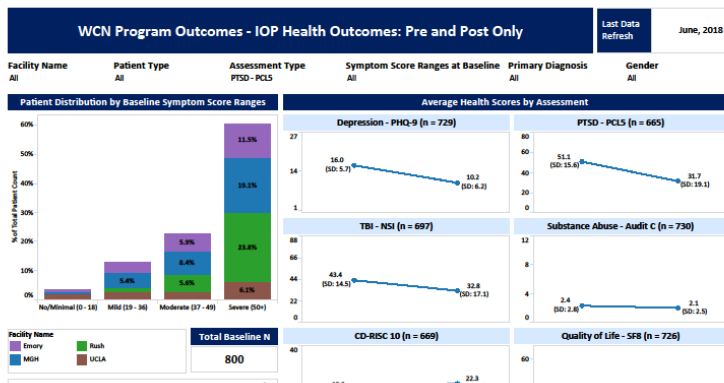
Example:

Through systematically evaluating the data, the Road Home Program notices that 1/3 of veterans who were accepted for the 3-week Intensive Outpatient Program did not attend.



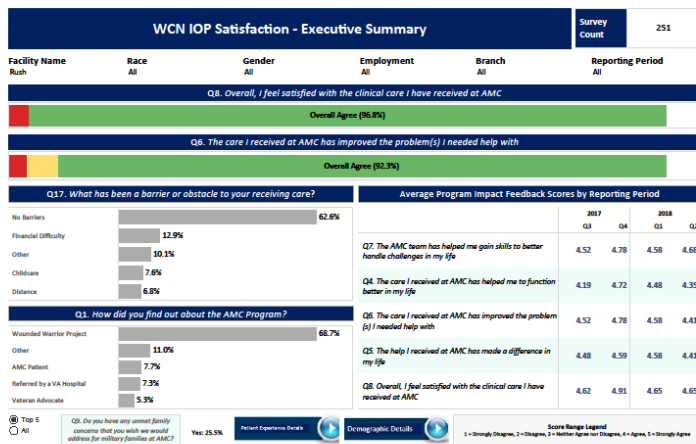


Value Derived – Funder Level



Following the example of the Road Home Program, other Academic Medical Center that are part of the Warrior Care Network have adopted the use of specialty forms, such as the *Post Encounter Form* and *Pre-Intake Form*.

The collection of the same clinical information across different Academic Medical Centers enables funders, such as the Wounded Warrior Project, to compare the effectiveness of different programs in real time. It also enables a precision medicine approach to help determine which veteran will receive the most benefit from a certain program.





Value Derived – Cost Savings

Estimated Costs* per
Case of Untreated
PTSD per 2 years

\$5,904-
\$10,298

Estimated Costs* per
Case of Untreated
Depression per 2 years

\$15,461-
\$25,757

Estimated Costs* per
Case of Untreated
PTSD and Depression
per 2 years

\$12,427-
\$16,884

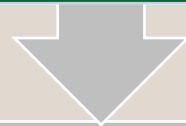
*Costs estimates from the Rand Corporation include therapy and emergency room visits, development of chronic health conditions, etc.



Value Derived – Cost Savings*

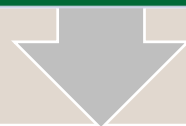
Estimated Costs for all Veterans Who Participated in the IOP IF PTSD Remained Untreated per 2 years

\$1,688,544 - \$2,945,228



Estimated Costs for all Veterans Who Participated in the IOP Who Completed the IOP per 2 years

\$675,417 - \$1,178,091



Under-Estimated Cost Savings for all Veterans Who Participated in the IOP per 2 years

\$1,013,127-\$1,767,137

* This is a **conservative** estimate of cost savings, assuming that veterans do not have comorbid disorders; more comprehensive cost-effectiveness analyses are currently underway.



Next Steps

Short-Term

Continue to refine the Intensive Outpatient Program and evaluate the cost-effectiveness

Medium-Term

Transport the IOP model, including it's IT infrastructure, to other organizations

Long-Term

Evaluate the feasibility of IOP model as a primary treatment modality for PTSD