**Variables to Pull for 2- and 3-Week IOP For Marley and Angie:**

From EPIC:

* Sex
* Race/Ethnicity
* Sexual Orientation
* Marital status
* Age
* Number of children
* Education
* Housing
* Service-connectedness ??
* Military demographics: Discharge Status, Military Service status, Branch, Rank, Deployed Y/N
* CAPS?
  + (Baseline) Avoidance CAPS

From RedCap Arm 1:

* Military demographics:
  + Post 9/11 Status (Participant info)
* PCL:
  + (Baseline) Overall PCL Past Month
    - Avoidance subdomain
  + (Every) Overall PCL Past Week
    - Avoidance subdomain
  + (Baseline) PCL Past Month Avoidance
* Dates
  + 3-Week IOP Start Date (send Angie sheets)
  + 3-Week IOP Dropout Date
  + 2-Week IOP Start Date
  + 2-Week IOP Dropout Date

**Poster 1: Looking at how avoidance**

**Poster 2:**

**Reasons for drop out**

**Intro:**

* Gaps in BOK: most research is only on men. Less focus on outpatient settings
* Low tx engagement among veterans
* Unclear how to predict who will discontinue treatment
* Tx discontinuation is a big problem: “88.6% of veterans who initiate treatment for PTSD do not receive an adequate amount, defined as eight or more psychotherapy sessions (Cully et al., 2008).”

Response Variable: Tx discontinuation

* **Strictly Defined Treatment Discontinuation:** Individuals that did not complete 5 RT sessions or a10 CPT sessions (at first round of Tx)
* **Liberally Defined Treatment Discontinuation:** Individuals that did not complete a5 RT sessions or 10 CPT sessions (at first round of Tx) OR chose not to attend CPT (in the second round of Tx)
* Individuals that did not enroll in OPTIONAL CPT after their RT session or did not complete 80% Tx sessions

**Marley Hypotheses:**

* Generalized Linear Models (GLM): You could also consider using generalized linear models if your ordinal outcome variable follows a specific distribution (e.g., binomial, Poisson, etc.). This approach allows you to model the relationship between the explanatory variables and the outcome variable while accounting for the distribution of the data.
* Analysis of Variance (ANOVA) or Analysis of Covariance (ANCOVA): Depending on the nature of your ordinal outcome variable and the specific research question, you might also consider running an ANOVA or ANCOVA. ANOVA is used when you have a categorical outcome variable, while ANCOVA extends ANOVA by including continuous covariates (interval explanatory variables) to control for their effects on the outcome.
* Tree-Based Methods: Decision tree-based methods like Random Forest or Gradient Boosting can handle both ordinal and interval predictor variables. These methods are useful for capturing complex nonlinear relationships and interactions between variables.
* Nonparametric Tests: If your data does not meet the assumptions of parametric tests, you could explore nonparametric alternatives such as the Kruskal-Wallis test or the Mann-Whitney U test for ordinal outcome variables.
* Latent Variable Models: Depending on the nature of your research, you might consider latent variable models such as Structural Equation Modeling (SEM) if you want to explore relationships among latent constructs represented by multiple observed variables.
* Ordinal Logistic Regression (Ordinal Regression): If you have an ordinal outcome variable and want to analyze the relationship between that variable and multiple interval explanatory variables, ordinal logistic regression (also known as ordinal regression) could be a suitable choice. This type of regression is an extension of binary logistic regression for ordinal outcome variables. It models the cumulative odds of being in a certain category of the outcome variable based on the levels of the explanatory variables.
* **H0: Demographic exploration: Who are the people that are leaving?**
  + Intake, Demographics: Age, gender, Sexual orientation, veteran status, ethnicity, race, employment status, Annual household income, Number of people supported by income, Highest education, Marital status ??, homeownership status,
  + Trauma subtypes?
* **~~H1: Trauma subtypes:~~** ~~Military combat veterans will be more likely to discontinue treatment than non-military combat veterans.~~
  + ~~Intake:~~
* **H1: Time since trauma**: Individuals with greater time since trauma will be more likely to discontinue treatment. (how to define greater?)
  + Intake: CAPS Item 22,
* **H2: Patient treatment expectations:** Pre-treatment treatment expectations will be strongly correlated with treatment discontinuation
  + Intake: Treatment expectations: scale from 1-9
* **~~H3:~~** ~~Greater PCL score improvement throughout treatment will predict lower treatment discontinuation~~
  + ~~Intake: PCL Past Month~~
  + ~~Arm 2-3:~~
* **~~H4:~~** ~~Greater PHQ score improvement throughout treatment will predict lower treatment discontinuation~~
  + ~~Intake: PHQ9~~
  + ~~Arm 2-3, Day 1-5 PHQ9~~
* **H4:** Higher avoidance (as assessed by PCL and CAPS section C at intake) will be significantly associated with higher treatment discontinuation
  + Intake: CAPS, PCL Past Month
* **H5:** Higher CAPS total severity, total symptom scores and PCL overall scores will be significantly associated with higher treatment discontinuation
  + Intake: CAPS total severity, total symptom scores and PCL Past Month overall scores

**Angie Hypotheses:**

* **H0: Exploratory: Who are the people that are leaving?**
  + Baseline, Arm 1-2, Participant info: Cohort Type
* **H1: Trauma subtypes:** Military combat veterans will be more likely to discontinue treatment than non-military combat veterans.
  + Intake:
* **~~H2: Time since trauma~~**~~: Individuals with greater time since trauma will be more likely to discontinue treatment. (how to define greater?)~~
  + ~~Intake:~~
* **H3: Higher Patient treatment expectations** will predict significantly lower rates of treatment discontinuation
  + Intake: Treatment expectations
  + Arm 1, Baseline: CEQ-Set 1,
* **H4:** Greater PCL score improvement throughout treatment will predict lower treatment discontinuation
  + Baseline, Arm 1-2:
* **H5:** Greater PHQ score improvement throughout treatment will predict lower treatment discontinuation
  + Intake:
* **H6:** CAPS section C and PCL scores will be significantly associated with each other ??
  + X and X were correlated with each other and each were predictive of \_\_\_\_.
  + Baseline, Arm 2-3:
* **H7:** Higher avoidance (as assessed by PCL and CAPS section C at intake) will be significantly associated with higher treatment discontinuation
  + Baseline, Arm 2-3:
* **H8**: Higher Pain intensity (as assessed by PROMIS) will be significantly associated with higher treatment discontinuation
  + Intake, PROMIS

**Methods:**

* Explanation of Mech/SGB procedures
* Mostly correlational unless we have mediator moderator variables
* Median split for treatment expectations (group into high and low expectations)
* Correlation between PCL and Cluster C CAPS (or overall score?)

**Results:**

**Implications:**

* Import of measuring these variables.
* For high-risk individuals, consider having more back up methods and discuss potential barriers early and often
  + - * These folks may need increased psychoeducation prior to CPT/more sessions of CPT
* Adjunct or personalized treatment/services/resources to address the common issues that lead to tx discontinuation (e.g., SUD, anger management techniques, compensation)
* Inequality

**–––**

* [Difficulties in Emotion Regulation Scale-SF):](https://elcentro.sonhs.miami.edu/research/measures-library/ders-sf/index.html)

**Notes:**

* Racial disparities
* CPT specific studies
* Szafranski et al. (2016)
  + inpatient environment, EBT content, family obligations, medication use concerns, rule violations, treatment noncooperation, psychotic symptoms, and decompensation in functioning
  + “16% of OEF/OIF/OND veterans develop PTSD postdeployment (Dursa, Reinhard, Barth, & Schneiderman, 2014; Vaughan, Schell, Tanielian, Jaycox, & Marshall, 2014)” (Szafranski et al., 2016, p. 25)
  + treatment noncompliance and family obligation
  + Less PTSD symptom improvement, less improvement from overall functional impairment, and higher rates of concurrent drug usage predicted earlier termination from inpatient PTSD treatment (Szafranski et al., 2014)
  + transportation/scheduling difficulties, medical problems, and housing relocation were the most common reasons (Teng et al., 2008).

**A diagram of a patient's flow

Description automatically generated**

Demographics of each box??

When did they drop out?

Instead of boxes, line chart where each line ends at different stages

Also, on the side, who are tx continuers? What do they look like?

* Szafranski et al. (2016)
  + inpatient environment, EBT content, family obligations, medication use concerns, rule violations, treatment noncooperation, psychotic symptoms, and decompensation in functioning
  + “16% of OEF/OIF/OND veterans develop PTSD postdeployment (Dursa, Reinhard, Barth, & Schneiderman, 2014; Vaughan, Schell, Tanielian, Jaycox, & Marshall, 2014)” (Szafranski et al., 2016, p. 25)
  + Tx discontinuation is a big problem: “88.6% of veterans who initiate treatment for PTSD do not receive an adequate amount, defined as eight or more psychotherapy sessions (Cully et al., 2008).”
  + Within OEF/OIF/OND veteran outpatient studies, younger age, negative treatment indicators on the Minnesota Multiphasic Personality Inventory–II (Garcia et al., 2011), higher disability status, and lower social support predict treatment discontinuation (Gros et al., 2013)
  + treatment noncompliance and family obligation
  + Less PTSD symptom improvement, less improvement from overall functional impairment, and higher rates of concurrent drug usage predicted earlier termination from inpatient PTSD treatment (Szafranski et al., 2014)
  + transportation/scheduling difficulties, medical problems, and housing relocation were the most common reasons (Teng et al., 2008).