

# Screening Adults for Depression and Suicidality in an Outpatient Burn Center

Amanda F. Rose, Psy.D<sup>1</sup>.; Alan Gilbertson, Ph.D<sup>1</sup>.; Heather Belacic, MSN, RN, NE-BC<sup>2</sup>; John Crow, MD, FACS<sup>2</sup>

1. Cleveland Clinic Akron General, 2. Akron Children's Hospital, The Paul and Carol David Foundation Burn Institute Akron, Ohio

## Introduction

In response to NIH recommendations and ABA verification standards, a protocol utilizing the Patient Health Questionnaire (PHQ-9) was initiated to screen adult burn patients in an outpatient verified burn center for depression and suicide risk.

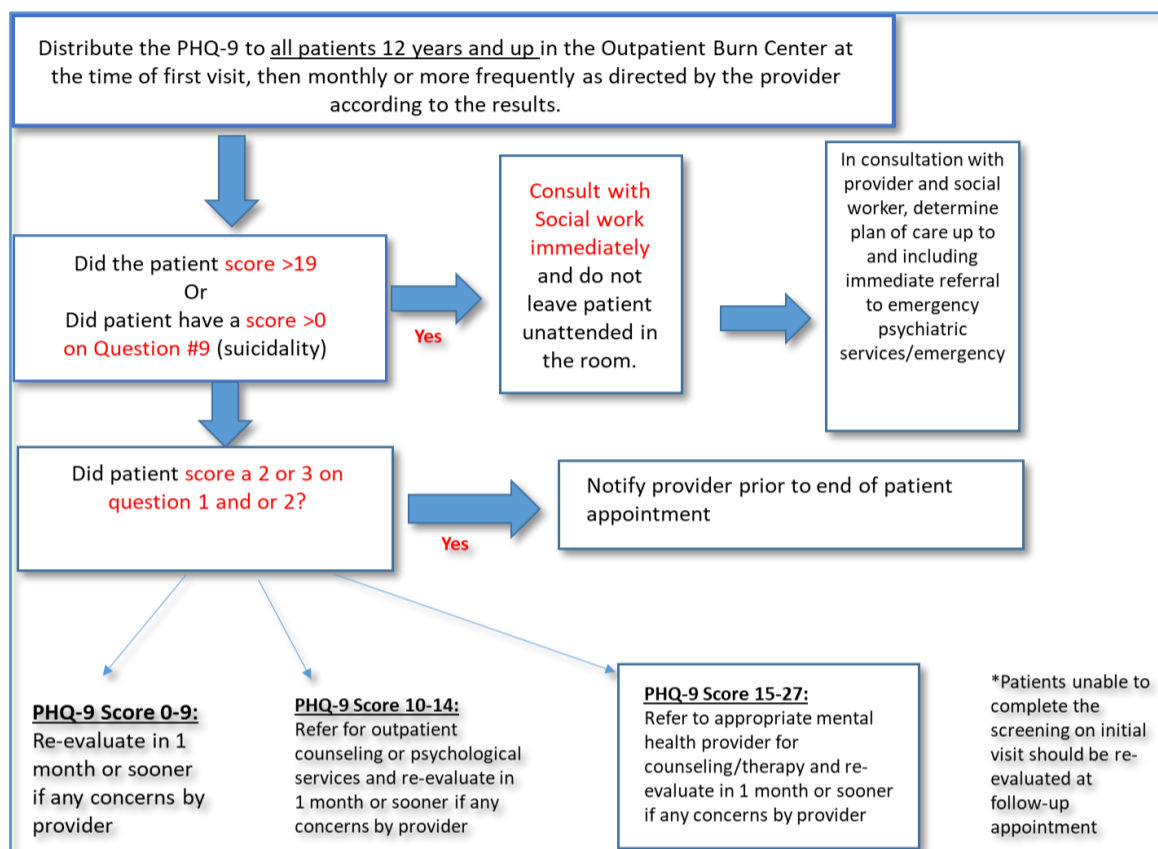


Figure 1. Screening Protocol Flow Chart

## Study Purpose

This project was completed as part of a QI initiative at the burn center to answer questions pertaining to:

1. Have established procedures been consistently implemented?
2. Does the PHQ-9 identify patients with depressive symptoms or suicide risk effectively in this patient population?
3. Does the PHQ-9 identify patients with depressive symptoms or suicide risk that were previously unrecognized?
4. Did clinicians consistently document and complete additional assessment for patients who "screened positive"?
5. Does the severity of patient's injury correlate with elevated scores on this screening measure?
6. What were the referral patterns for patients identified as positive on the screen?

## Methods

- Adult patients treated for burns at the Outpatient Burn Center over a one year period were identified from the electronic medical record (EMR)
- Patients who scored 10 or greater on the PHQ-9 or endorsed the suicide risk question (#9) were included in the retrospective chart review
- Additional information pertaining to demographics, PHQ-9 scores, mental health treatment and diagnosis, and burn injuries was also collected

## Results

There were 748 adults with an initial visit, 61% men and 39% women, ages 19-85. Of those patients, 572 had a PHQ-9 score documented in the EMR, demonstrating a 76% compliance rate with initiating this protocol.

### PHQ-9 Scores

- Of the screened patients, 52 met criteria for inclusion by scoring 10 or greater or endorsing the suicide risk question
- 15.4% endorsed question #9, but scored <10
- 35% had a previous suicide attempt
- Of the identified charts, 80% included discussion/documentation of the PHQ-9 results in the initial visit

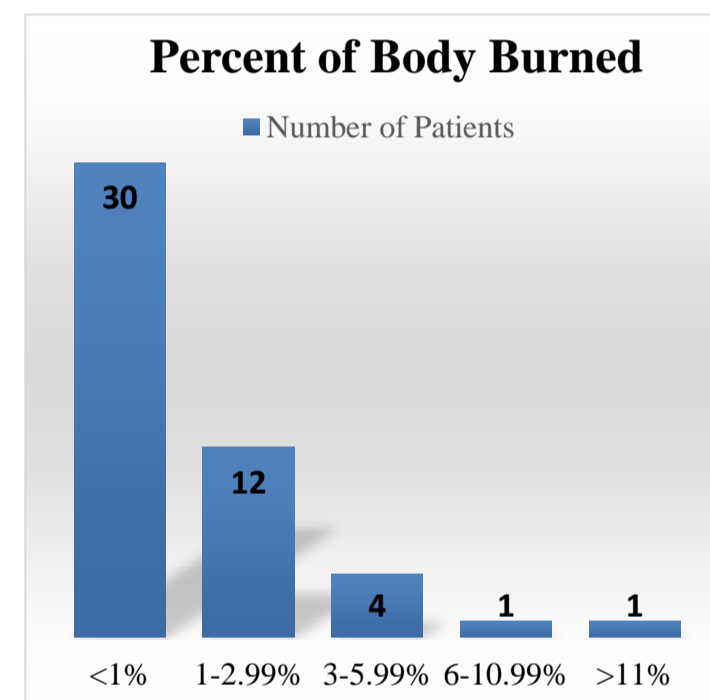


Figure 3. TBSA for identified patients. Four patients had no TBSA documented (n=48).

### Patient Referrals

- 52% of these patients were currently being treated for a mental health condition
- 19 of 52 patients were given a referral for psychiatry/psychology/mental health services
- Of the 25 patients not documented to be in services 9 patients were given a referral and 16 were not

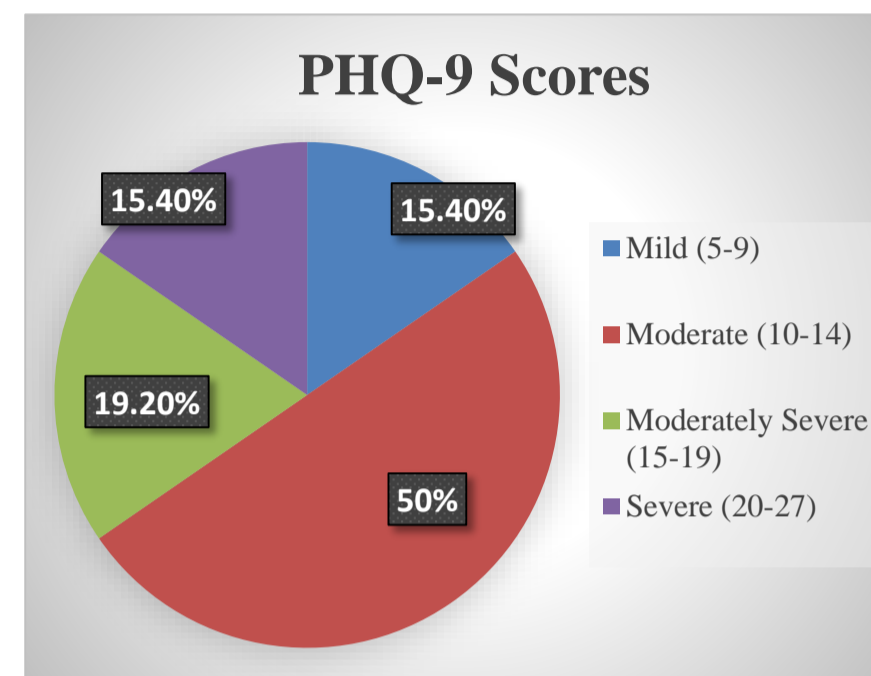


Figure 2. Distribution of PHQ-9 scores.

### Reason for Injury

- 90% of injuries were documented as accidental
- 10% documented as frost bite or other
- None of the burns were documented as being related to intentional self-injury

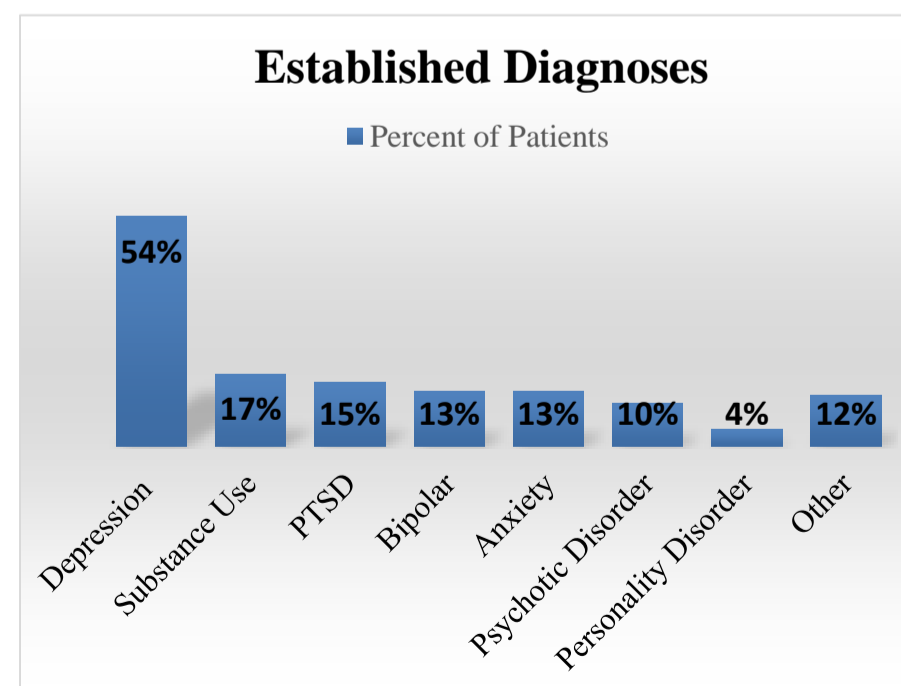


Figure 4. Established diagnoses documented for identified patients. Seventy-three percent had a psychiatric diagnosis documented and 23 patients had 2 or more diagnoses.

## Conclusions and Recommendations

- The results of this project highlight that compliance with administering and documenting the PHQ-9 was good, but could be improved
- PHQ-9 identified patients with and without preexisting mental health diagnoses
  - Referrals for follow-up services for patients not active in mental health treatments was relatively low
- Reviewing question #9 independent of total score is important, partly because several of these patients had a score below the protocol total score cut-off
- This protocol asked about previous suicide attempts, which could help with identifying patients at greater risk
- Screening for other mental health conditions that may hinder treatment compliance and recovery may be beneficial
- Burn severity did not correlate with elevated scores on PHQ-9
- Documentation of screening results was not consistent across providers
  - Standardizing the documentation process for these screenings may be beneficial
- Staff education and compliance are important to maintain this standard
- Screening for depression and suicide risk in adult burn patients is valuable and creates an opportunity to begin conversations about mental health, offer additional support, and make referrals for services

## Limitations

- Archival Data
- Different providers documentation
- Chart review – Evaluator error
- Patient self-report of mental health diagnoses and treatments
- Within group review, no comparison to patients who did not screen positive