100 Use of the PHQ-2 as a Depression Screening Tool to Meet BQUIP Guidelines

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Introduction: In 2015, the Burn Quality Improvement Program (BQUIP) guidelines were established with recommendations for systematic screening of Major Depressive Disorder at all verified burn centers. Our level one trauma center rolled out a program to screen all patients entering the burn service starting in June 2018. After a year of collecting data, we have been able to evaluate the program and make recommendations for other burn centers.

Methods: All patients admitted to the inpatient burn service who were over 12 years of age were screened by bedside nurses using the 2-item Patient Health Questionnaire (PHQ-2). Exclusion for screening included those who were intubated and sedated and/or not alert or oriented. A reminder automatically popped up in the nursing task list in the electronic medical record until it was given, or patient was coded as not appropriate for screening.

Results: A total of 509 patients were admitted to the Burn Service between June 2018 and May 2019. Of those, 40 were identified as not being appropriate for screening due to inability to regain consciousness, and 116 (24%) were not screened for unknown reasons. The remaining patients, 353 (77%) were screened with the PHQ-2 and 94% of these patients were screened on the same day of admit. Of the patients screened, 28 (8%) scored above the clinical cut-off for probable depression (PHQ-2 ³ 3) and 265 (75.1%) did not endorse any symptoms on the PHQ-2. Of the 28 that screened positive, 16 (57.1%) received psychological services. Of those that did not receive psychology services, the majority were admitted for less than 3 days (n=10, 76.9%).

Conclusions: In the first year of the program the vast majority of eligible patients were able to be screened by nursing staff with a 2-item measure. A 77% screening rate is high for a trauma setting. This success is likely due to the automation of the task in the electronic medical record, the ease of use of the PHQ-2 and the dedication of the nursing staff. The 8% rate of a positive screen is higher than the general population (4%) but a similar rate to what is reported in the literature of burn survivors who are 5- and 10-years post burn injury. Given that most patients were screened within 24 hours of admission, we are capturing depressive symptoms that predate the injury. We know that depression can impair burn recovery (e.g., affect participation in therapy, impede wound healing) and lead to poorer long-term outcomes. Systematic screening of depressive symptoms upon admission will allow us to intervene earlier and potentially reduce barriers to optimal recovery. We will be discussing utilization of resources for providing inpatient services to patients with a positive screen.

101 Homeless Status, Distance from Clinic, and Substance Dependence Associated with Low Follow-Up Rates for Burn-Injured Survey Respondents

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Introduction: Over 25% of burn-injured patients at our institution never attended a follow-up appointment. A quality-improvement discharge survey (QIS) identified potential barriers to follow-up as distance from the clinic, transportation, and time off work. This study compares follow-up rates before and after the QIS was administered and correlates them with patients' self-identified barriers.

Methods: Following IRB approval, a retrospective chart review was conducted using electronic medical records of adult burn-center admits who responded to the QIS and were discharged between September 2019 and July 2020. Controls were burn-center admits discharged from 2016–2018, prior to the survey period. Exclusions included patients with non-burn injuries, and those who died in the hospital were transferred to another hospital, did not require follow-up, or followed up elsewhere. Data analysis was conducted using chi-square, t-test, and logistic regression models.

Results: The post-survey group includes 272 patients (mean age 47 ± 16.8, 201 males (73.6%), mean burn size (TBSA) of 9.3% ± 9.6%). The pre-survey control group includes 878 patients (mean age 45.1 ± 16.8 years, 646 males (73.6%), mean burn size (TBSA) 10.16 ± 11.7%). Compared to the pre-survey group, post-survey patients had a lower frequency of missed appointments (MA) (47.3% post vs. 56% pre), but worse overall follow-up rates (63.7% post vs. 74.5% pre). Per multivariate analysis, different factors were associated with follow-up and MA in the two groups (Table 1). Rates of follow-up and MA were not significantly different before and after the onset of the Covid-19 pandemic.

Conclusions: Patients who were surveyed to identify barriers to follow-up had fewer missed appointments but worse overall follow-up rates. Patients fail to follow up due to homelessness, substance dependence, and distance to the hospital. These findings are consistent with patients' self-identified barriers to follow-up in a QI survey.

Table 1. Factors associated with lack of follow-up and MA in pre- and post-survey patients.

Lack of Follow-Up		Missed Appointments	
Pre-survey group	Post-survey group	Pre-survey group	Post-survey group
Homelessness (OR 0.30, p<0.001)	Homelessness (OR 0.38, p<0.002)	Homelessness (OR 0.19, p<0.001)	Homelessness (OR 0.37, p=0.004)
Distance from hospital (OR 1.004, p<0.001)	Distance from hospital (OR 1.003, p=0.048)	Drug Dependence (OR 0.41, p<0.001)	Drug Dependence (OR 0.36, p=0.003)
Drug Dependence (OR 0.47, p=0.002)	Tobacco use (OR 0.46, p=0.007)	ED Visits (OR 0.53, p=0.02)	Larger TBSA (OR 1.03, p=0.003)
Smaller TBSA (OR 0.964, p=0.0001)	Major psychiatric illness (OR 0.52, p=0.028)	Poverty (OR 1.02, p=0.03)	
Tobacco (OR 0.614, p=0.01)			