

Routine Psychosocial Screening and Follow-Up of Adult Burn Patients in an Outpatient Clinic



Alaina G. Tiani, MS¹, Desireé Williford, MS¹, Carrie B. Jackson, MS¹, Kristine Durkin, MS¹
Ariana E. Langholz, PA-C², Gina Hajduk, RN, MSN², Ariel M. Aballay, MD, FACS², Christina L. Duncan, PhD^{1,2}



¹West Virginia University, Morgantown, WV; ²West Penn Hospital Burn Center, Pittsburgh, PA

Significance

- Surviving a burn is associated with an increased risk for psychosocial distress. Estimated prevalence of mental illness in burn survivors 1 to 4 years post injury⁷
 - Depression (10 - 61%)
 - Anxiety (10 – 47%)
 - PTSD (7 – 30%)
 - Substance Abuse (20-24%)
- < 50% of adults with significant mental health/substance use concerns receive mental health care, and mental illness has negative impacts on recovery (SAMHSA, 2016).
- Few studies have examined broad screening for these mental health concerns in an outpatient burn clinic.⁴
- Paucity of research exists on managing positive screener results in this setting.

Objective

- Examine prevalence of psychosocial concerns from implementing a psychosocial screener in an outpatient burn clinic, in addition to referral outcomes at follow-up

Method

- Screener devised based on common concerns in burn survivors: depression, anxiety, PTSD, and substance abuse
- 16 items total – about 5 to 10 minutes to complete
- Incorporates validated components:
 - Primary Care PTSD Screen
 - CAGE questionnaire
 - Patient Health Questionnaire (PHQ-4)
 - Suicidality and Safety at Home
- Administered during intake with all new patients at the burn clinic
- Contact patients with positive screeners in clinic (if unable to reach in clinic, contact via phone)
- Second “follow-up” contact within one month of initial positive screener contact

Method

Participants

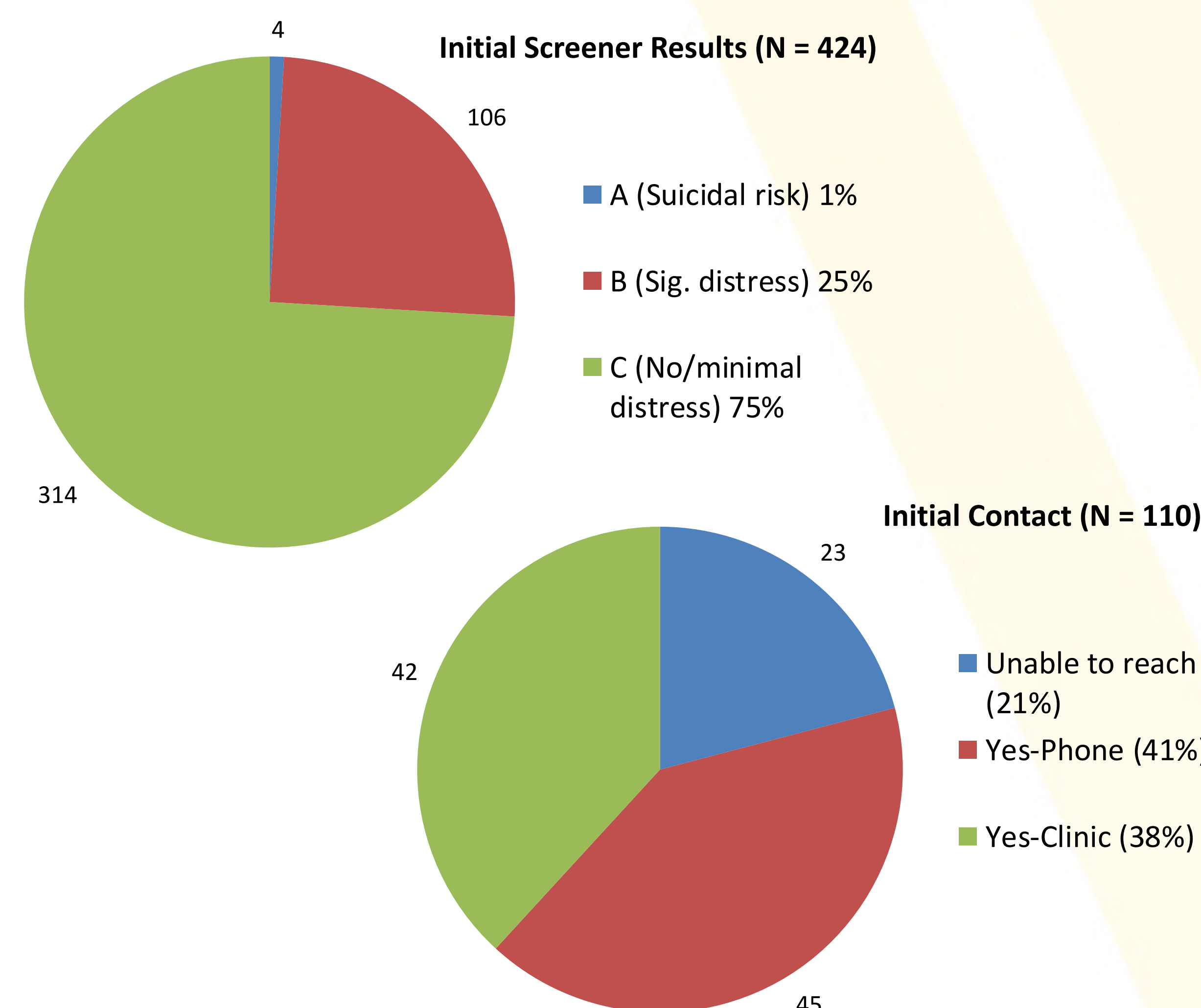
- 424 adults were administered the screener in a northeastern burn center from October 2016 to January 2020
- 1-month follow-up (from original screen) began in February 2019
- N = 27 + screens

Variable	M (SD)/%
Age	41 (16.7)
TBSA	3 (3.7)
Severity	55% 2 nd degree
Gender	59.4% male
Race	84.8% Caucasian

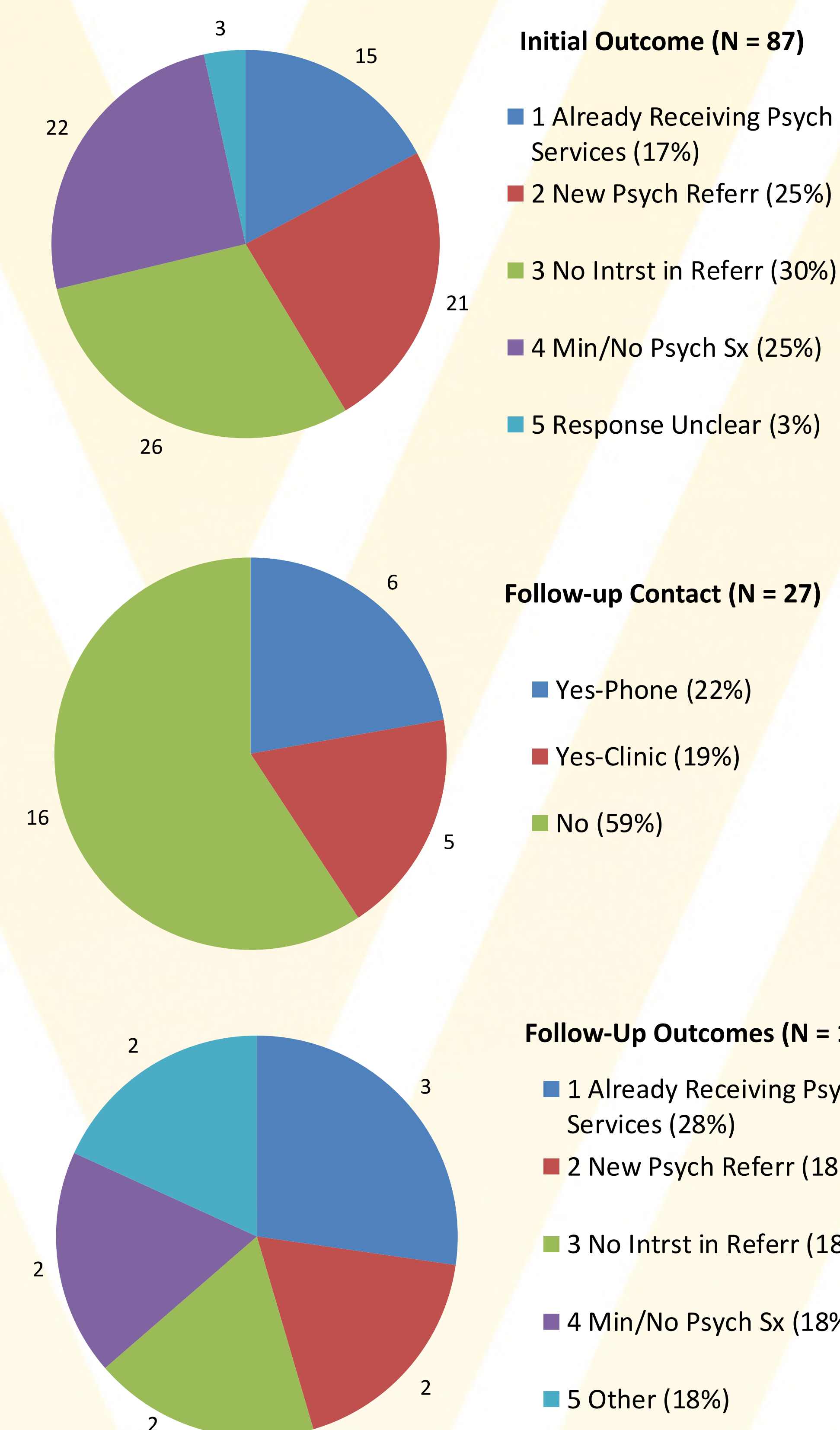
Screener Outcomes

- ❖ Plan A : Suicidal and/or safety risk
- ❖ Plan B: Clinically significant psychosocial distress
- ❖ Plan C: Unremarkable/non-significant results

Results



Results



Lessons Learned

- Screener is a **feasible, brief, low-cost strategy** for detecting and managing psychosocial concerns in a burn clinic setting
 - Wide catchment area – referral process may facilitate access to appropriate psychological services
 - 1-month follow-up allows us to:
 - Discover if referrals were utilized
 - Inquire about changes in symptoms/severity over time
 - Attempt to provide referrals to those previously not interested
- Limitations:**
- Screener is face valid- number of positive screens may be an underestimate
 - Reaching patients outside of the clinic via phone was challenging
 - Psychosocial concerns may fluctuate over time, and it is difficult to follow patients long-term



Contact Information: Alaina G. Tiani, MS, agt0006@mix.wvu.edu

- Albright, J.M., Kovacs, E.J., Gamelli, R. L., & Schermer, C.R. (2009). Implications of formal alcohol screening in burn patients. *Journal of Burn Care and Research*, 30(1), 62 – 69.
- Cameron, R. P., & Gusman, D. (2003). The primary care PTSD screen (PC-PTSD): Development and operating characteristics. *Primary Care Psychiatry*, 9(1), 9-14.
- Hudson, A., Al Youha, S., Samargandi, O.A., & Paletz, J. (2017). Pre-existing psychiatric disorder in the burn patient is associated with worse outcomes. *Burns*, 43, 973 -982.
- Jackson, K.B., & Lauderback, H. (2015). Psychosocial aspects of burn management in a changing mode of care. *Austin Journal of Emergency & Critical Care Medicine*, 2(5), 1-3.
- Löwe, B., Wahl, I., Rose, M., Spitzer, C., Glaesmer, H., Wingenfeld, K., ... & Brähler, E. (2010). A 4-item measure of depression and anxiety: Validation and standardization of the Patient Health Questionnaire-4 (PHQ-4) in the general population. *Journal of Affective Disorders*, 122(1), 86-95.
- Mayfield, D., McLeod, G., & Hall, P. (1974). The CAGE questionnaire: Validation of a new alcoholism screening instrument. *American Journal of Psychiatry*, 131, 1121-1123.
- ter Smitten, M.H., de Graaf, R., Van Loey, N.E. (2011). Prevalence and co-morbidity of psychiatric disorders 1-4 years after burn. *Burns*, 37, 753 – 761.
- Wiechman, S.A., & Patterson, D.R. (2004). Psychosocial aspects of burn injuries. *British Medical Journal*, 329, 391 – 393.