Trauma Psychology: A Stepped Care Approach to Treating the Traumatically Injured
Louisiana State University Health Sciences Center
Jennifer Hughes, Alisha Bowker & Erich Conrad, Erin Morrison

Purpose: New Orleans had the highest homicide rate in the United States of 46.9 deaths per capita from 2010-2015 (FBI, 2015). In 2016, violent crime increased 4.1% nationwide (USDOJ, 2016). Our Level 1 Trauma Center (L1TC) admits over 2,000 patients each year; in 2016, 65% of trauma activations due to violent injury were gunshot victims (N = 525). Traumatically injured patients admitted to our L1TC have complex comorbidities, including PTSD (52%), depression (44%), alcohol use (20%), and potential for violence (48%) or re-victimization (60%) (Conrad et al., 2013). Unfortunately, patients have limited access to outpatient trauma specialists following hospital discharge. The Trauma Recovery Clinic (TRC) opened to fill the much needed treatment gap for this vulnerable population. The TRC is the nation’s only hospital-based behavioral health outpatient clinic specializing in the treatment of psychologic sequelae for trauma surgery patients and their loved ones. Patients receive patient-centered, evidence-based interventions and pharmacological treatments for PTSD and other comorbidities in a cross-disciplinary environment.

Resources: The Trauma Recovery Clinic (TRC) was established using a combination of outside grant funding, strong administrative support from our Level 1 Trauma Center, and a well-developed interdisciplinary treatment team. Grant funding was secured locally from an organization seeking to support programs to treat the unique needs of New Orleans’ under served population. Administrative support allowed our team to obtain clinic space within the hospital’s trauma surgery clinic in order to most effectively serve patients during their surgical follow-up visits. Our interdisciplinary treatment team is comprised of the trauma surgery team, psychiatrists, psychologists, and clinical social workers. Because the TRC is housed in the hospital’s trauma surgery clinic, the team has daily interactions and collaboratively engage in patient care, allowing for patient-centered treatment of both physical and psychological needs.

Description: Upon admission to our Level 1 Trauma Center, the Trauma Psychology team proactively screens trauma patients for PTSD and depression in order to provide brief hospital-based services and resources for follow-up care. Following hospital discharge, trauma patients and their loved ones have access to the Trauma Recovery Clinic to meet their behavioral healthcare needs. The TRC provides evidence-based psychopharmacological interventions and the following patient-centered, evidence-based treatments: 1) Prolonged Exposure Therapy to treat PTSD; 2) Cognitive Behavioral Therapy to address depression; and 3) Motivational Enhancement Therapy to reduce substance use disorders and to enable violently injured patients to take action to reduce the risk of violent re-injury. All interventions are provided by highly trained psychologists, psychiatrists, and clinical social workers. The TRC also provides active evidence-based case management services to help patients access additional providers for their physical and psychosocial needs. Collection of empirically validated measures allows the TRC to develop individualized treatment plans and conduct ongoing evaluations of treatment effectiveness, both at an individual and group level.

Effectiveness: A within-group, repeated measures design is being used to evaluate the effectiveness of TRC services. Following consent to participate in research, participants complete a formal intake interview and assessment using both structured interview techniques and standardized measures to assess patients’ emotional and physical functioning at baseline. Intake results are also used to develop an individualized treatment plan for each patient, which may include pharmacotherapy and/or brief or long-term psychotherapy provided by a licensed clinical psychologist, licensed clinical social worker, or a supervised trainee. Patients are then scheduled for their first behavioral health treatment session. Enrollment occurs either during the patient’s hospitalization or during their outpatient surgery follow-up visit depending on when they begin to develop symptoms of Acute Stress Disorder, Posttraumatic Stress Disorder, or other significant psychiatric disturbances. Follow-up assessments occur at various scheduled time points post-intake, with most occurring either at each follow-up appointment or at 3-month intervals. All assessments are completed in-person, with the final assessment coinciding with participants’ last treatment session. Baseline and follow-up interviews are completed by trained study personnel. Comprehensive chart reviews are also conducted to assess change in symptoms of PTSD, depression, and other comorbid diagnoses as a function of patients’ injuries, medical interventions performed while patients are hospitalized and receiving outpatient medical care, and other psychosocial and medical variables documented in their electronic medical records. Finally, public record searches are conducted to review and analyze publicly available criminal record data. We do not currently have sufficient outcome data to report, however we currently have 24 patients enrolled in our within-group, repeated measures research. Our sample is 50% female, 56% African American, and 44% are victims of gun violence. Standardized assessments of PTSD (PCL-C; Weathers & Ford, 1996) and depression (PHQ-9; Kroenke et al., 2001) are clinically significant at intake. Participants also
Clinical report a clinically significant level of diminished physical/social functioning and severe pain at intake (SF-36; Ware & Sherbourne, 1992).

Lessons Learned: Since establishing the Trauma Recovery Clinic, we have learned important lessons regarding patient access to care, effective referral processes, and the importance of community partners. Regarding access, we have learned that housing our clinic within the trauma surgery follow-up clinic increases rapid engagement in behavioral health services via interdisciplinary collaboration with the trauma surgery team. Our centralized location also eases the burden on patients as they have fewer follow-up appointments, which has resulted in a lower no-show rate compared to national averages (Molfenter, 2013). Collaboration with the trauma surgery team has also improved our referral processes as trauma surgery is able to refer patients to the TRC both from the inpatient floors and during outpatient surgery follow-up visits. Community partnerships have also enhanced our referral rate and allowed the TRC to support the complex physical and psychological needs of our target population. Current challenges include restricted referral guidelines and difficulties with outreach and advertising. Our clinic is only able to provide behavioral health services to trauma patients treated at our Level 1 Trauma Center. Because New Orleans has one of the highest homicide and motor vehicle accident rates in the country, this restricts access to individuals who would benefit from our services but are ineligible. Regarding outreach and advertising, although we have established strong partnerships with other community providers, the vast majority of our referrals are internally generated when patients are admitted following traumatic injury. We are exploring additional means of outreach and advertising, including public education via media outlets and social networks.

Conclusions: Our preliminary analyses confirm the severity of trauma, depressive, and physical symptoms in our sample, thus validating the need for the TRC. By treating patients’ trauma-related behavioral health problems in a hospital-based clinic, we are working to facilitate emotional and physical recovery (Zatzick et al., 2002) and to reduce future traumatic injuries (Cunningham et al., 2015) and violent crimes (Conrad et al., 2016).

Benefits to Others: Patients with traumatic, life altering physical injuries have very few resources that provide evidence-based treatment for comorbid behavioral and physical health symptoms. Moreover, they often get lost to follow up once they leave the hospital due to difficulties with continuity of care. Thus, hospitalization, and especially surgical follow-up visits, following a physical trauma is a unique, and perhaps ideal, opportunity to intervene with this population, especially for high-risk victims of violence. Interdisciplinary Level 1 Trauma Centers are in a unique position to be a provider of behavioral health care to patients returning for follow-up surgical treatment. These services improve continuity of care and enhance community-based behavioral health care for trauma patients, many of whom are under-served. Thus, hospital-based behavioral health clinics fill in the missing piece to providing comprehensive care for highly at-risk populations by providing evidence-based psychotherapeutic and pharmacological interventions. When implemented in an academic teaching hospital, these clinics also serve to develop cutting-edge research endeavors, creating new treatments, and setting the example for trauma centers nationally.

Implementation by Others: By capitalizing on administrative and community support, other trauma centers can work to replicate our treatment approach, bridging care between inpatient and outpatient services. Grant funding is often necessary to start a clinic like the TRC but, as we are currently exploring, reimbursement rates may ultimately cover the operating costs.