tion between 1 and 5 years postinjury (G1Y, n = 39). Parametric and nonparametric analyses revealed nonsignificant between-group differences on measured premorbid demographic variables, treatment intensity, and level of disability on admission. The primary analysis used a mixed factorial design with the between-subject factor being Chronicity Status (L1Y vs. G1Y) and the within-subject factor being Time of Assessment (SRS scores at pretreatment vs. posttreatment). A significant Chronicity Status × Time of Assessment interaction reflected that although both groups significantly improved when comparing pretreatment versus posttreatment scores, the L1Y group’s improvement was more extensive. Further analysis using the Reliability Change Index (Jacobson & Truax, 1991), which considers the reliability of a measure to determine whether the noted individual change is due to something beyond measurement error, revealed that 53% of the L1Y group and 21% of the G1Y group improved to a clinically significant degree. These results overall suggest the SRS, which can be quickly administered and based on observed behavior, is a useful tool when evaluating functional outcome after TBI.

Seale, G. S., Caroselli, J. S., High, W. M. Jr., Becker, C. L., Neese, L. E., & Scheibel, R. S. Program Evaluation Using the Community Integration Questionnaire (CIQ). The Community Integration Questionnaire (CIQ) as an index of handicap level for survivors of traumatic brain injury (TBI) has been investigated from the standpoint of its psychometric characteristics and validity. The measure has a Total Score and three subscale scores, viz., Home Integration, Social Integration, and Productive Activity. To date, it has not been employed as a tool for program evaluation within the context of a postacute rehabilitation facility. For each participating client in this investigation, a CIQ was completed upon initiation of treatment and on average 42 days (SD = 18 days) after discharge. The participants presented for treatment within 5 years of injury, were treated for at least 45 days, and were commonly categorized as sustaining a severe TBI. In addition, they represented more than 80% of the TBI clients who actually participated in rehabilitation during the time of the study and who met the exclusion criteria of the study. The sample consisted of 71 clients, and they were subgrouped as follows: clients who presented for rehabilitation less than 1 year postinjury (L1Y, n = 32) and clients who presented for rehabilitation between 1 and 5 years postinjury (G1Y, n = 39). The subgroups did not significantly differ on recorded demographics, injury characteristics, or treatment intensity. A mixed factorial design, with subgroups (L1Y vs. G1Y) serving as the between-subject factor and Assessment Time (CIQ administration at pretreatment vs. posttreatment) serving as the within-subject factor, revealed a significant main effect for assessment time for the Total Score and each subscale. This result reflected positive changes in scores at the group level when comparing the posttreatment to pretreatment assessments. Significant Subgroups × Assessment Time interactions for the Total Score and the Productive Activity Score reflected greater improvement for the L1Y group compared to the G1Y group. Further analysis looking at clinically meaningful change for the individual was carried out using the Reliability Change Index (RCI) as presented by Jacobson and Truax (1991). The degree of positive change was mixed for the subscales; however, with respect to the Total Score, 66% of the L1Y group showed positive change compared to 44% of the G1Y group.

Stewart, K. J., Hotz, G. A., Petrin, D., Villanueva, P., Nedd, K. J., Duncan, R., & Puentes, G. Neurobehavioral Outcomes of Penetrating and Tangential Gunshot Wounds to the Head. This study’s objective was to compare penetrating and tangential gunshot wounds to the head with regard to demographic, neurobehavioral, and clinical outcome measures. A
retrospective review design was utilized. Subjects consisted of 29 penetrating gunshot wound (P-GSW) to the head and 11 tangential gunshot wound (T-GSW) to the head that were admitted to an acute neurotrauma service. Subjects in the two groups were compared using standardized neurobehavioral and clinical outcome measures. The two groups were similar on age and education. The P-GSW group was more severely injured and the care was more costly when compared to the T-GSW group. The financial classifications of all subjects revealed that 82.5% had no insurance or were funded by government programs. Both groups’ mean scores were found to be below the normative values on all neuropsychological measures and continued to demonstrate residual neurobehavioral deficits. However, when comparing the P-GSW and T-GSW groups, significance were found on two neuropsychological measures, Digit Span and Block Design. Functional outcomes between the two groups were similar except significance was found for acute length of stay and acute hospital charges. GSW to the head is a severe and costly injury to the patient, family, and health system. A patient that survives past the acute phase of care had similar functional outcomes regardless of the nature of the injury. The P-GSW group was found to be significantly more impaired on the two neuropsychological measures assessing, attention/concentration, and concept formation. The P-GSW group was found to have a longer acute-care length of stay and thus higher acute care charges compared to the T-GSW group. Future prospective trials should be conducted utilizing standard classification, neuropsychological, and clinical outcome measures.


This poster presents results of an interim analysis of data generated by the Defense and Veterans Moderate Traumatic Brain Injury Rehabilitation Outcome Study at Walter Reed Army Medical Center. The present study details the performance of 75 active duty service members who underwent comprehensive neuropsychological evaluation within 3 months of having sustained a moderate-severe closed head injury. Following multidisciplinary baseline assessment, they were randomly assigned to one of two treatment conditions: (a) an intensive 8-week inpatient brain injury rehabilitation program, with vocational placement and both individual and group therapies, or, (b) a low intensity 8-week home management program. Of the 41 patients assigned to the inpatient treatment program and 34 patients assigned to the home-based management program, there were no significant differences in neuropsychological functioning or emotional adjustment at baseline. Both groups underwent follow up screening 8 weeks and 6 months following admission, and underwent comprehensive neuropsychological re-evaluation 12 months following baseline testing. There was no significant difference in fitness for duty or return to work 1 year following initial randomization to the two treatment conditions. A significant majority of each group was able to return to active military service, and both groups demonstrated much higher rates of return to work than have been reported elsewhere in the literature on brain injury outcome. Across groups, fitness for duty and return to work were only modestly correlated with some aggregate measures of neuropsychological functioning, and with aspects of higher order memory and attention. In contrast, fitness for duty and return to work were much more closely related to psychological status, in general, and to the presence of affective symptoms, in particular. The present interim data analysis suggests that there was no difference in neuropsychological performance or psychological status at 12-month follow-up between those patients re-