Abstract Title: Integration of Screening and Brief Intervention into a Trauma Program

Authors: Debra Kitchens, RN, CEN, NRP; Aaron Johnson, PhD; Princess Thomas Nelson, MD; Paul Seale, MD

Background & Purpose: Evidence for the efficacy of alcohol screening and brief intervention (SBIRT) as a prevention strategy for reducing at-risk drinking continues to increase. A recent study comparing preventive services found SBIRT to be the third highest in terms of preventable burden. The provision of SBIRT is now required by the ACS COT for Level 1 Trauma Center certification. Previous studies suggest that 46% percent of trauma patients screen positive for at-risk alcohol use and nearly 25% meet criteria for alcohol abuse. The percentage of risky drinkers combined with the potential "teachable moment" created by the event that resulted in a trauma admission creates an ideal setting for the delivery of SBIRT.

Study/Project Design: A performance improvement initiative was developed integrating the SBIRT program into the trauma service care plan.

Setting: The authors implemented a specialist model of SBIRT in the Trauma Service & ED of a large medical center in the S/E U.S.

Sample: Total patients screened over one year was 1664 in the adult population of 18 and older.

Procedures: Meetings between the SBIRT project group, and comprised of trauma administration, trauma manager, and surgery residents, resulted in three phase integration into the trauma service routine. This included: 1) identifying a resident “champion” responsible for SBIRT implementation and follow-up; 2) SBIRT enrollment report delivered monthly at the trauma conference, and 3) incorporation of SBIRT into the standard trauma order set. Outcome measures were number of patients screened, number of patients screening positive, and the number of patients receiving specialist-delivered SBIRT services. Data were grouped into quarters with the first quarter of 2011 representing a baseline measure before the performance improvement plan was initiated. Quarter 2 included the identification of a resident champion, quarter 3 the monthly report at the trauma conference, and quarter 4 the inclusion of SBIRT into the standard order set.

Findings/Results: Analyses were conducted using crosstabs and chi-square tests to identify significant differences between the baseline measures in quarter 1 and subsequent quarters. During the 4 quarters of the project, the number of trauma patients being screened for at-risk alcohol and drug use more than doubled from 190 (52.4%) in quarter 1 to 443 (95.1%) in quarter 4, a statistically significant increase (p<.05). There was also a statistically significant increase (p<.05) in the number of patients screening positive for at-risk use. The number of screen positive patients increased threefold from 68 in quarter 1 to 208 in quarter 4. Finally, the number of patients receiving services from health education specialists also increased threefold from 30 in quarter 1 to 113 in quarter 4.

Discussion/Conclusions/Implications: Efforts to better integrate SBIRT into the trauma service resulted in significant increases in patients screened, patients screening positive, and patients receiving specialist-delivered services. Initial screening is critical as it was the primary result of the increase in the number of patients screened. These results show that relatively small and inexpensive changes in the communication and coordination between the trauma service, staff, and a team of SBIRT specialists can lead to increases in the numbers of patients participating in this important prevention program. The changes implemented could be replicated not only in other trauma programs, but also in other areas of healthcare.