

# BIG Part 2: A Protocol in Process

Doris Cowell, BSN, RN; Mary Henson, MSHA, BSN, RN; Robert McClaren, BSN, RN, CSTR, CAISS; Brittny Roso, BSN, RN



## BACKGROUND

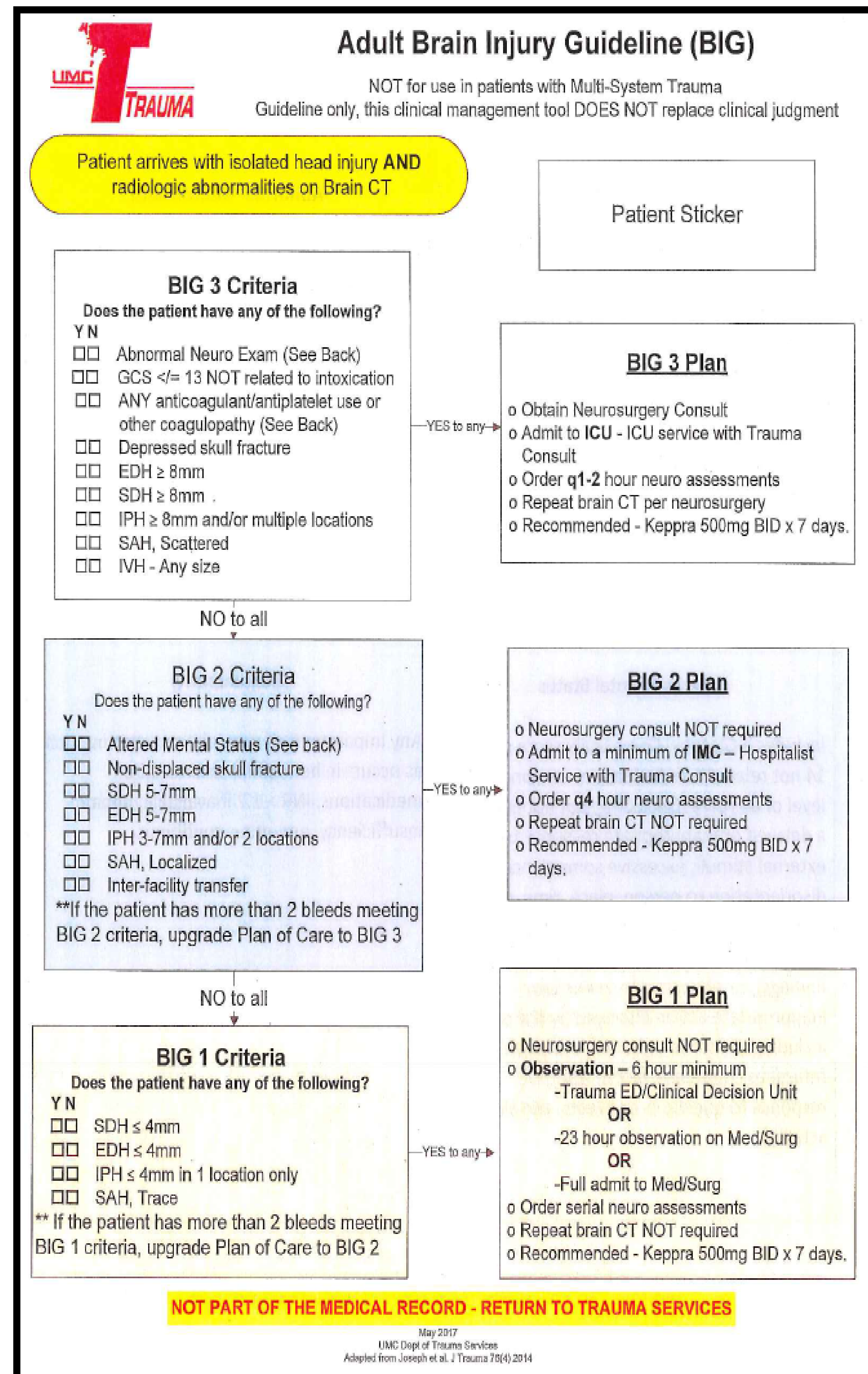
Traumatic Brain Injury (TBI) accounts for \$92 billion in health care costs with 2.9 million emergency department (ED) visits and 224,000 hospital admissions due to TBI (1). Most centers mandate repeat head CTs, neurosurgery consults, and hospital admissions (often to the ICU) for all patients with TBI and ICH. Obviously, with such a large disease burden and extensive evaluation, this had made traumatic brain injury a natural target for improvements in resource utilization. This is why UMC started utilizing the BIG Protocol Guidelines in 2016. We are now ready to take BIG to the next level to see if we can identify when patient's with TBI/ICH are likely to evolve.

## PURPOSE

Retrospectively identify BIG population patients with TBI or ICH that have evolved after admission. This data has been requested by various groups in the past.

## METHODS

Multidisciplinary team approach was used to develop the process for identifying which patients would qualify for inclusion. Now that these patients have been identified, the next step is to identify which data points will be collected for next steps in the process. Examples include time to re-bleed, presence of anti-platelet or anti-coagulants, coags, comorbidities, etc.



## RESULTS

The data tracking element, BIG Evolved, has been added to the NTRACS registry. The data point will be added to the records by Trauma Performance Improvement RNs as the patients are identified.

## CONCLUSIONS

Utilizing BIG has allowed up to decrease length of stay and cost to those falling in the BIG 1 and BIG II range as well as decrease over treating and over consulting for those patients. Throughout the time we have been collecting this data we have had several requests for data on patients with re-bleeds after admission. We now have a mechanism to collect and share that data. It is our hope that, given our large data set, this will give us an opportunity to further the study of traumatic brain injury.

## REFERENCES

- (1)Centers for Disease Control and Prevention (2021). Surveillance Report of Traumatic Brain Injury-related Hospitalizations and Deaths by Age Groups, Sex, and MOI – United States, 2016 and 2017. Joseph, B., Friese, R., Sadoun, M., Aziz, H., Kulvatunyou, N., Pandit, V., Wynne, J., Tang, A., O’Keeffe, T.,(2014) The BIG (brain injury guidelines)project: Defining the management of traumatic brain injury by acute care surgeons. Western Trauma Association retrieved from [westerntrauma.org/algorithms/algorithms.html](http://westerntrauma.org/algorithms/algorithms.html).

