External Ventricular Drain (EVD) Safety Campaign
Perioperative Quality and Safety Metrics

A) Preoperative assessment of patients with EVDs
   Documentation of EVD-specific clinical information
   Numerator: Percentage of patients with documentation of EVD setting, average CSF output, and an average ICP value
   Denominator: All patients with indwelling EVDs who undergo preoperative assessment
   Data source: Pre-anesthesia assessment notes

B) Intrahospital transport
   ICP monitoring during intrahospital transport
   Numerator: Percentage of patients with ICP monitoring during intrahospital transport
   Denominator: All patients with indwelling EVDs who undergo intrahospital transport
   Data source: Anesthesia records, electronic medical records

C) Intraoperative care of EVD
   Intraoperative documentation of intracranial res
     1. Intraoperative EVD output (q 15 min- q 1 hr.)
     2. Intraoperative ICP values (q 15 min- q 1 hr.)
     3. Documentation of adverse events
        a. Disconnection of EVD system
        b. Inadvertent injection in the EVD collecting system
        c. Intracranial pressure elevation during intrahospital transport
   Numerator:
     1. Number of patients with intraoperative EVD output documentation
     2. Number of patients with intraoperative ICP documentation
   Denominator: Number of patients with indwelling EVDs who have an anesthetic encounter
   Data source: Electronic medical records, Anesthesia records

D) EVD-associated infection
   Numerator: Cerebrospinal fluid (CSF) infection related to an EVD. Definition: positive CSF culture
   Denominator: External ventricular drain days
   Data source: Infection control / ICU QI

E) EVD-associated hemorrhagic complication
   Numerator: Intracerebral hemorrhage associated with placement of EVDs.
   Denominator: All patients with EVDs placed at your institution
   Data source: Post-EVD-placement computerized tomography of the head.

Abbreviations:
ICP: Intracranial pressure, CSF: cerebrospinal fluid