**Supplemental Data**

**Study Definitions**

1. Neurological insults: Initial or primary subject diagnosis in the ICU is one of the following:

a. Traumatic brain injury: Traumatic injury to the brain by history, with signs and symptoms consistent with brain injury. (Centers for Disease Control).

b. Stroke: Sudden focal neurological al deficit of presumed vascular origin lasting ≥ 24 hours (or fatal within 24 hours). (NINDS Stroke Common Data Element Project Stroke Types and Subtypes Subgroup: Recommendations).

c. Brain Mass: Typically diagnosed to be a tumor or arteriovenous malformation. A primary brain tumor is a group (mass) of abnormal cells that start in the brain (U.S. National Library of Medicine). Vascular malformations of the brain are abnormal arrangements of blood vessels (Brain and Spine Foundation).

d. Hydrocephalus: Buildup of fluid inside the skull, leading to brain swelling. (U.S. National Library of Medicine).

e. Cardiac arrest: Cessation of cardiac mechanical activity as confirmed by the absence of signs of circulation. Includes the following rhythms: pulseless electrical activity, asystole, ventricular tachycardia, and ventricular fibrillation (Utstein).

f. Status epilepticus: A seizure lasting more than 5 minutes. This includes convulsive and non-convulsive status epilepticus, whether continuous for ≥ 5 minutes or discontinuous (intermittent seizures without return to baseline)(Lowenstein DL, et al. Epilepsia, 40(1):120-122, 1999).

g. Central nervous system infection and inflammation: Infection requires clinical or laboratory evidence of infection causing meningitis or encephalitis. (Infectious Disease Society of America). Inflammation is due to various non-infectious causes including vasculitis, encephalitis, certain demyelinating diseases, etc.

h. Spinal cord injury: Damage to the spinal cord resulting from direct injury to the cord itself or indirectly from damage to surrounding bones, tissues, or blood vessels. (American Spinal Injury Association).

2. Specialized pediatric transport team: Interfacility and scene transport via pediatric-trained team. Composition of caregivers may vary but usually includes critical care nurse and respiratory therapist with or without a physician.

3. Unfavorable outcome was death or greater than a 1 category change on the pre-insult pediatric cerebral performance category score.