

Evaluating Predictors and Outcomes in Patients with Neurovascular Disorders

Rationale and specific aims

Cerebrovascular disorders have devastatingly high rate of death and disability, and as such appropriate treatment of these conditions is critical. However, studies regarding care efficiency and cost effectiveness of such interventions are currently lacking. The goal of this study is to investigate patient outcomes after various interventions for neurovascular disorders, as well as the cost effectiveness of various diagnostic and treatment modalities for these conditions. As post-operative LOS is a major contributor of the cost of treatment, we also strive to determine the predictors of extended LOS in patients who undergo intervention. The results of this study can inform clinical decision-making and facilitate patient counseling, with the ultimate goal of providing high value care.

Specific aim 1: Understand the utility of various imaging procedures (CT angiogram, angiogram, MRI, etc.) in the diagnosis, treatment, and follow-up of neurovascular disorders.

Specific aim 2: Examine the costs and resource utilization of various diagnostic and treatment protocols for neurovascular disorders.

Specific aim 3: Evaluate patient, treatment, and hospital factors that influence the prognosis and outcomes of neurovascular disorders.

Specific aim 4: Determine the patient and hospital factors that predict extended post-operative length of stay.