**Data Analysis Plan – Multiple Drug Intolerance Syndrome and Chronic Pain**

**Hypothesis**: Individuals with Multiple Drug Intolerance Syndrome (MDIS) have higher rates of chronic pain post spinal surgery.

**Exposure:**

Multiple Drug Intolerance Syndrome (MDIS)

**Outcomes:**

**Primary:** Chronic Pain

**Possible Covariates:**

Gender (male, female), Ethnicity (Hispanic, Non-Hispanic), Race(Black, White, Other), Financial Class

**Inclusion Criteria:**

18-89 years old spinal surgery patients

**Exclusion Criteria:**

**Data and Variables:**

**Spinal Patients:** Patients with any of the following procedures:

ANTERIOR CERVICAL SPINE SURGERY

LUMBAR LAMINECTOMY

POSTERIOR LUMBAR SPINE SURGERY

INCISION AND DRAINAGE SPINE POSTERIOR LUMBAR \ THORACIC

SPINAL MICRO DISCECTOMY

POSTERIOR THORACIC SPINE SURGERY

ANTERIOR / POSTERIOR CERVICAL SPINE SURGERY

ANTERIOR / POSTERIOR LUMBAR SURGERY

ANTERIOR LUMBAR SPINE SURGERY

POSTERIOR SPINAL FUSION

POSTERIOR CERVICAL SPINE SURGERY

ANTERIOR / POSTERIOR THORACIC SPINE SURGERY

INCISION AND DRAINAGE SPINE POSTERIOR CERVICAL

SPINAL FUSION \ DECOMPRESSION ANTERIOR CERVICAL (ACDF)

RESECTION SPINAL CORD TUMOR LUMBAR AND THORACIC

POSTERIOR SOFT TISSUE THORACIC / LUMBAR SPINE SURGERY

SPINAL FUSION POSTERIOR LUMBAR \ THORACIC

POSTERIOR CERVICAL LAMINECTOMY

SPINAL FUSION PEDICLE SUBTRACTION OSTEOTOMY

SPINAL FUSION ANTERIOR LUMBAR \ THORACIC

SPINAL FUSION ANTERIOR POSTERIOR CERVICAL

REMOVAL HARDWARE SPINE POSTERIOR THORACIC/LUMBAR SPINAL

SPINAL FUSION POSTERIOR CERVICAL

SPINAL DECOMPRESSION

INTRASPINEOUS DECOMPRESSION (X-STOP)

SPINAL FUSION ANTERIOR POSTERIOR LUMBAR

SPINAL FUSION/DECOMPRESSION COFLEX

REMOVAL HARDWARE SPINE POSTERIOR CERVICAL SPINAL

ENDOSCOPY ASSITED SPINAL FUSION

SPINAL LAMINECTOMY \ DISCECTOMY TETHERED CORD RELEASE

SPINAL DISC REPLACEMENT ARTIFICIAL CERVICAL

**MDIS:** Patient Allergy info will be sourced from the allergy table. Drug allergies will have to be manually classified.

**Chronic Pain:** 338.2 and 338.4 (ICD-9) and G38.2 and G38.4 (ICD-10) diagnostic codes will be used. They may be from the billing diagnosis, encounter diagnosis, or problems list.

**Analysis:**