**Supplemental Table 1. Identification of Exclusion Criteria by** **International Classification of Diseases – 9th Edition** **– Clinical Modification Codes and Receipt of Medications**

|  |  |  |
| --- | --- | --- |
| **Comorbidity** | **ICD-9-CM Codes** | **Medications** |
| Sickle Cell Anemia | 282.60, 282.61, 282.62, 282.63, 282.64, 282.68, 282.69, 282.41, 282.42 | N/A |
| Seizure Disorders | 345.00, 345.01, 345.10, 345.11, 345.40, 345.41, 345.50, 345.51, 345.60, 345.61, 345.70, 345.71, 345.80, 345.81, 345.90, 345.91, 649.40, 649.41, 649.42, 649.43, 649.44, 780.33 | Carbamazepine |
| Pentobarbital |
| Phenobarbital |
| Phenytoin |
| Fosphenytoin |
| Valproic acid/divalproex sodium |
| Topiramate |
| Lacosamide |
| Levetiracetam |
| Oxcarbazepine |
| Ethosuximide |
| Perampanel |
| Zonisamide |
| Clobazam |
| Lamotrigine |
|  |

**Supplemental Table 2. Conversion of opioid medications to oral morphine equivalents and benzodiazepine medications to oral lorazepam equivalents**

|  |  |  |
| --- | --- | --- |
| **Medication** | **Route** | **Dose equivalents** |
| Morphine | PO | 15 mg oral morphine |
| Morphine | IV | 5 mg |
| Hydromorphone | PO | 3 mg |
| Hydromorphone | IV | 1.2 mg |
| Oxycodone | PO | 8 mg |
| Fentanyl | IV | 60 mcg |
| Codeine | PO | 110 mg |
| Hydrocodone | PO | 15 mg |
| Meperidine | PO | 150 mg |
| Meperidine | IV | 37.5 mg |
| Opium | PO | 15 mg |
| Tramadol | PO | 150 mg |
| Methadone | PO | 4 mg |
| Methadone | IV | 1.5 mg |
| Benzodiazepine | PO | 1 mg oral lorazepam |
| Alprazolam | PO | 0.5 mg (0.25 mg-1 mg) |
| Chlordiazepoxide | PO | 25 mg (6 mg–25 mg) |
| Clonazepam | PO | 1 mg (0.25 mg-2 mg) |
| Diazepam | PO | 5 mg (2 mg–10 mg) |
| Midazolam | PO | 5 mg (2.5 mg-5 mg) |
| Midazolam | IV | 2 mg (1 mg-2 mg) |
| Temazepam | PO | 10 mg (2.5 mg-20 mg) |
| Triazolam | PO | 0.25 mg (0 mg-0.5 mg) |

PO, per orum (enteral); IV (intravenous)