**Appendix A: Opioid-related ICD-10 codes**

| **ICD-10-CM Code** | **Description** |
| --- | --- |
| F11.1 | Opioid use disorder, mild |
| F11.10 | Opioid use disorder, mild |
| F11.12 | Opioid use disorder, mild with intoxication |
| F11.14 | Opioid use disorder, mild with opioid-induced mood disorder |
| F11.15 | Opioid use disorder, mild with opioid-induced psychotic disorder |
| F11.18 | Opioid use disorder, mild with other opioid-induced disorder |
| F11.19 | Opioid use disorder, mild with unspecified opioid-induced disorder |
| F11.2 | Opioid use disorder, moderate or severe |
| F11.22 | Opioid use disorder, moderate or severe with intoxication |
| F11.23 | Opioid use disorder, moderate or severe with withdrawal |
| F11.24 | Opioid use disorder, moderate or severe with opioid-induced mood disorder |
| F11.25 | Opioid use disorder, moderate or severe with opioid-induced psychotic disorder |
| F11.28 | Opioid-dependence with other opioid-induced disorder |
| F11.29 | Opioid use disorder, moderate or severe with unspecified opioid-induced disorder |
| F11.9 | Opioid use, unspecified |
| F11.90 | Opioid use, uncomplicated |
| F11.92 | Opioid use, unspecified with intoxication |
| F11.93 | Opioid use, unspecified with withdrawal |
| F11.94 | Opioid use, unspecified with opioid-induced mood disorder |
| F11.95 | Opioid use, unspecified with opioid-induced psychotic disorder |
| F11.98 | Opioid use, unspecified with other specified opioid-induced disorder |
| F11.99 | Opioid use, unspecified with unspecified opioid-induced disorder |
| T40.0 | Poisoning by, adverse effect of and underdosing of opium |
| T40.1 | Poisoning by and adverse effect of heroin |
| T40.2 | Poisoning by, adverse effect of and underdosing of other opioids |
| T40.3 | Poisoning by, adverse effect of and underdosing of methadone |
| T40.4 | Poisoning by, adverse effect of and underdosing of other synthetic narcotics |
| T40.6 | Poisoning by, adverse effect of and underdosing of other and unspecified narcotics |

**Visit Classifications:**

**Overdose:** Defined by any discharge dx code = “T40.xxx”

**Withdrawal**: Defined by any discharge dx code = “F11.23x, F11.93x”

**Other**: Defined as any other patients in the cohort