

Documentation of code to convert opioid prescriptions to morphine milligram equivalents (MME).

Three important tables are needed to compute MME from opioid prescriptions. We will detail this in the following lines:

1. **Medication:** this table contains all the prescriptions from the EHR system It's usually named "stride_medication". Note that this table contains all type of medications including opioid prescriptions. Below details of its columns:

Medication

Columns	Description
medication_id	ID of medications
start_time	Start time of prescription
end_time	End time of prescription
number_of_times	It is always a number or empty values. It represents the number of hours between each dose. For instance: <ul style="list-style-type: none">- number_of_times = 6, if prescription mentions "... take by mouth every 6 hours as needed...".- number_of_times = null, if prescription mentions "... take by mouth every bedtime...".
freq_name	A bit different than "number_of_times". It represents the number of hours between each dose as string . For instance: <ul style="list-style-type: none">- freq_name = "every 6 hours prn", if prescription mentions "... take by mouth every 6 hours as needed...".- freq_name = "bedtime", if prescription mentions "... take by mouth every 6 hours as needed...".
sig	A string of instructions that go on the prescription label
hv_discrete_dose	Discrete dose of medication extracted from "sig".
hv_dose_unit	Type of medication unit, most common "mL".
ordering_mode	Type of patient in the hospital, such as "outpatient" or "inpatient"

2. **Medication Definition:** this table contains the list of medications used in the EHR system (old and current medications). It's usually named "stride_medication_def". Below details of its columns:

Medication Definition

Columns	Description
medication_id	ID of medications
str	Name of medication
strength	Strength of medication. For instance,

	- For "Acetaminophen-Codeine" its strength can be = 120-12 mg/5 mL .
route	Administration route which is often classified by the location at which the opioid is applied, such as oral or intravenous.
form	Form of the medication (needed as information not for conversion).
thera_class	Classes and subclasses of the medication that will guide us to choose only "Opioids" and "Analgesics". It can be edited by the user in the sql code.
pharm_class	
pharm_subclass	

3. **Morphine Equivalent:** this table will be CREATED by the user. It will be called "ome_stride_medication_morph_eq_fnl". It's not needed to edit its table name and columns' names. This will contain opioid medications and their associated values of conversion in order to compute the final MME. Below details of its columns:

Columns	Description
medication_id	ID of medications
strength_per_unit	Strength of medication. For instance, For "Acetaminophen-Codeine" its strength can be = 120-12 mg/5 mL .
mme_conversion_factor	Conversion factor provided by the CDC.
ome_factor	International conversion factor (needed as information whether users want to compare it with conversion factor provided by the CDC). There are conversion factor different to CDC conversion factors.
route	- Administration route which is often classified by the location at which the opioid is applied, such as oral or intravenous.
uom	Type of medication unit, most common "mL".