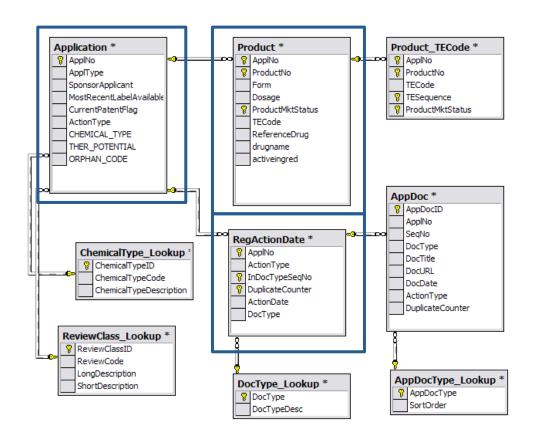
# Changing Trend of Active Ingredients in Pain Relievers

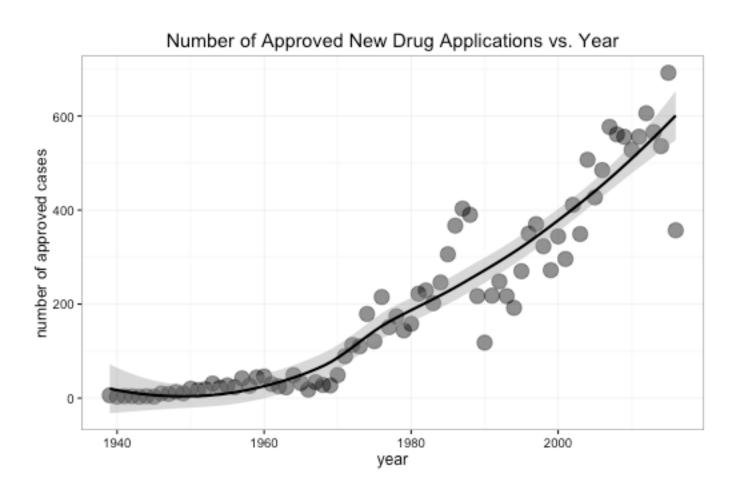
Anne Chen July 18, 2016

#### **Dataset Introduction**

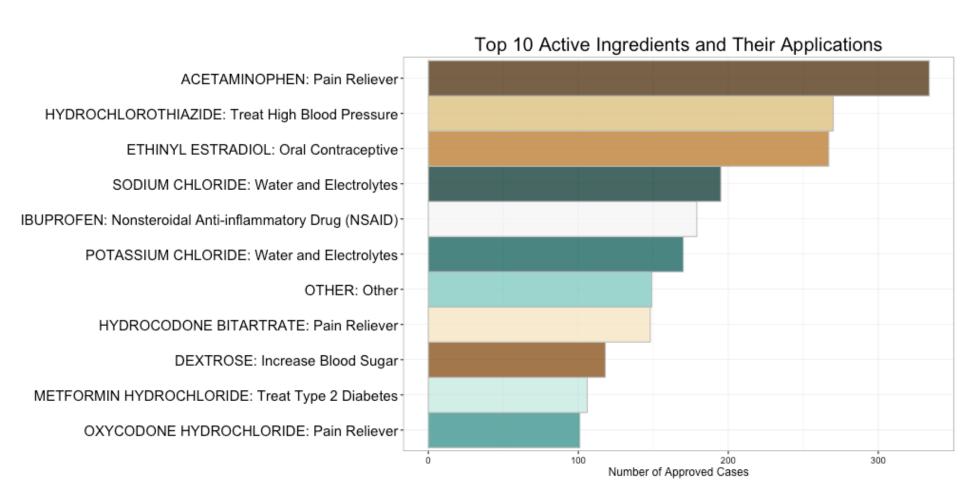
- Source: Drug Database from U.S. Food and Drug Administration (FDA)
- Entity Relationship Diagram:



## Number of Approved New Drug Applications Has Increase Over Past Decades

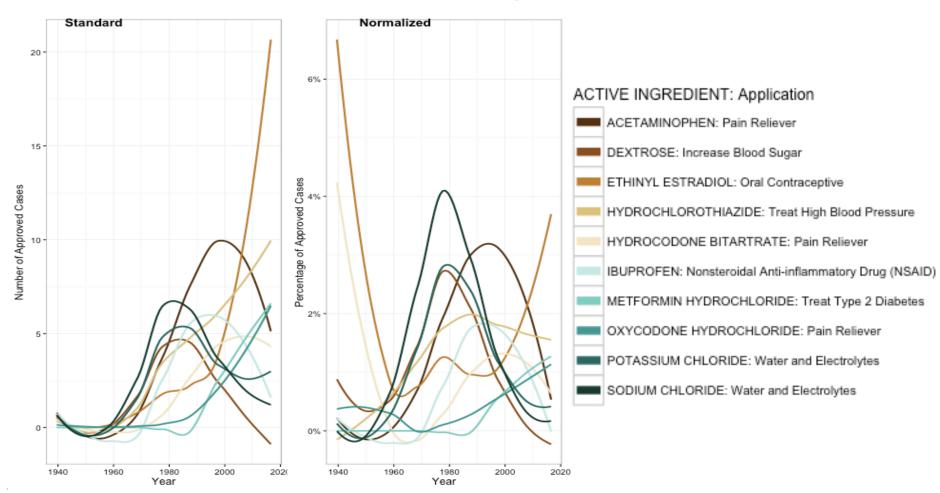


### Top 10 Active Ingredients in Approved Cases From 1939 to 2016

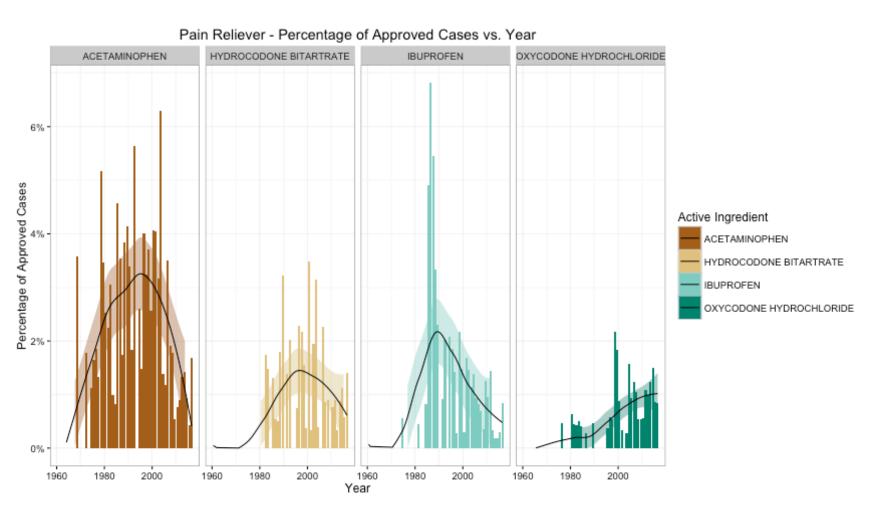


## How Top 10 Active Ingredients Change Over Years

Approved Cases for Top 10 Active Ingredients vs. Year



## Changing Trend of Active Ingredients in Pain Relievers



#### Q & A