Emerging Analytics Project Charter Draft

Risk of Opioid Dependence – AMEX Pilot

# Initiative Summary Agreement

Initiative Name: Risk of Opioid Dependence – AMEX Pilot

Advanced Analytics Lead: Prateek Agrawal, Yuchen Li

Date: 8/15/2018

Key Stakeholders (market/person/titles): Mark Goodhart (Government), Terrence Shea (Strategic Partnership Executive)

Market Background (The Why)

In the late 1990s, pharmaceutical companies reassured the medical community that patients would not become addicted to opioid pain relievers and healthcare providers began to prescribe them at greater rates. Increased prescription of opioid medications led to widespread misuse of both prescription and non-prescription opioids before it became clear that these medications could indeed be highly addictive. In 2017, U.S. Department of Health & Human Services (HHS) declared a public health emergency and announced a ‘5-Point Strategy to Combat the Opioid Crisis’, among which HHS listed ‘strengthening our understanding of the epidemic through better public health surveillance’ as the 3rd strategy.

The Government Health and Human Services (GHHS), in collaboration with Emerging Analytics, has developed a first-iteration of the model that identifies risk factors and individuals at high risk of opioid dependence using MarketScan Medicaid data. AMEX is supporting the work on a pilot project that utilizes the model developed for Medicaid data on its commercial data.

Initiative Overview (The What)

* A predictive model that identifies risk factors and individuals at high risk of opioid dependence.

Estimated Timeline (The When)

* Deliver the predictive model, user manual, and the technical write-up to AMEX team (?) by 11/1/2018.

# Team (The Who)

* Lead: Mark Goodhart, Terrence Shea
* Client Manager: Greg Baltzer
* Data Scientist: Prateek Agrawal, Yuchen Li

# Approach (The How)

* Known data sources/needs: admission, claims, eligibility and episode data of AMEX
* Available customer partners or targets? N/A
* Analytic techniques to be explored:
  + The objective is to predict whether a patient will be Opioid Dependent or not within a prediction year (calendar year) based on the data of that patient for the previous year (measurement year, also set to be a calendar year).
* Can continue to flush this out and update through the Analysis phase.

# Known Dependencies

* The accuracy of the predictive model is heavily determined by the fill rate of AMEX commercial claims data.

# Out of Scope

* The model will be developed using Python. It will not be a production level model.
* It will not be a progression-based model.
* Future potential enhancements? N/A

# Agreement Date

* Names and dates of agreement by key stakeholders agree