Research Commercialization

**MigraineMedPick**

*Technology #2019-140*

Migraine and tension-type headache (TTH) are among the most common medical complaints and causes of disability, chronically afflicting up to 5% of the population. There are a wide variety of abortive and preventive medications for migraine treatment. These medications contain a variety of contra-indications depending on a patient's medical profile – current medical problems, blood pressure, heart rate, etc. Some of these contra-indications have significant and potentially dangerous health implications. For patients with multiple medical problems, choosing potential migraine medications can be a challenge.

Software currently integrated into EMR systems tend to focus on drug-drug interactions, examining prescriptions entered by the physician for potentially dangerous interactions with other drugs as indicated in the patient’s record. This approach is not useful to the physician for clinical decision making, as it would be overwhelmingly time consuming to enter in all commercially available migraine medications to the prescription portal to discover which medications are safe for the patient.

**Description:**

A physician practicing in the Neurology Department at Rutgers Robert Wood Johnson Hospital developed the MigraineMedPick software to assist practitioners by generating a list of drugs that are safe or not safe to use based on user input of medical history and vitals.

**Benefits:**

The MigraineMedPick program incorporates a comprehensive list of commercially available medications and contra-indications, so the clinician can:

- Consider all commercially available migraine medications in determining patient treatment.
- Enhance patient safety by receiving guidance on potentially negative interactions based on the patient’s medical profile.

With further clinical validation, MigraineMedPick may allow for safer prescription practices in clinical headache medicine.

Users should note that the software does not currently include a drug/drug interaction component, which will be forthcoming in future development.

**Target Users:**

- Primary Care Physicians
- Neurologists
- Headache Physicians
· Medical Educators
· Electronic Medical Records Providers
· Commercial Health Insurers

**Inventors**

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Dr. Pengfei Zhang is a practicing physician in the Rutgers Health Robert Wood Johnson Hospital Department of Neurology. He is Board-certified in Neurology and Headache Medicine. He is a graduate of Georgetown University School of Medicine, and completed his residency at Mount Sinai Hospital in New York.