**Pharmacophenotyping: The Design and Implementation of a Generic Medications Filter for iCONCUR**

Informed Consent for Clinical Data and Biosample Use in Research (iCONCUR) is a web-based,tiered, informed consent tool that aims to elicit patient preferences for clinical data sharing. iCONCUR takes into account what data is going to be shared and who is going to be the recipient of shared data. Designing a medications filter to honor patients’ preferences in terms of sharing their current and past pharmacotherapy is a technological challenge. To overcome it, we present the concept of pharmacophenotyping. We define pharmacophenotyping as the past or current pharmacotherapy or pharmacoprevention associated with a medical condition. By exploiting Epic Clarity medication database, information such as pharmacological classification, dosage, and formulation can be used to predict the intended medical indication for prescribing. The advantages of this approach are the low rate of false negatives and ease of implementation. The main disadvantage is the potential for false positives which varies depending on the medication and the disease state of interest. Further research is warranted to improve the design of and the implementation of this approach.