

## **C3OD User Interface – A Simple and Intuitive Solution to Feasibility Analysis for Clinical Trials**

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### **1. Background**

With a variety of recruiting and feasibility challenges, organizations and researchers have been either developing or have implemented several solutions to support feasibility analysis for clinical trials, and one of the conventional techniques involves retrieving information from the electronic health record and other sources to provide aggregate numbers for how many subjects could be expected that match a specific set of inclusion/exclusion criteria for a proposed trial. However, many of these solutions are not intuitive and require a fair amount of training to maximize tools utility. Given the busy schedules of most researchers involved in clinical trials, this can present an obstacle to the adoption of these tools, which can lead to inaccurate assessments of trial feasibility and trial failure. Furthermore, many of these tools are expensive, adding to the budget of clinical trials. Therefore, there is a need for a simple, intuitive tool for trial feasibility analysis that is provided open-source, so that cancer centers can adopt it without unreasonable additions to clinical trial costs and so that they can modify it to meet the needs of their institution.

### **2. Goals**

We are using a validated survey instrument for measuring the impact of a new software tool to assess the effect it is having on researchers involved in planning clinical trials at our institution.

### **3. Solutions and Methods**

We have implemented a simple, intuitive user interface to our data warehouse, which we call the Curated Cancer Clinical Outcomes database. The user interface is implemented in Angular, making the software widely available through a web browser over an institution's intranet. A middleware layer disconnects the user interface from the data warehouse, making it easier to connect the software to different data warehouse implementations. The software will soon be made available as an open-source tool to all institutions that would like to investigate its utility.

### **4. Outcomes**

Preliminary data show that the user interface to C3OD is having a positive impact on clinical trial design and assessment at KU Cancer Center.

### **5. Lessons Learned**

Soon, we will be requiring all studies going through the Protocol, Review, and Monitoring Committee (PRMC) to demonstrate that they used C3OD to determine the feasibility of a trial.