Creation of a Budget Workload Score for Analysis

B. Search, H. Hampton, K. Kaufman, E. Lascu, B. Zakrzewski

Memorial Sloan Kettering Cancer Center

1. Background

Memorial Sloan Kettering Cancer Center's (MSKCC) Clinical Research Finance, Budget Analysis unit is responsible for centralized budget development for new, amended, and feasibility studies. An in-house developed clinical research application, the Budget and Contracts Management System (BCMS), tracks action and status dates of the budget development process. Complexity for these budgets can range based on factors including budget type, protocol type, protocol category, number of treatment arms, company budget, and amendment categories. These variables are tracked across different clinical research applications. Budget work should be distributed to budget analysts evenly based on the complexity of that budget and that analysts' work capacity.

2. Goals

To develop a budget workload score (BWS) to be associated to each budget. This BWS will allow managers to distribute work accordingly, and to develop detailed reporting to continuously monitor budget work completion and pending work items.

3. Solutions and Methods

The Clinical Research Finance team reviewed and identified variables that would be included in the budget workload formula to calculate the BWS. The developed BWS score has a scale of 0 to 10.

Letter of intents (LOIs) are assigned a score of 3.5.

Five variables are used to calculate the BWS for new protocol budgets: protocol type, internal budget status, protocol category, company budget status, and number of treatment arms. These variables were sourced within clinical research applications. All other variables are sourced from BCMS. The complexity of the elements within each variable are assigned a score ranging from 0.0 - 1.0, multiplied together, and then multiplied by 10 to calculate the BWS.

Within BCMS, amendments can have one or many categories. These categories range from treatment arms being added (score = 10) to addition of central labs (score = 1). For amendments with multiple categories, the highest score category is declared as the BWS.

Tableau is utilized to blend our data across applications with different database types. Multiple visualizations have been created from the Tableau data source, allowing managers to identify workloads across sponsoring departments, budget analysts, and budget managers.

4. Outcomes

The below Tableau visualization shows one example of data reporting capabilities. We went live with the first reports from the BWS on 3/11/2022. Budget managers have since used this dataset to reassess workload for their staff, and to assign new budget development projects. At the click of a button, budget managers can identify members of the team that have or do not have bandwidth and reassign work accordingly. Managers are also able to view work completed vs. work in progress, in addition to total work for a given period. BWS may be utilized to create benchmarks for progress during onboarding of

new budget analysts.

5. Lessons Learned and Future Directions

We will continue to refine the BWS with input from the Clinical Research Finance team and their staff's assessment of the BWS matching to the observed complexity of the budgets they are developing. The count of studies in a budget analyst's queue is not representative of workload due to the complexity of individual studies. The BWS allows mangers to take both the number of budgets and workload score into account when assigning work.

Figure

