Category: Training, Career Development, and Staff Retention – Complete Project

Automated Quantification of a Research Data Coordinator's Workload for Staff Retention and Staffing Planning

D. Goodridge, M. Ott, C. Machado, I. Krupitsky, E. Royster, M. Ugrenovic-Petrovic, J. Lebsack

Moffitt Cancer Center

1. Background

Moffitt Cancer Center's Research Data Coordinators (RDCs) are responsible for data entry into electronic data capture (EDC) systems. We have successfully designed a clinical research coordinator (CRC) workload capacity tool that describes CRC workload. Leaders remained challenged for RDC capacity though and noted the next step was to design a similar tool for the RDCs. Quantifying an RDC's workload, however, can be challenging due to many factors including trial complexity, EDC system variations, and staff experience. Doing this in an automated way without manual manipulation of the data has not yet been accomplished.

2. Goals

We sought to develop a workload capacity tool that helps leaders identify how many patients and/or studies individual RDCs can successfully manage while also ensuring programs have adequate staffing to support clinical trials.

3. Solutions and Methods

I. A sample of RDCs kept an electronic diary, cataloging and documenting what activities they performed and how long each activity took for four weeks. RDCs with varying levels of experience volunteered to participate in this project.

II. A biostatistical formula for predicting workload was developed, utilizing a study's Clinical Research Effort Study Tool (CREST)[1] score and the diary entries. This allowed for knowing when a study's CREST score is X, how much time would be needed for data entry or query resolution on average for RDCs.

III. Using Power Business Intelligence (BI) report builder and with data from Oncore (CTMS), a report was developed to measure and stratify workload by RDC.

4. Outcomes

Seventy-five percent of RDC time was spent on data entry or query resolution (DEQR). There was also a moderate correlation between the study's CREST score and time needed for DEQR.

A limitation of the original findings was the number of RDCs involved in the diary collection. This information needed to be expanded to a larger number of RDCs and studies. Subsequently, work instructions were developed that mirrored the diaries, instead now being captured by Oncore's Effort Tracking interface.

The use of Effort Tracking to adjust the Power BI output was validated against manual diary collection again for a subset of RDCs. Staff were also queried about their feelings about workload, as compared to the data produced by Power BI, whether it was too high, low, etc.

Consequently, leaders can now assess RDC workload on a weekly basis with a dashboard.

5. Learned and Future Directions

Effort Tracking through OnCore's system had been piloted at Moffitt in the past but was not adopted or well received, leading to its abandonment. Reintroducing it required early adopters on the RDC team, enforcement and support from CTO leadership, and buy-in from the RDCs. Bi-monthly check-ins by the working group helped identify any programs not completing effort tracking.

Managers are encouraged to review workload capacity at least bi-weekly with staff to help prevent burnout. The tool has been utilized to lead one on one discussions between management and staff about workload and determining new trial assignments. Moffitt will also begin incorporating the results of the RDC Capacity Tool into position justification requests and resource pool allocations.

Citations

1- Turner, Rebecca. "Workload Scoring Using OnCore" Onsemble Conference Presentation, February 22, 2016.