Incorporating the Complexity of Screening into Protocol Acuity: Updates to the SCCC Staff Scoring Model

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Background

The SCCC clinical research operations (CRO) has been using a home-grown staffing model using protocol acuity to calculate coordinator and data effort on clinical trials for several years. Last year, analyses run based on our legacy staffing models and study budgets reflected that the complexity of trials over time had not changed substantially within the previous five years and did not appear to correlate with an increase in study budgets over the same period. Given the team's sense that complexity of trials had increased over the same time period, we hypothesized that the primary source of greater complexity was due to increased intensity of screening activities. Because our current staffing model used only a static score to evaluate screening activities of coordinators, the overall study acuities did not change to reflect this nuance. We recognized that further evaluation was needed to more accurately capture the impact of screening on the efforts of study personnel.

Methods

A working group of managers and coordinators formed in the fall of 2020 to review the current staffing model database and transition the static screening score to one which is study-specific.

- A list of typical screening procedures was compiled and the stages of prescreening and screening through enrollment were outlined.
- Scores for each procedure were determined in order to accurately measure screening activity.
- The calculation for points per hour of work were revised to apply to tasks that were time-based.
- Some of the changes made impacted procedures outlined in the active study portion of the staffing model as well.
- Current studies were applied to the new system for validation.

Results

- After evaluating the entire screening process, we determined that there were four primary phases:
 - o Prescreening
- Informed consent
- Conduct of screening visits following informed consent
- Evaluation of eligibility & enrollment
- When six current studies were entered into the new staffing model, the screening score went from a static 10 points to an average 22.2 points per patient enrolled (range 17.4 - 26.7 points).
- The working group determined that the model more accurately reflected the maximum load for pre-screening through enrollment for one individual.
- The proposed revisions to the staffing model database were presented to the CRO managers.

Discussion / Conclusion

Delving into and breaking down possible screening/pre-study procedures allows us to more accurately account for staff time and effort. We received final feedback from CRO managers in order to apply changes to the existing database and reevaluate existing studies. We are in the process of entering current studies into a trial database. We will then run similar analyses as our original project to determine whether our budgets are correlative with study complexity.

