

Developing a Scoring Tool to Calculate Protocol Acuity for Clinical Research Nurse Workload

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1. Background

Nurse managers in our Clinical Trials Office experienced a discrepancy among nurses and their perceived workload. Management requested a tool to assist with human resource management that could apply empirical objective values to face-to-face patient interactions and allow for fair and equitable case assignments. A literature search did not yield a tool that addressed nursing duties specifically. This project began in early 2022 and was implemented in Spring 2023.

2. Goals

The quality improvement model used throughout our project was FADE: Focus, Analyze, Develop, Execute, and Evaluate. We are currently in the Execute and Evaluate phases. Our goals continue to be:

1. To improve existing processes used by managers to assign studies to nursing staff
2. To quantify overall staffing needs, by evaluating nursing activities involved per protocol
3. To assign a tangible score based on objective criteria to minimize subjectivity in nurse staffing
4. To improve staff retention and employee satisfaction by defining optimal workload per nurse
5. To allow managers an opportunity to work with individual staff on prioritization and organizational skills as identified

3. Solutions and Methods

Criteria were developed for each aspect of the nursing interactions that occur in each phase of the clinical trial, such as screening, treatment, and follow-up. Values were assigned to each nursing task required and averaged for a score for each arm of the study. The plan was to incorporate the protocol acuity score into our Clinical Trials Management System (CTMS) and provide reports that assess current nurse workload. Once all studies were scored and available in our CTMS, managers were provided access and were able to assess current staff workloads and levelized as needed. Managers then were able to discuss with individual staff nurses to compare actual work performed to the workload measurement tool, determining the tool's reliability and validity.

4. Outcomes

Managers were able to assess current workloads, reassign protocols as needed, and identify the acceptable workload score per nurse. This information proved helpful in projecting staffing needs for studies in the start-up pipeline. This tool has already been used by managers to adjust staffing shortages.

5. Lessons Learned and Future Directions

There is a need for a research nurse specific workload tool. Future development includes scoring studies in the start-up process and anticipate the impact on current staffing, providing objectivity in determining feasibility of existing pipeline. This conference provides opportunity for collaboration with other institutions to further develop and improve this tool.