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Care Team Dynamics during Family Centered Rounds

Background:

Please note that sections of this background have been omitted to protect the study design and goals from being susceptible to the Hawthorne effect.

Family-Centered Rounds (FCR) have become standard of practice in many children's hospitals. Mittal et al (2014) commented on the advantages and disadvantages posed to patient care and resident education as a result of this development, as noted in previously done studies. Other studies have looked at optimizing family-centered care and communication between the medical team and family members (Subramony et.al 2013), and outlining teaching techniques to maximize resident learning on rounds (Beck et.al, 2015).

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This project would aim to observe and document successes and challenges during family centered rounds.

To our knowledge the communication dynamics we hope to better characterize have yet to be studied in pediatric family centered rounds.

Study Design and Statistical Procedures:

Please note that the specifics of data being collected is not listed in this document to protect study goals and objectives.

This project is a prospective observational study of Family-Centered Rounds as performed in the inpatient general pediatrics floors at Morgan Stanley Children's Hospital of New York. Pediatrics rounds are conducted daily in the morning. A member of the study team (one of two investigators) will observe rounds discretely, and record data using a uniform, standardized data collection tool. Data collected will include certain features of the members participating in rounds as well as certain outcomes of communication during rounds.

Independent variables (physician factors, P) will be categorical, while dependent variables (rounding variables, X) will be scored as continuous.

Statistical analyses will be done via pairwise t-tests, comparing the average of each X1 across the different possible P1 values (ex: P1 = A, P1= B, P1= C). This will be repeated for X1 with each P1, P2, P3 etc. as well as for each X2, X3, etc across each P.

Multiple regression analysis will be used to analyze whether the combination of the independent variables (physician factors = P) together have an effect on the dependent

variable (rounding variables = X). This will also be done for each rounding variable, X1, X2, X3 etc.

It is estimated that approximately 50 rounding events will be observed. A power analysis for the outcome using an unpaired t-test, using $p < 0.05$ and power of 80% to determine the effect size was done. Based on our approximated/expected number of rounding events, assuming equal groups of 25 and a standard deviation of 1 for a given P, the smallest possible effect size we can observe with statistical significance is 0.81 in our outcomes.

Study Procedures:

No procedures will be performed for this study.

Study Subjects:

Study subjects include attending and resident physicians in the Pediatrics Department at Columbia University Medical Center/NYPH.

Recruitment of Subjects:

Participants (providers) will receive a brief email describing the purpose of our study, as well as an information sheet prior to the start of data collection. There is no specific recruitment of subjects.

Confidentiality of Study Data:

No protected health information will be recorded for the physicians. No personal health information of patients will be linked to the observations.

Hard copies of the data collection tool will be stored in the PI's office in a locked drawer. These will be transcribed into a password-protected electronic database and the hard copies will be destroyed at the end of the study period. This electronic database will be stored on a secured CUMC domain.

Potential Benefits:

There is no direct benefit to individual participants, though medical providers may benefit from better understanding communication dynamics during family centered rounds.

Potential Risks:

The potential risk of this study is loss of data. Precautions against this will be taken by storage of hard copies of data in a secured locked place, and electronic storage on a secure domain.

References:

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6. Stanski N and Patel A. **Improving Trainee Education During Family Centered Rounds: A Resident's Perspective;** Pediatrics 2015; DOI: 10.1542/peds.2015-3679
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