Text4Peds: Short Message Service Evaluating Medical Student Education

Data Analysis

Initial IRB Document Approval Date: 12/8/15

Text4Peds Data Analysis:

-Data Analysis:

-The difference in the mean pediatric NBME scores will be analyzed between the two groups, likely using t-tests, assuming the results are normally distributed.

-Power analysis was performed after a literature review on the effect of texting on declarative knowledge. Effect sizes ranged from $d = 0.50$ to $d = 2.67$. The power analysis was performed based on the smallest effect of $d = 0.50$. This produced a sample size of 51 per group (total of 102 students). Our hope is to enroll, at least 150 out of 180 subjects.

-We will also obtain a conscientiousness scale on each subject at onset of the study to help control for the conscientiousness of the subjects. This is a 20 item scale containing items such as (I am always prepared, I follow a schedule, I waste time, I neglect my duties) and has an Alpha of 0.88.

-Smallest group for separate reporting:

-Mean test results (with standard deviation) of groups of 10-15 students which is the control/intervention group size or each block of medical students.
-De-identified comments from individuals may also be listed

Qualitative results including post-texting protocol survey will be assessed for student preferences, feedback and predominant themes.