**Brief Project Description: Operating Room Overages: An Observational Study**

Medical supplies that are unused and in perfect conditions are often discarded in the operating room. This practice generates a substantial amount of medical supply surplus and contributes to the increasing healthcare cost. At UCSF Health, a significant amount of unopened medical supplies is donated to Medshare or disposed into landfills. 14,691 lbs of medical supplies were donated to Medshare for FY2019 alone, and these donations were estimated at $440,730 in retail values by Medshare. The staggering pounds of overage generated is indicative of inefficient practices, which result in huge financial losses and ecological footprint.

There is generally a lack of quantitative knowledge in the amount of overage generated per surgical cases. One UCSF neurology resident took the initiative to quantify the financial loss from discarded supplies. An observational study carried out in 2017 estimated approximately $968 worth of unused supplies were generated for each neurosurgery case, which extrapolated to $2.9 million per year for the neurosurgical department alone.

We are seeking for a resident/medical student to study the following specialty area: anesthesia, arthroplasty, neurosurgery, urology, and general surgery, to perform a similar observational study to itemize and quantify the financial values of the wasted supplies after each surgical case. The data collected will be used to inform and educate the surgical team for behavioral changes.

The project aims to reduce overages by identifying frequently discarded items through observation, to encourage behavioral changes among surgeons through education, and eventually to adjust the PAR level inventory to reduce supply purchases. The reduction in overages and supply purchases should also be showed to reduce in carbon emissions during it’s lifecycle in some way, consistent with the intent of the CNI funding. $4000 stipend for project completion.

**Skills needed for the project:**
Data analysis, research, strong communication skills

**Skills desirable for the project:**
Knowledge of medical supplies used in the following specialty, including arthroplasty, neurosurgery, urology, and general surgery

**Time frame for completion/number of hours:**
Ten months Sept 2020 – June 2021

**Description of specific on-site work necessary:**
Perform data collections on overages after each surgical case for a minimum of 30 cases; perform data analysis and extrapolation on collected data to identify trends and projections.

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Description of specific optional off-site work:
Meet with relevant staff for background and desired deliverable; present research results at staff meetings for education purpose; write up study for publication

Expected deliverables/value of the end product:
Weekly meetings initially with the Seema Gandhi, MD, sponsor and individual/team. Two mid-course check-ins. Write up a scope of work for a fellow on the project. Final project poster, UCOP CNI deliverables, a 250-word article for our website, and a potential publication on the observational study