**PRACTICUM SUMMARY REPORT**

**Name:** Brian Blaugrund

**Team Members:** Khalid Almoosa, MD

**Project Title:** Early Functional Mobility Therapy of Critically Ill Patients

**University/Organization Name:** University of Texas Medical School at Houston

**Health System Sponsor Name:** Memorial Hermann Hospital

**Aim of project (1-2 sentences)**
The goal was to increase physical and occupational therapy activities, otherwise known as functional mobility therapy, in the Transplant Surgery Intensive Care Unit (TSICU) by mobilizing at least 90% of eligible patients before the end of March 2013.

**Planned changes tested (2-3 sentences)**
The first change was a survey administered during August 2012. The second change was an educational display initiated at the beginning of March 2013, which was accompanied by two weekly teaching sessions and an end-of-the-month reward luncheon.

**Predictions (2-3 sentences)**
The survey was predicted to identify mobility champions. The educational display, teaching sessions, and lunch incentive were predicted to increase mobilization and consultations, while simultaneously decreasing sedation ineligibility. It was also predicted that ventilator and ICU duration would improve.

**Results**
Present your results with a graph(s).

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**PERCENT MOBILIZATION**

- **DAY NUMBER**
- **MOBILITY THERAPY PER OPPORTUNITY**
- **ATTENDING PHYSICIAN SWITCHED**
- **MOBILITY EDUCATION STARTED**
- **MEDIAN**
- **MEAN**
Summary of results (3-4 sentences):
Percent mobilization first decreased when attending physicians switched, but then increased after the educational intervention began. Both percent capacity and length of stay shifted downward. Sedation ineligibility dropped after the educational intervention, albeit following a slight delay. Percent consults and ventilator duration stayed about the same.

Learning (4-5 sentences)
Comparison of questions, predictions, and analysis of data:
Baseline data indicated that attending physicians have a significant role in percent mobilization, likely related to their nursing oversight and use of sedating medications. Percent capacity was initially overlooked, but appears to have been either a driver of increased percent mobilization or a product of decreased length of stay. The drop in percent sedation is also likely related to both increased mobilization and decreased length of stay, but its delay relative to the educational intervention is unaccountable, but possibly related to the impact of the first follow-up teaching session. Percent consults remained at previous levels likely because increased nursing diligence precluded the need for an outside therapist. Persistent average ventilator duration may have been convoluted by high initial variation that became more precise with rising mobility.

Impact on systems (3-4 sentences)
Discuss the project’s significance on the local system and any findings that may be generalizable to other systems:
The mobility culture in the TSICU has become more vigilant and widespread amongst staff, not to mention patients are spending less time in the TSICU—signifying higher quality care. The stage has been set for the unit to develop, implement, and enforce an early mobility protocol. The significance of this project is that mobility education was effective at overcoming the tradition-based practice of bed rest. Other systems may benefit from both identification and cultivation of mobility champions, followed by education and incentives to help broadcast their perspectives and behaviors.
Conclusions (3-5 sentences)
Summarize the outcome of the project. Is this project sustainable? What are the requirements for sustainability?

More TSICU patients are being mobilized early now that frontline stakeholders know when and how. The mobilization gains due to education have been an important step toward implementing more sustainable changes, like protocols or investments in staff and equipment, but the education alone has so far only affected people in the system, rather than the system itself. For improvement to be truly sustained, the system should be redesigned to overcome people, who alone are fallible and temporary. It will be important for future improvement projects to quickly capitalize on this temporary culture elevation and affect the system before the culture shift digresses.

Reflections/Discussions (5-7 sentences)
Discuss the factors that promoted the success of the project and that were barriers to success. What did you learn from doing this project? What are your reflections on the role of the team?

A fundamental part of the success in this project was having a mentor that was fully integrated as both a unit administrator in the sponsoring system and a direct observer of data collection, because it expedited the use of unit resources, communication with unit staff, and execution of unit interventions. The results could have been more informative if less data per time were collected without a five-month gap, and instead collected over a longer continuous period. Streamlined data collection could have been achieved if multiple student collaborators would have been involved. Teamwork could have helped alleviate the burden of complex data collection in the intensive care setting. To that end, this project also needed simplification by reducing the amount of data collected. A key lesson was that simplicity forces high-yield change while upholding brevity—producing greater rapid improvement.

By signing this document (electronic signature is acceptable), I attest that the information provided by the learners in this project is accurate.

LEARNER(S):

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FACULTY SPONSOR:

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HEALTH SYSTEM SPONSOR (if different from faculty sponsor):

Signature:  
Printed Name:  
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AUTHORIZATION
Do the learners, faculty sponsor, and health system sponsor authorize this project for publication at www.ihi.org?

✓ Yes  □ No