

# Productivity Standards in Level I Trauma Centers: Transitioning from Minutes to Units

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# OVERVIEW OF CAPSTONE SITE

**Overview of Capstone Site:** The University of Mississippi Medical Center is a state-owned, not-for-profit inpatient hospital located in Jackson, MS. UMMC offers the state's only Level I trauma center. UMMC also serves as the state's only medical school and offers degrees in multiple health related professions. The acute care rehab department covers nearly 500 adults beds in services lines such as neuro, transplants, five ICUs, and many other areas.

**Purpose:** The purpose of this project was to conduct surveys on similar Level I trauma and academic healthcare centers acute rehab departments to benchmark current practices regarding productivity standards, standards of care, and staff expectations. Data was then summarized and disseminated to identify any opportunities for improvement in UMMC's acute care rehab department.

## LITERATURE SUMMARY

There are many demands and expectations in the acute care setting. Gorman et al. (2010) states that a therapist must show proficiency in reading medical charts, identifying contraindications, and communicating with other healthcare professionals. Previous studies have examined the effects these demands place on an acute care staff. High demands may influence a healthcare professionals ethical decision making due to organizational demands. One study found that almost a third of respondents who encountered ethical dilemmas worked in acute hospitals (Barnitt, 1998). Tammany et al. (2019) conducted a study to examine if productivity standards leads to unethical behavior. In this study, a majority of participants reported observing some form of unethical behavior, and that there was a positive correlation between expected productivity standards and the rate of unethical behaviors observed. When these and other demands become too great, patient safety and outcomes can be affected. One theory that can help guide a staff in high demands environments is the scientific theory. This theory is aimed at making the workplace more efficient. An administrator using this theory analyzes work tasks to determine the most efficient way their employees can perform the task, both safely and effectively, to match employee's abilities and motivation to tasks.

## NEEDS ASSESSMENT

A phase I needs assessment was conducted via phone interview in the summer of 2020 between the Capstone mentors and Capstone student. Open ended questions pertaining to department goals, staff expectations, and department needs were asked so that the respondents could provide as much information and feedback as possible. From that phone interview, it was determined that more research needed to be conducted on standards of care, productivity standards, and staff expectations in Level I trauma and academic healthcare centers, and a survey would be designed and conducted on current Level I trauma and academic healthcare centers. The results would then be compared to UMMC's acute rehab department to examine possible opportunities for growth.

## PROJECT GOALS / OBJECTIVES

Goal 1: The OTD Capstone student will develop a survey encompassing productivity standards, standards of care and staff expectations for similar Level I trauma centers by the end of November 2020.

Objective 1: Complete research on productivity standards, standards of care, and staff expectations of Level I trauma centers by the end of July 2020.

Objective 2: Collaborate with the Capstone advisor and Capstone mentor on survey design and layout and complete survey design/layout by the end of September 2020.

Goal 2: The OTD Capstone student will disseminate survey findings to stakeholders by the end of week 4 of the Capstone experience.

Objective 1: Summarize findings from phone interview surveys to determine similarities and differences through coding of transcripts by the end of week 3 of the Capstone experience.

Objective 2: Organize face-to-face meetings with stakeholders to disseminate key findings by the end of week 3 of the Capstone experience.

Goal 3: The OTD Capstone student will develop a quality improvement program for the UMMC acute rehab department based on the findings from the survey by the end of week 8 of the Capstone experience.

Objective 1: Collaborate with stakeholders to determine what areas the department needs to improve in by the end of weeks 6 of the Capstone experience.

# PROJECT DEVELOPMENT and/or IMPLEMENTATION

In the Summer of 2020, a thorough literature review on Level trauma centers was conducted. From that review, it was noted that there was little research on Level I trauma centers acute rehab. A phase I needs assessment was then conducted and it was determined that a survey pertaining to standards of care, staff expectations, and productivity standards would be designed and administered on similar Level I trauma and academic healthcare centers. This survey was designed in the Fall of 2020 with data gathering taking place in the Spring of 2021. Survey results were then compiled and discussed with stakeholders. A program to help transition from minutes-based therapy to units-based therapy was then initiated to help UMMC align with similar Level I trauma centers and for CPT coding. A productivity spreadsheet was edited to help track productivity amongst each therapist at the site. An executive summary was also written to to provide a condensed summary of the survey results to benchmark current practices of other Level I trauma and academic healthcare centers.

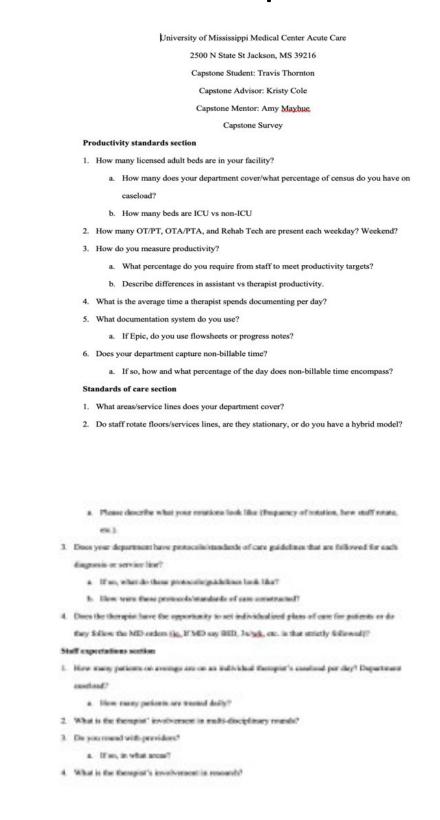
Summer/Fall 2020

Needs Assessment conducted
 Level I trauma and academic healthcare centers identified
 Survey designed

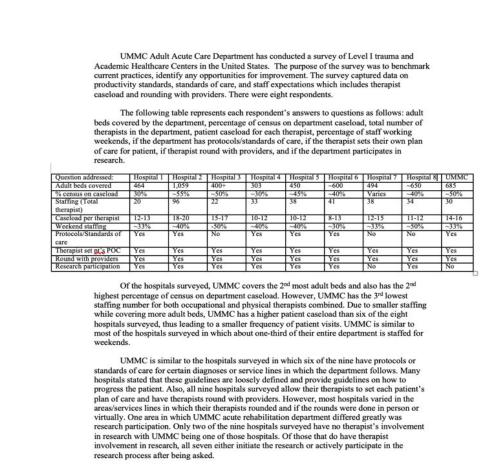
Spring 2021

Survey data gatheredProductivity spreadsheet editedExecutive summary written

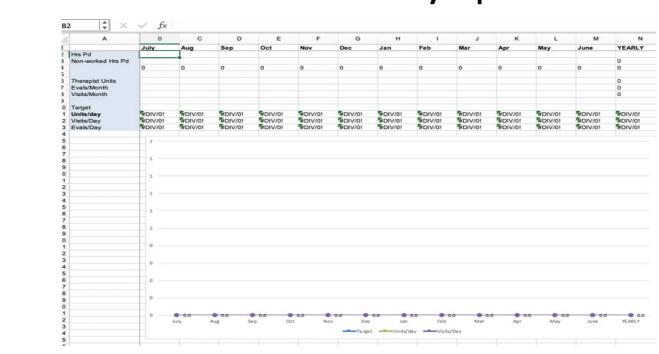
#### Picture 1: Capstone Survey



#### Picture 2: Executive Summary



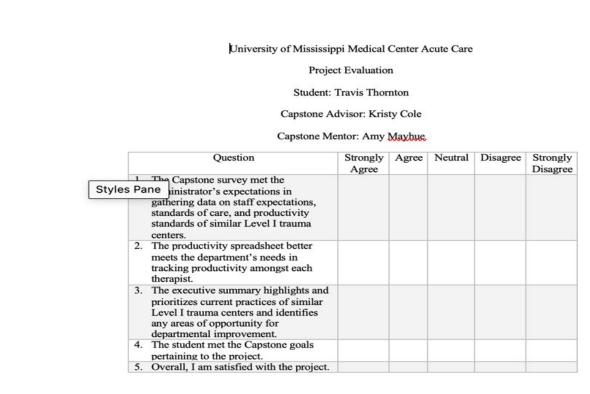
Picture 3: Productivity spreadsheet



# PLAN FOR PROJECT EVALUATION

To measure outcomes from the quality improvement project, a satisfaction survey was utilized. This satisfaction survey was completed by one of the acute care rehab administrators. It contained five, Likert scale questions and helped to determine whether the quality improvement program was beneficial to the rehab department at UMMC.

Picture 4: Satisfaction Survey



## PROJECT SUMMARY AND FUTURE RECOMMENDATIONS

The Capstone project aimed at transitioning the UMMC acute rehab department from minutes-based therapy to units-based therapy. A productivity spreadsheet was created/edited to assist with this transition, along with an executive to benchmark current practices in similar Level I trauma centers. Transitioning from minutes-based therapy to units-based therapy allows the UMMC acute care department to be more aligned with other Level I trauma and academic healthcare centers and for CPT coding. Further education is needed for the staff at UMMC's acute rehab department for a more smooth transition, Also, further research should be conducted to examine the effects of this transition and current trends in Level I trauma and academic healthcare acute rehab departments.