

An Interprofessional Approach to Decrease Length of Stay in a Long-Term Acute Care Hospital (LTACH)

Jill Cinko, DNP, APRN, ANP-C

PROBLEM STATEMENT

- Advances in medicine and technology have led to a larger number of Americans surviving acute critical illness thus increasing the demand for LTACHs
- Length of Stay (LOS) is a quality indicator. Increased LOS can result in a substantial negative financial impact for the institution and healthcare system as a whole
- Integrating a discharge process that is efficient and includes input from multiple disciplines can increase the likelihood of a timely and safe discharge, while decreasing costs for individuals, their families and the system
- The desired LOS in an LTACH is 25-30 days

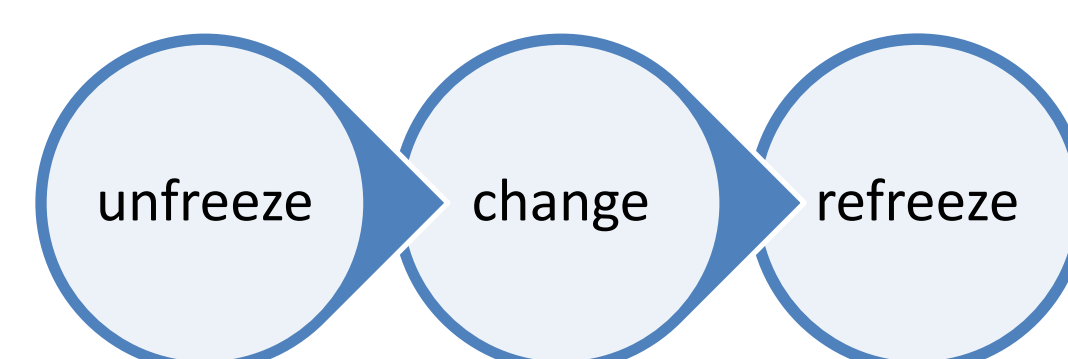
PROJECT PURPOSE

- To reduce LOS on a medical/surgical unit of an LTACH in the Southeastern United States
- Overarching goal: To evaluate the impact of a standardized discharge planning process on patient length of stay within a Long-Term Acute Care Hospital setting
- Specific Aim: To reduce patient length of stay within a medical-surgical unit at a Long-Term Acute Care Hospital by 5% within 30-days following implementation of a standardized interprofessional discharge planning process
- Clinical Question: Can Implementation of a standardized interprofessional discharge planning process decrease length of stay by 5% within 30-days on a medical/surgical unit of a Long-Term Acute Care Hospital?

The Model for Improvement guided the implementation of change for this QI project



Lewin's Theory of Change, borrowed from the social science of psychology, was integrated into the framework of this QI project



METHODS

Subjects:

- Chronically critically ill adult and older adult patients admitted to the second floor of a LTACH
- All patients admitted to the second floor of the LTACH, regardless of diagnosis, during the pilot period who are expected to be discharged from the facility to a lower level of care

Demographics:

Pre-Intervention Cohort:

- Males 64% (n=16)
- Females 36% (n=9)
- Age range 25-86 years
- Mean age - 66
- Mode age - 76
- Median age - 71

Post-Intervention Cohort:

- Males 55% (n=16)
- Females 45% (n=13)
- Age range 46-96 years
- Mean age - 68
- Mode age - 89
- Median age - 71

- Setting: second floor medical/surgical unit in 75-bed LTACH in the Southeastern United States

Intervention:

- Creation of order set for consultation with case management within 72 hours of admission
- Formation of a dedicated interprofessional team (IPT)
- Weekly IPT meetings dedicated to discharge planning
- Implementation of an IPT discharge tracking form
 - Identification of goals for discharge to lower level of care
 - Weekly monitoring of progression towards meeting goals of discharge
 - Improve communication
 - Increase efficiency of discharge process
- Analysis of pre-study data reports depicting average anticipated LOS and the average actual LOS for the designated unit

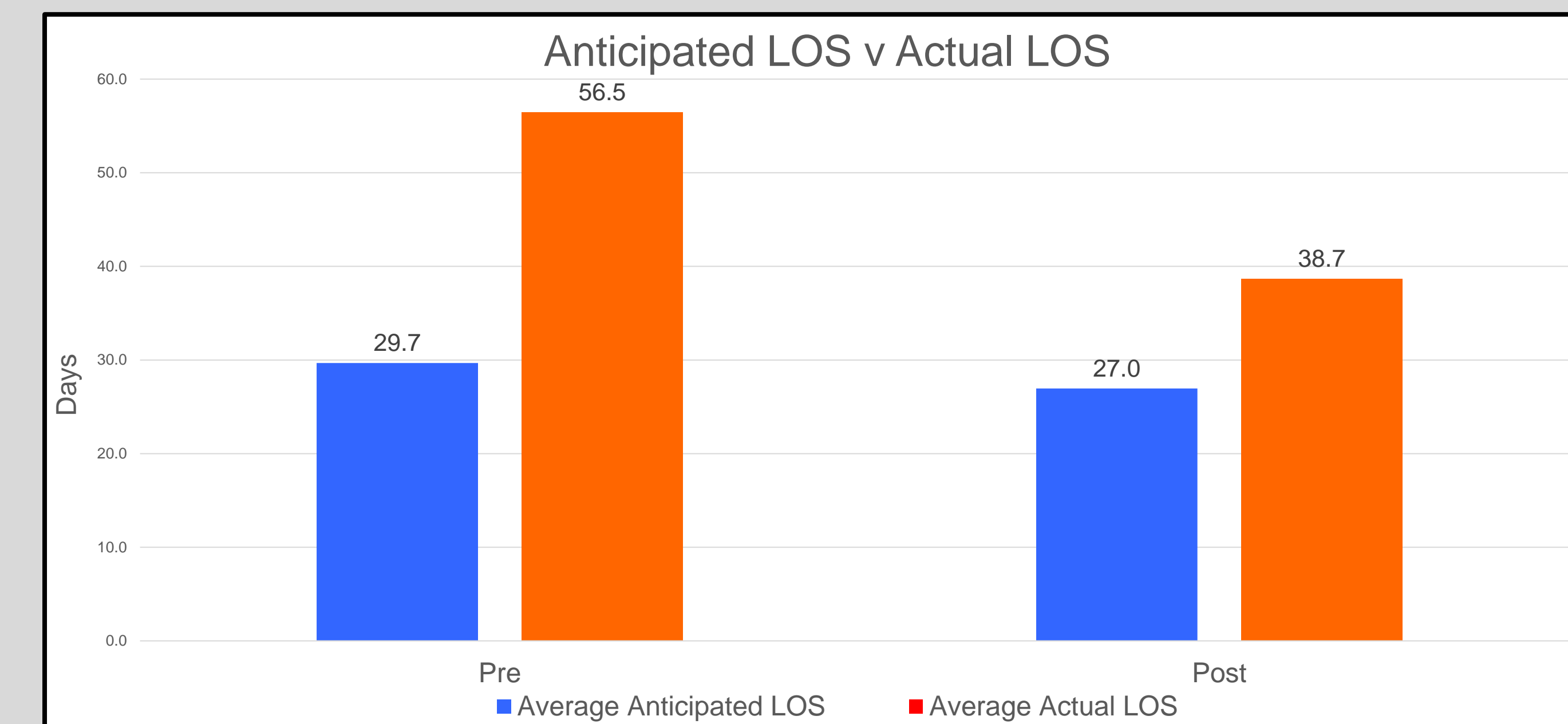
Data Collection

- Average LOS from the 30 days prior to intervention will be compared to the average LOS for the 30 days post implementation
- Data was collected using the IPT discharge tracking form and facility generated data. Data was input into Excel Spread Sheet

Data Analysis

t-test

RESULTS



Actual LOS:

t=2.0098

df=52

standard error of difference = 8.852

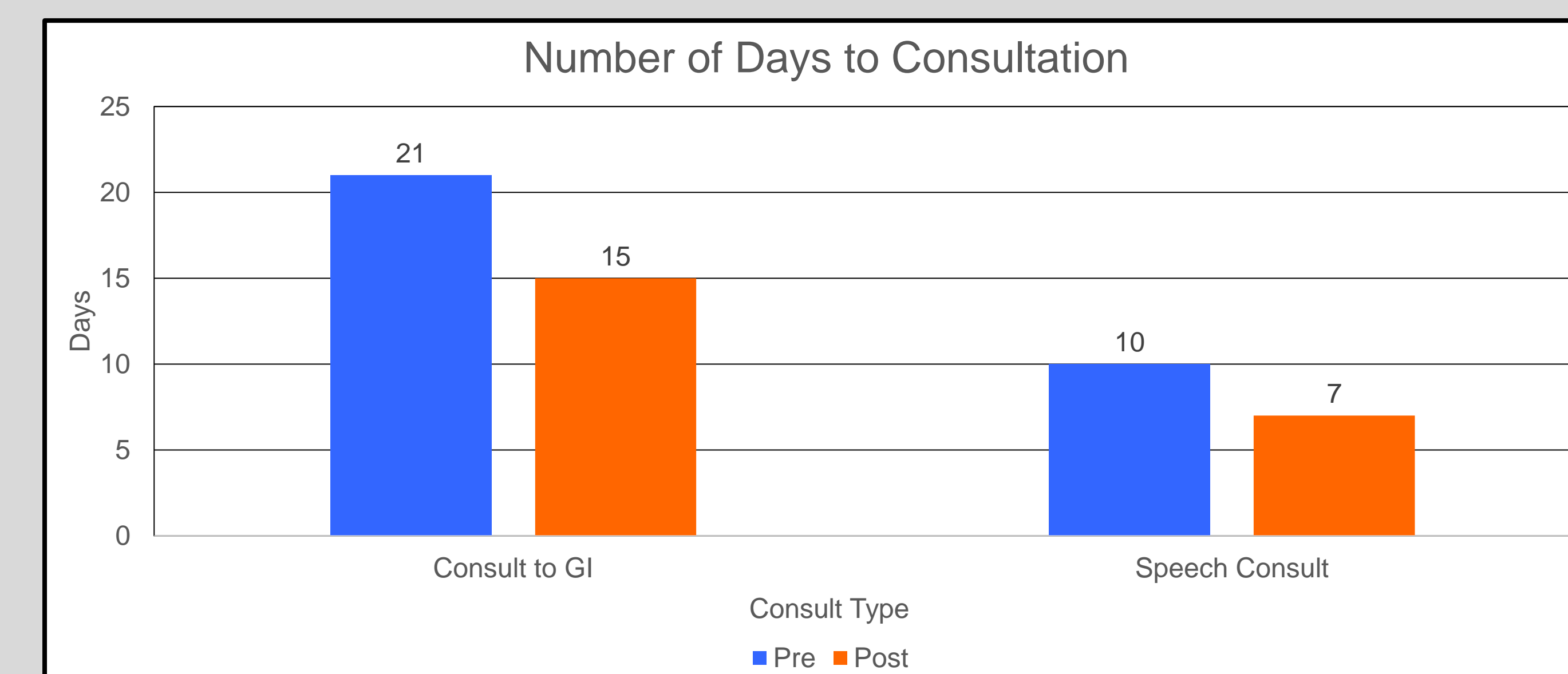
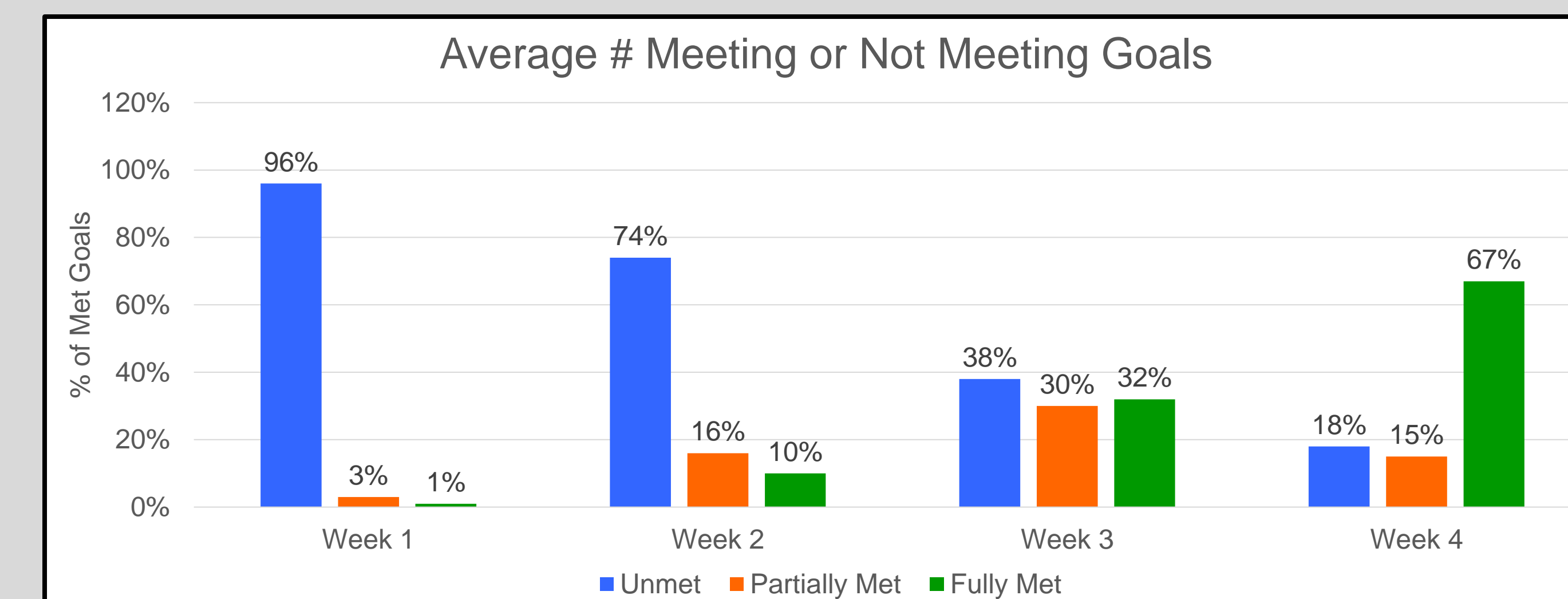
p = 0.0496

mean of Group 1 - Group 2 = 17.79

(95% CI 0.03-35.55)

$$\text{pre}_{(\text{actual})} - \text{post}_{(\text{actual})} = 17.8$$

$$\text{post}_{(\text{anticipated})} - \text{post}_{(\text{actual})} = -11.7$$



Unanticipated Finding:

Improved efficiency and communication contributed to significant reductions in timetable for completion of gastroenterology and speech therapy consultation

DISCUSSION

- The development of an IPT discharge tracking form shows promise for improving efficiencies, accountability, and communication
- Implementation of a standardized interprofessional discharge planning process lends support for reduced LOS and potential decrease in health care cost
- Implementation of a standardized discharge process demonstrates favorable support to reduce LOS worthy of further study
- Limitations include: 1) short 30-day pilot study 2) limited sample size with use of aggregate data limits generalizability and 3) project implementation during a pandemic

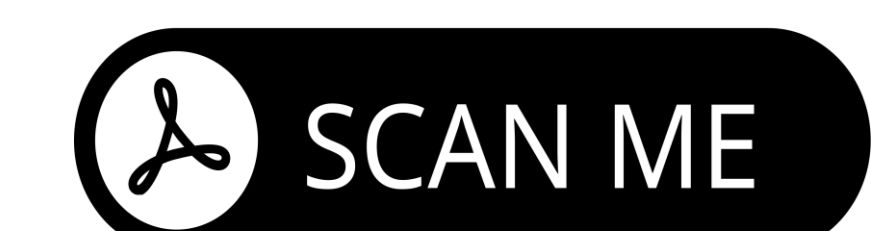
IMPLICATIONS FOR ADVANCE PRACTICE NURSING

- APRN's are in direct positions to improve patient care outcomes
- Addressing inefficiencies of the discharge process holds promise to decrease LOS
- By improving LOS, healthcare costs are reduced
- LOS is a quality indicator, and by lowering LOS patient outcomes can be improved

SUSTAINABILITY

- Results support that LOS can be reduced through improved efficiency and communication
- Adoption of the dedicated interprofessional team has occurred within the supporting facility
- Spread of the standardized discharge planning process and discharge tracking form in the form of a second PDSA cycle has been supported

REFERENCES



Implementation of a standardized interprofessional discharge planning process lends supports for decreasing LOS in an LTACH

