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Reducing Hospital Readmission using Medical Students as Health Coaches



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INTRODUCTION

This study is designed to assess the benefits of using medical students as health coaches to **reduce 30-day hospital readmission** for patients with chronic conditions. Secondary outcomes include patient's attending primary care follow-up post-discharge within 2 weeks as well as patients achieving their health coaching goals.

RESULTS

At this point, with the 27 patients that have been successfully recruited. To date, the percentage of 30-day readmissions in the intervention group was **decreased** compared to the historical controls, however this difference **did not reach statistical significance**. The patients in the intervention have an increased number of chronic conditions as noted in Table 1.

CONCLUSIONS

This study will continue recruiting and the primary and secondary endpoints will be reassessed. There is a potential for statistical significance with more recruitment. Additional research is needed to assess health coaching. Medical schools should consider implementing projects that **increase student's knowledge of empathy, communication, and barriers that face patients as they discharge from the hospitals**. These skills will be vital to practice medicine. With the changing landscape of healthcare, more focus should be on **counselling patients, safe discharges, and innovative solutions** in the medical school curriculum.

Using medical students as **health coaches** has the potential for **mutual benefits for both the patient, the medical student, the family, as well as the primary medical provider of the patient**.

METHODS

The population includes inpatients at Cooper Medical Center who are admitted for **COPD, heart failure, MI, or pneumonia**. Exclusion criteria included patients less than 18 years of age, non English-speaking patients, or if the patient is on an active chemotherapy or other cancer treatment.

The study design is a **prospective cohort study** which is matched with historical controls of patients from Cooper who did not receive health coaching.

| Table 1 | Intervention (SD) | Controls (SD) | p-value (paired two-tailed t test) |
|--------------------------------------|-------------------|---------------|------------------------------------|
| N | 27 | 125 | N/A |
| Age | 61.24 (13.09) | 65.01 (13.19) | 0.5571 |
| % Male | 56 (5.0) | 47.5 (5.1) | 0.0317* |
| % African American | 56 (5.1) | 36.29 (4.8) | 0.7698 |
| % Caucasian | 36 (4.9) | 42.74 (5.0) | 0.1344 |
| Average number of chronic conditions | 3.6 (1.05) | 2.83 (1.04) | 0.0271* |
| BMI | 31.28 | N/A | N/A |
| % Previous or current Tobacco use | 84 (3.7) | 73.4 (4.4) | 0.49 |
| Pack Years (Tobacco) | 24.43 | N/A | N/A |
| 30-day Readmission rate (%) | 12 (3.3) | 15 (3.6) | 0.0830 |

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