

Increasing Transplant Medication Knowledge Through Implementation of a Medication Education Intervention Algorithm

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INTRODUCTION

- Limited health literacy is associated with increased disease burden, worse clinical outcomes, and overall greater annual healthcare costs.^{1,2}
- Kidney transplant recipients with low health literacy are at a 14% increased risk of medication nonadherence.³
- Medication nonadherence is one of the largest threats to allograft function.⁴
- Identifying patients with limited health literacy allows for opportunities to provide tailored interventions to help patients become more active participants in their care and to improve post-transplant outcomes.

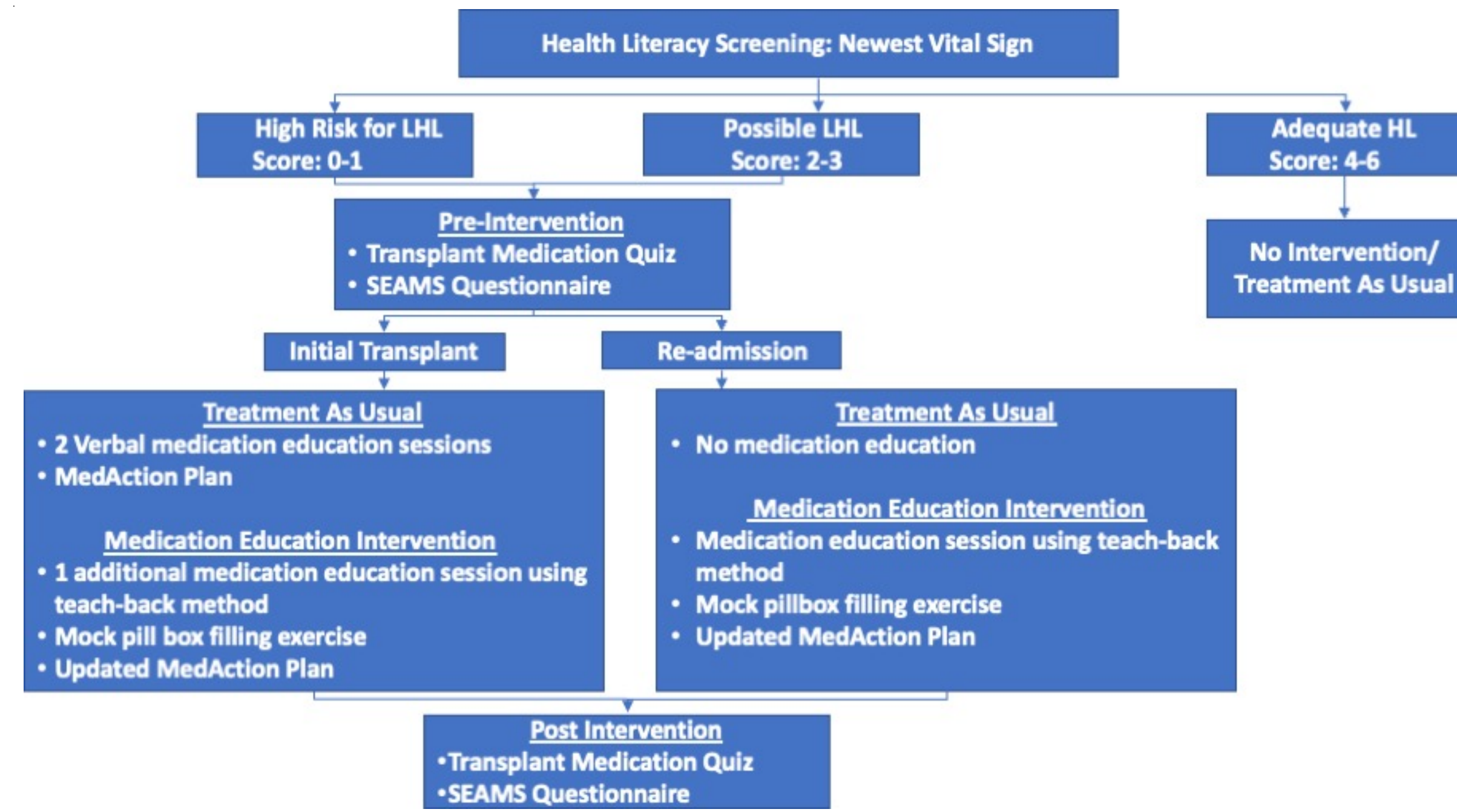
OBJECTIVES

The goal of this DNP project is to **identify kidney transplant recipients with limited health literacy and improve transplant medication knowledge through the implementation of a medication education intervention algorithm.**

Aims:

- Develop a medication education intervention algorithm that incorporates health literacy scores and evidence based educational interventions.
- Implement the medication education intervention algorithm and evaluate what effect medication education interventions have on transplant medication knowledge.
- Make recommendations for sustainability and scalability of the medication education intervention algorithm including expansion into other areas including the pre-transplant evaluation.

METHODS



AIM 1: Develop a Medication Education Intervention Algorithm

- Selection of assessment tools:**
- Newest Vital Sign (NVS)
 - Self-efficacy for Appropriate Medication Use (SEAMS)
 - Transplant Pharmacy Medication Quiz
- Medication education interventions:**
- Printed MedAction Plan
 - Medication education with teach back
 - Mock Pillbox filling

AIM 2: Implementation and Evaluation of Medication Education Intervention Algorithm

- Convenience sampling
- Metrics: pre-test/ post-test method
- Descriptive statistical analysis, Chi-Square Test, and Anovas

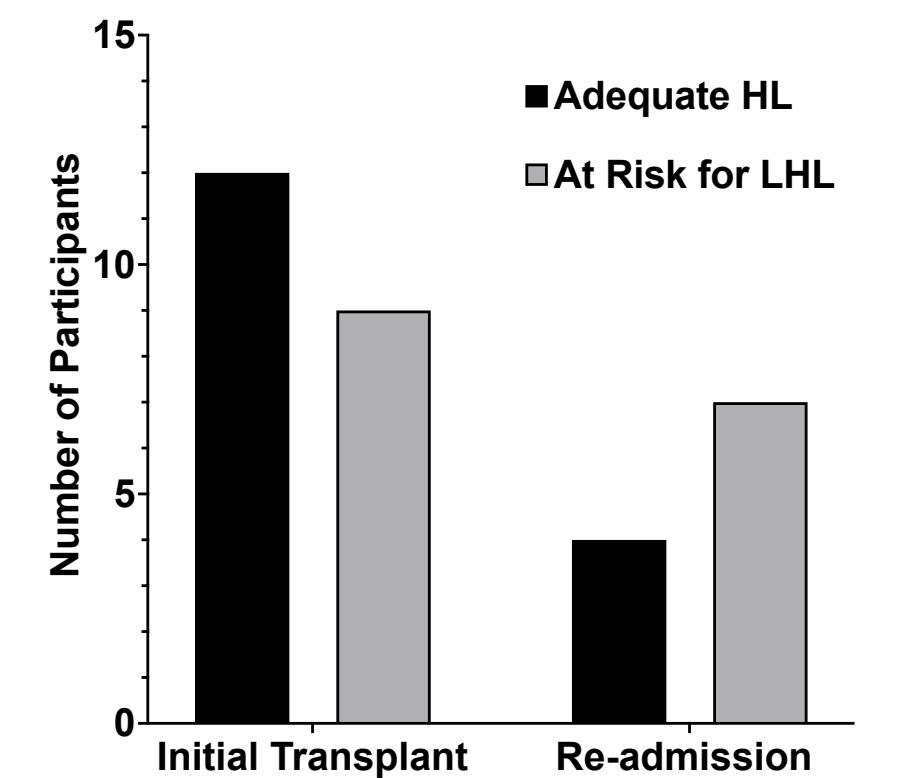
AIM 3: Project Scalability and Sustainability

- Expand training to include multidisciplinary staff
- Implement algorithm into current workflow
- Collaborate with other transplant centers
- Obtain additional funding to equip clinic
- Present findings at national conferences
- Publish findings in academic journals

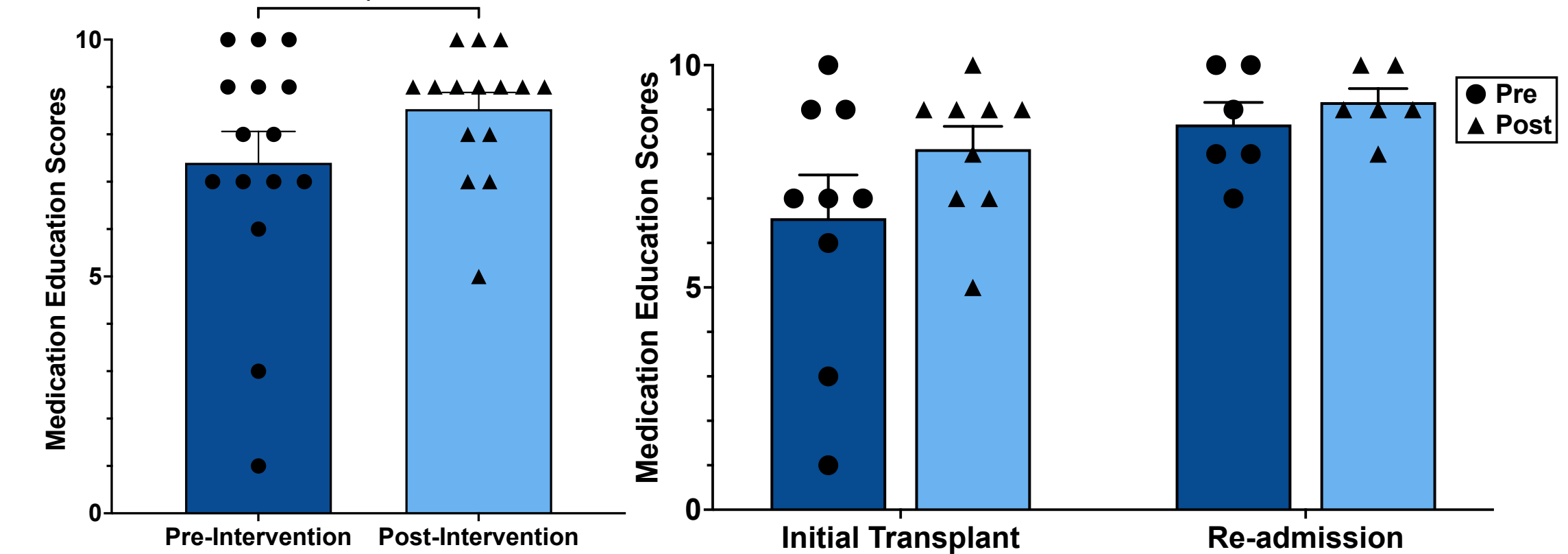
RESULTS

	Overall (n= 31)	Initial Transplant (n= 21)	Re-Admission (n= 10)
Age, y	51.2	53.6	46.4
Race, n (%)			
Black	8 (25.8 %)	4 (19%)	4 (40%)
White	13 (41.9 %)	9 (42.9%)	4 (40%)
Other	10 (32.3 %)	8 (38.1%)	2 (20%)
NVS, score +/- SD	3.2	3.47	2.9
Received Intervention, n (%)	15 (48.4%)	9 (60%)	6 (40%)
Pre-Intervention Medication Education Quiz, score +/- SD	7.4	6.5	8.6
Pre-Intervention SEAMS, score +/- SD	35.7	35.4	36.2
Post-Intervention Medication Education Quiz, score +/- SD	8.5	8.1	9.2
Post-Intervention SEAMS, score +/- SD	38.2	38	38.5

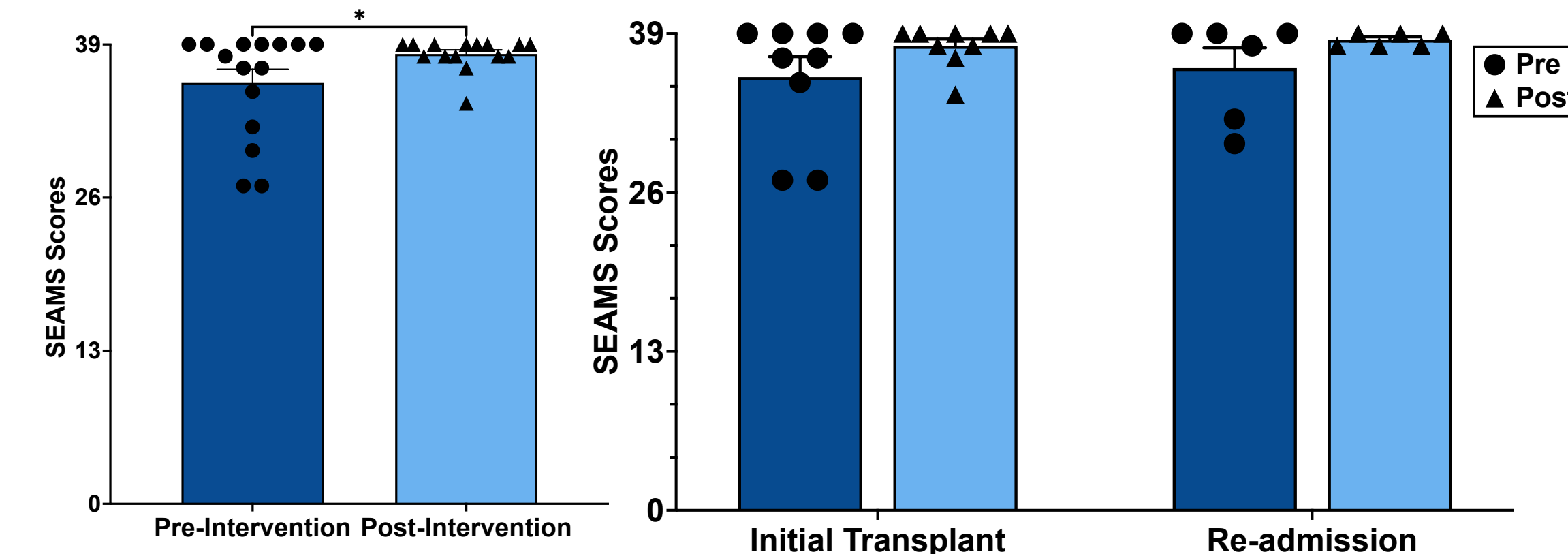
Comparison of Health Literacy Screening Results



Comparing Pre- vs Post-Intervention Medication Education Scores: Admission Type



Comparing Pre- vs Post- SEAMS Assessment Scores: Admission Type



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