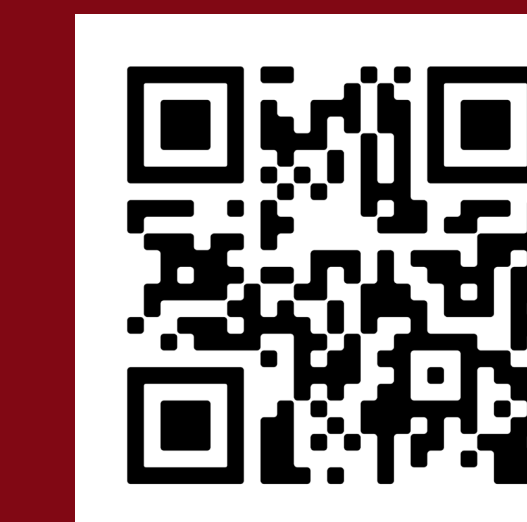




# Evaluating the Impact of No Standardized Tests on Early Assurance Student Success



## BACKGROUND

- Many colleges/universities have continued as test optional for undergraduate admissions since the pandemic.
- Early assurance students are admitted with no requirement for reported standardized test scores to the University of South Carolina College of Pharmacy Gamecock Pharmacy Assurance (GPA) pathway.
- We sought to determine if lack of standardized test score results in admission of early assurance students who struggle in pre-pharmacy coursework or the first year of the professional degree program.

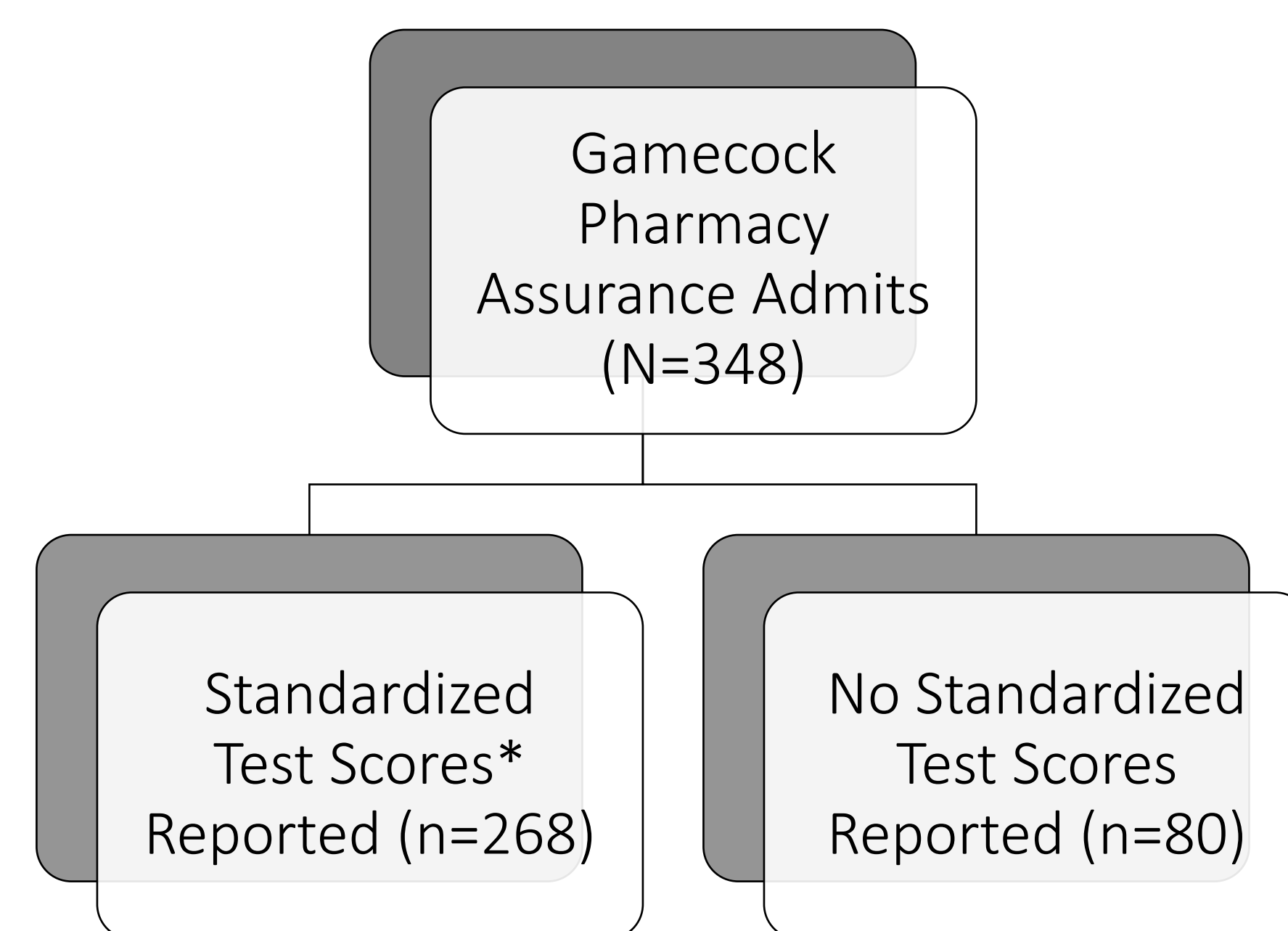
## OBJECTIVES

- To evaluate if lack of standardized test score reported among students enrolled in an early assurance pathway results in a difference in:
  - Matriculation rate into the Doctor of Pharmacy professional degree program; and/or
  - Success factors during the first year of the Doctor of Pharmacy program.

## METHODS

IRB-approved retrospective observational evaluation of two early assurance cohorts

Figure 1.



\*For standardized test scores reported, mean ACT was 28.32 and mean SAT was 1302.

- Descriptive statistics were applied to the collated data
- Continuous and categorical variables analyzed using t-tests and  $\chi^2$  respectively
- Wilcoxon Rank Sum test used for sample size < 30
- Fischer's exact test used for contingency tables for cell sizes < 5

## RESULTS

Table 1. Baseline Characteristics of GPA Students

| Baseline Characteristic         | Standardized Test Score Reported* (n=268) | No Standardized Test Score Reported (n=80) | P value  |
|---------------------------------|---|--|----------|
| Gender                          |   |  |          |
| Male                            | 62 (23.1%)                                | 14 (17.5%)                                 | 0.5033   |
| Female                          | 205 (76.5%)                               | 66 (82.5%)                                 |          |
| Unknown                         | 1 (0.4%)                                  | 0 (0%)                                     |          |
| Race                            |   |  |          |
| Asian                           | 22 (8.2%)                                 | 4 (5.0%)                                   | 0.1652   |
| Black                           | 20 (7.5%)                                 | 11 (13.8%)                                 |          |
| Hispanic                        | 7 (2.6%)                                  | 5 (6.2%)                                   |          |
| White                           | 203 (75.7%)                               | 57 (71.3%)                                 |          |
| Other                           | 16 (6.0%)                                 | 3 (3.7%)                                   |          |
| Instate                         |   |  |          |
| Yes                             | 153 (57.1%)                               | 46 (57.5%)                                 | 1        |
| No                              | 115 (42.9%)                               | 34 (42.5%)                                 |          |
| Honors College Admission        |   |  |          |
| Yes                             | 53 (19.8%)                                | 5 (6.3%)                                   | 0.007409 |
| No                              | 215 (80.2%)                               | 75 (93.7%)                                 |          |
| Mean High School GPA, mean (SD) | 4.597 (0.40)                              | 4.543 (0.37)                               | 0.2845   |

## Take Home Point

A significant difference in prerequisite GPAs between students who reported no standardized test scores and those who did indicates a need for continued monitoring and may inform future change to pathway admission requirements.

Table 2. Prerequisite Performance of GPA Students

| Prerequisite GPAs                | Standardized Test Score Reported (n=189) | No Standardized Test Score Reported (n=19) | Difference of two medians | P value   |
|----------------------------------|--|--|---------------------------|-----------|
| Science Prerequisite GPA, median | 3.64                                     | 3.06                                       | 0.58                      | 0.002248  |
| Math Prerequisite GPA            | 4.00                                     | 3.13                                       | 0.87                      | 0.0007064 |
| Pharmacy Prerequisite GPA        | 3.72                                     | 3.40                                       | 0.32                      | 0.003103  |

## RESULTS

Table 3. Matriculation and Success Factors During P1 Year

| Success Factor         | Standardized Test Score Reported (n=220) | No Standardized Test Score Reported (n=33) | Difference of two proportions | P value | Power |
|------------------------|--|--|-------------------------------|---------|-------|
| Matriculation          |  |  |                               |         |       |
| Yes                    | 153 (70%)                                | 21 (64%)                                   | 6%                            | 0.6301  | 8%    |
| No                     | 67 (30%)                                 | 12 (36%)                                   |                               |         |       |
| Success Factor         | Standardized Test Score Reported (n=121) | No Standardized Test Score Reported (n=4)  | Difference of two medians     | P value | Power |
| Fall P1 GPA, median    | 3.64                                     | 3.43                                       | 0.21                          | 0.1115  | 45%   |
| Spring P1 GPA, median  | 3.61                                     | 3.53                                       | 0.08                          | 0.3472  | 14%   |
| Overall P1 GPA, median | 3.59                                     | 3.48                                       | 0.11                          | 0.2214  | 35%   |
| P1 Deficiencies        |  |  |                               |         |       |
| Yes                    | 4 (3%)                                   | 1 (25%)                                    | 22%                           | 0.1524  | 33%   |
| No                     | 117 (97%)                                | 3 (75%)                                    |                               |         |       |

## Conclusions

- There was a significant association between Honors College admission and submissions of standardized test scores.
- Students reporting standardized test score at GPA pathway admission had higher overall prerequisite GPAs, as well as higher GPAs in science and math coursework, by the conclusion of their undergraduate courses.
- No difference in matriculation rate or P1 success factors were observed; however, a limitation of this study was its small population leading to insufficient power to detect difference in these outcomes.

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