

# Pharmacy College Admission Test Utilization and Minimum Composite Scores in U.S. Doctor of Pharmacy Program Admissions 2016 to 2018

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## Abstract

**Objectives:** To analyze Pharmacy College Admission Test (PCAT) usage and minimum composite score requirement trends for U.S. Doctor of Pharmacy Programs.

**Methods:** The PharmCAS website was reviewed for PCAT exam requirements and minimum composite scores considered for all U.S. Doctor of Pharmacy programs for the 2016 and 2018 admission cycles. Utilization trends for programs requiring PCAT for both the 2016 and 2018 were evaluated. **Results:** In 2016, 77% of programs required PCAT versus 73% in 2018. Only 31% of PCAT-requiring programs listed a minimum composite (range 20-60). Approximately 1/3 of PCAT-requiring institutions provided no response or N/A to the minimum composite field. The remaining programs recommended preferred scores or gave guidance on competitive scores. Public institutions required the PCAT more frequently and were more likely to require minimum scores while private institutions include more preference or guidance statements. A total of 30 programs altered PCAT requirements between 2016 and 2018. Twenty-four lowered PCAT requirements; 10 programs stopped requiring the exam, 5 lowered minimum scores, 3 changed a minimum to a preference given and 3 programs removed a preference statement and 3 removed a minimum score. Six programs raised requirements; 2 added the exam, 3 added minimum scores, and 1 provided a guidance statement. Public and private institutions made PCAT requirement changes at a similar rate of 21%. **Implications:** Admission PCAT requirements from 2016 to 2018 varied. Programs making changes were four times more likely to lower requirements (no longer require the exam or lower/eliminate minimum scores) thus expanding their qualified admission pool.

## Background

- Pharmacy applications decreased by 20% between 2012 and 2016 leading some schools to struggle in meeting their enrollment goals.<sup>1</sup>
- Concerns have been raised about the accelerating expansion of pharmacy education and as the number of pharmacy schools has increased the competition for qualified students has also increased.<sup>2,3</sup>
- The recent emphasis on holistic admissions encourages consideration of applicants' experiences and attributes in addition to the traditional academic metrics.

## Objective

To analyze recent trends in Pharmacy College Admission Test (PCAT<sup>®</sup>) usage and minimum composite score requirements for U.S. Doctor of Pharmacy Programs.

## Methods

Data was collected from individual PharmCAS<sup>®</sup> program listings in August 2015 and August 2017 reflecting expectations for the 2016 and 2018 admission cycles. Program listings were reviewed for responses to "PCAT required:" under the Test section and "Minimum Composite PCAT score considered:" under the Program Statistics and Criteria section.

PCAT required responses were recorded as yes or no. Entries for minimum composite PCAT score considered were collected and sub-categorized by the response provided. Actual composite scores were recorded when listed. Additional responses were categorized by the type of information, which included: no minimum, use of raw scores, conditional minimums depending on other admissions criteria, and descriptions of preference or guidance on scores of successful applicants.

Program demographics, public or private institution, were recorded.

Exclusion criteria for the change analysis included programs not having data for both the baseline 2016 cycle and follow-up assessment 2018 cycle.

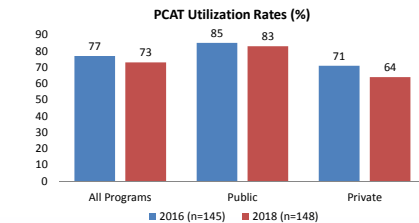
## Methods (continued)

Data compared for the two time points (2016 and 2018) were:

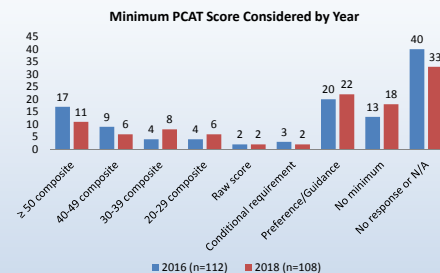
- PCAT utilization rate overall
- PCAT utilization by public/private status
- Minimum PCAT considered

PCAT changes in terms of both utilization and score minimums were summarized and classified as either lower or raising requirements.

## Results



In 2016, 33 programs did not require the PCAT exam in the admission process which rose to 40 programs in 2018. Public institutions more frequently required PCAT exams.



Even though the majority of Doctor of Pharmacy degree programs required the PCAT exam, only 52.7% (59/112) in the 2016 admissions cycle and 52.8% (57/108) in the 2018 admissions cycle provided PCAT expectations.

Total programs requiring the PCAT which responded "no minimum" or had no information listed, remained stable over the 2 evaluated years, 53 and 51 for 2016 and 2018 respectively.

## Results (continued)

### 2016 Finding

- 32% (36/112) listed a minimum score (composite or raw scores)
- 21% (23/112) listed a preferred or a guidance statement (i.e. successful applicants)
- 36% (40/112) listings were blank or N/A
- 12% (13/112) listed "no minimum" score

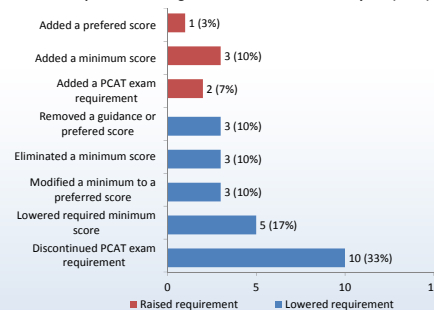
The mean minimum composite score listed in 2016 was 47.5 (range 20-60) for the 34 programs with reported minimums.

### 2018 Findings

- 31% (33/108) listed a minimum score (composite or raw scores)
- 22% (24/108) listed a preferred or guidance statement (i.e. successful applicants)
- 31% (33/108) listings were blank or N/A
- 17% (18/108) listed "no minimum" score

The mean minimum composite score listed in 2018 was 40 (range 20-60) for the 31 programs with reported minimums.

### PCAT Requirement Changes 2016 to 2018 Admission Cycles (n=30)



Over the 2 admission cycles one fifth of the schools and colleges of pharmacy (30/144) altered how PCAT exam scores are utilized.

Programs excluded from the change analysis included 2 new programs and 1 program that had split into two separate programs by the 2018 analysis.

It is unclear if the 4 more restrictive changes represent an increasing requirement based on the applicant pool or simply an attempt to provide clarification of current PCAT utilization, as previously all 4 of the programs had not provided a response.

Public and private institutions made changes to PCAT admission requirements at similar rates, of 21% (14/66) and 21% (16/78) respectively. Though 87.5% of the private institution changes lowered requirements compared to 71.4% for public institutions.

## Limitations

- Reported PCAT minimums listed in PharmCAS do not provide insight into to how the PCAT is weighted in the application evaluation process.
- Changes in reported PCAT minimums may have other explanations including updating PharmCAS profiles to reflect previously established PCAT expectations.
- Data on PCAT sub-score utilization was not evaluated.
- Specific reasons for change (holistic movement vs decreasing applications) could not be determined from the data.
- The PCAT blueprint changed for the 2016-2017 cycle which occurred after the first data collection time point. The changes included more passages with associated questions and elimination of the Verbal Ability section.<sup>4</sup>
- PCAT percentile rank score reporting for the 2016-2017 cycle used an updated normal comparator group.

## Conclusions and Implications

For the time points reviewed, a slight decrease in PCAT utilization was observed. Public institutions continue to be more likely to require the PCAT.

Programs making changes were four times more likely to lower requirements (no longer require the exam or lower/eliminate minimum scores).

Although changes were made to both the PCAT blueprint and the normal group used to determine the percentile rank, since the scaled scores remain comparable across blueprints, it is unlikely that this was a major factor in a program's decision to change requirements.

Lowering PCAT requirements will likely expand the potential admission pool for the majority of programs making such changes. This may reflect a movement toward holistic admissions. Holistic admissions places emphasis not just on academic metrics, but also includes consideration of experiences and attributes of the applicant. Such a process may increase the diversity of the student body and make pharmacy programs more accessible.

Alternatively, lowering requirements may result in students who would not have been admitted prior to the changes, and thus result in a less qualified student body. Lowering requirements may also result in an adverse impact on future program attrition rates.

## Acknowledgements

We wish to acknowledge Rosemary Hayes for assistance in initial data collection and Janice L. Gales for assistance in poster and abstract review.

## References

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