Physician Assistants (PAs) are regularly cited as part of the solution to the physician shortage in the United States. State scope of practice (SOP) laws can facilitate or restrict the capacity for PAs to strengthen the health workforce in a state. This study builds upon previous research demonstrating that permissive SOP laws increased the PA per population ratio. The purpose of this study is to understand if the number of six key elements enacted by a state are associated with number of employed PAs, PA/population ratio, PA/physician ratio, and PA/NP ratio by state while considering covariates.

**Methods**
- The AAPA’s 6 elements (E) of a modern PA practice act were categorized as Restrictive (1–2 E), Moderate (3–4 E), and Permissive (5–6 E).
- We used a 11-year (2010–2020) continuous sequence of U.S. Bureau of Labor Statistics for number of employed PAs, physicians and nurse practitioner by state.
- We estimated the effect of a change in SOP category on PA employment using a difference-in-differences (DiD) estimator to produce the average treatment effect on the treated (ATT).
- Models adjusted for the time-varying confounders: states’ proportion of uninsured, Medicaid percentage, proportion of population over age 65, and the US consumer price index.

**Results**
Over the study period the median PA ratio per 100,000 population increased from 27 in 2010 to 37 in 2020. During the same time period the number of states in the Permissive SOP category increased from 9 in 2010 to 25 in 2020. At the state level, a significant positive relationship was observed between PA employment and entering the Permissive category. The ATT suggests that, compared to control states, those that transition into the Permissive category experience PA workforce growth of 3.37 additional PAs per 100,000 population.

**Conclusions**
There has been continual growth in the PA/population ratio over the last decade. Significant expansion of state SOP laws has occurred yet heterogeneity remains which impacts the employment and care provided by physician assistants. Preliminary results from this study suggest that permissive SOP laws by a state is associated with a growth in PA employment. As the PA profession moves to implementing Optimal Team Practice, this study looks to examine the impact of state SOP laws on the size of the PA workforce within states and even more critical, the impact of the growth relative to other providers.

**References**