

# **Year 1 Impacts of the Pennsylvania College Savings Account Pilot, Keystone Scholars**

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## **Background/Context**

Tuition costs have risen at an average annual rate of 2.3% at private four-year colleges and 2.8% at public four-year colleges over the last decade<sup>1</sup>, outpacing inflation and household earnings over the same time.<sup>2</sup> The gap between parents' ability to pay and college costs has broad implications for equity, including access, persistence, degree/certification attainment, financial health, and labor market outcomes. This is particularly a concern in Pennsylvania, which has the 3<sup>rd</sup> highest in-state tuition and fees of any state, and is 1<sup>st</sup> in student loan debt.<sup>3</sup>

Based on previous research on child savings accounts (CSAs),<sup>4</sup> in 2018 the Pennsylvania Treasury launched a pilot child savings account program, Keystone Scholars. Pennsylvanian families that had babies in 2018 in six counties were eligible to opt-in to receive \$100 set aside for their child's future postsecondary costs. Eligible families were initially sent a letter about the program approximately 4-5 months after their child's birth. A follow-up postcard was sent approximately 5 months later. Families were also encouraged to open/link to their own Pennsylvania 529 (PA 529) college savings account. While the six counties were not randomly selected, they are representative of the state geographically, by population size, socio-economic status, and baseline proportion of households saving for college through a PA 529.

## **Purpose/Objective/Research Questions**

Our research questions are as follows:

- (1) What proportion of pilot families claimed the \$100? Did the pilot diversify the set of families using PA 529 accounts?
- (2) Did the pilot increase the likelihood of families opening their own PA 529 account in the first year of life?

## **Setting and Population/Participants/Subjects**

The study population includes all Pennsylvania families that had a new baby in 2018 and resided in one of six Pennsylvania counties, Delaware, Elk, Indiana, Luzerne, Mifflin, and Westmoreland. Control families are derived from families in Pennsylvania's 61 other counties, as well as families that had babies in a four-year (2014-2017) pre-period.

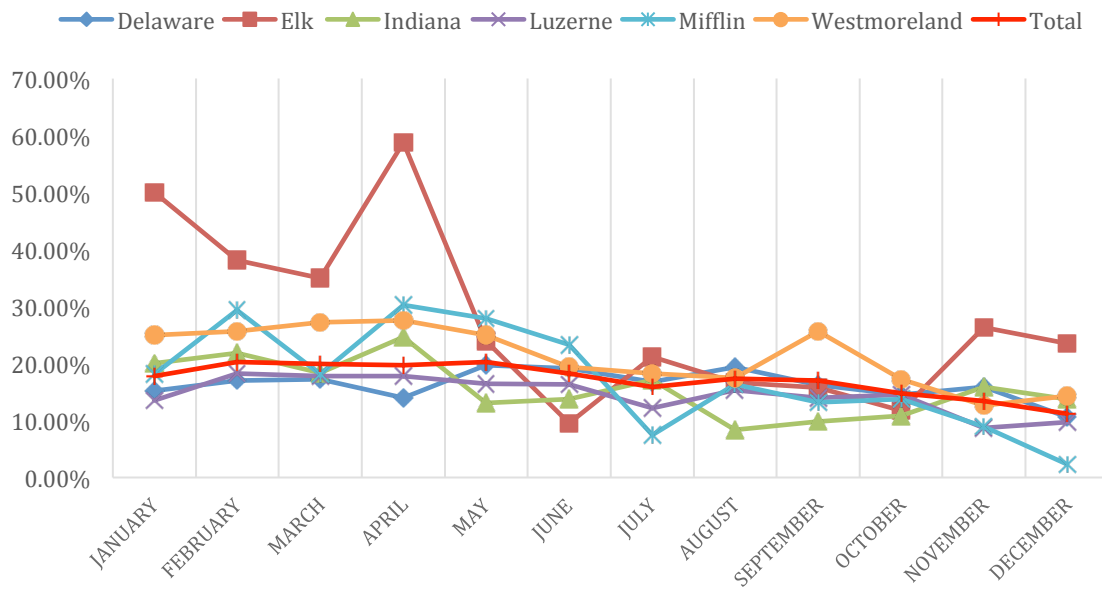
The data comes from three sources. Pilot claim statistics from the Pennsylvania Treasury's Vistashare data system, socio-demographic characteristics from birth records of the Pennsylvania Health Department, and PA 529 account openings from Ascensus, the Pennsylvania Treasury's 529 program data vendor. Parents were matched across files using mother's and father's socials.

### Research Design and Analysis

We implement a quasi-experimental difference-in-differences approach. We compare the impact of the pilot on 529 openings for families in the six pilot counties as compared to the non-pilot counties in the post (2018) period as compared to the pre-period. We find strong baseline equivalence between pilot and non-pilot counties on our set of observable socio-demographic characteristics in the pre-period, including mother’s education, marital status, WIC status, and race/ethnicity.

### Findings/Results

Figure 1. Proportion of Families Claiming, by Pilot County and Month



Descriptively, the odds of claiming the \$100 were just as high, if not higher, in the smaller counties.

Table 1. Percent of Families Claiming Keystone Scholars Pilot <sup>1</sup>

	<u>%</u>	<u>N</u>	<u>Total</u>
Claim	17.43	2,307	13,233
Linked with PA 529 if Claimed	19.90	459	2,307
Opened a New PA 529 if Linked	68.85	316	459

<sup>1</sup> Data derived from cleaned Vistashare file. The original file consisted of 14,274 records. 674 were removed for incorrect and not corrected addresses, 103 for incorrect addresses that were corrected but not in Pennsylvania, 262 had no social security information, and 2 did not have a proper zip code.

17.4% of families claimed the \$100 as part of the pilot. Of these, nearly twenty percent of families linked their account to either a new or pre-existing PA 529 account, the majority of which were new (Table 1).

Table 2. Modal Mother's Demographic Characteristics of 2018 Pilot County Families Claiming, Linking with a PA 529, and Opening a New PA 529 as part of Keystone Scholars Pilot

<u>Variable</u>	<u>Population (%)</u>	<u>Claim (%)</u>	<u>Linked with PA 529 if Claimed (%)</u>	<u>Opened a New PA 529 if Linked (%)</u>
Not on WIC	65.40	74.38	91.50	89.56
White	72.02	80.40	88.67	87.03
At Least a Bachelor's Degree	39.08	60.38	84.09	80.69
Married	59.46	72.47	89.82	86.77

Pennsylvania mothers that have a 529 account dramatically differ on socio-demographic characteristics from the general population (not reported). While this is also true for families that claimed the \$100 as part of Keystone Scholars, the numbers are not nearly as skewed (Table 2). For instance, 74% of families that claimed the \$100 had mothers not on WIC, which is much closer to the 65% of mothers not on WIC across Pennsylvania. This suggests that from an equity perspective, the pool of claimant families was more diverse than the pre-existing set of families with Pennsylvania 529 plans.

With regards to opening a PA 529 account, we find that families in pilot counties were twice as likely to open a 529 account within the first year of life than families living in non-pilot counties in 2018 as compared to the 2014-2017 pre-period (odd ratio of 1.99 in Table 3). The impact of the pilot was larger in the smaller counties.

### Conclusions

The likelihood that families opened a PA 529 account within the first year of their child's life were twice as large for families in pilot counties in the post-period. Results are statistically significant, large overall, and significant for each pilot county, with the impact the largest in smaller counties (e.g. Elk, Mifflin). The results suggest that it is possible to expand college savings through such initiatives. Implementation also plays an important role - the Pennsylvania Treasury spent a lot of time working with community partners to spread news of the program. Reports from the field suggest efforts to inform residents that 529 accounts could be used for any postsecondary training, including career and technical, and not just for college, were particularly helpful. The findings also suggest that different implementation strategies may be helpful in different geographical settings. For instance, word of mouth of the program was easier in Elk County, which only has one birthing hospital, than in Delaware County, a populous county in the Philadelphia suburbs.

This work is part of an ongoing partnership with the Pennsylvania Treasury to help expand college savings in the state. We are continuing to evaluate Keystone Scholars, which moved to a universal opt-out statewide model on January 1, 2019.

Table 3. Pooled Cross-Sectional Model Predicting PA 529 Account Opening Within First 12 Months of Child's Birth

Variable	Odds Ratio	
Pilot County	0.96	
Post-Period (2018)	0.90	
Difference-in-difference	1.99	***
WIC	--	
Yes	0.39	***
Unknown	0.89	+
Marital Status	--	
Married	2.13	***
Unknown	1.22	
Mother's Race/Ethnicity	--	
Black	0.39	***
Hispanic	0.52	***
Asian	0.56	***
Native American	0.45	+
Asian Pacific Islander	0.92	
Other/Unknown/Not Sure/Refused	0.57	***
Mother's Education	--	
Middle School or Less	0.01	***
Less than High School	0.04	***
High School	0.10	***
Some College	0.10	***
Associate's	0.42	***
Master's	1.39	***
Professional	1.74	***
Unknown	0.45	***
Constant	0.02	
County Fixed Effects	Y	
Year-Month Fixed Effects	Y	
N	645,027	

+ p<.10, \* p<.05, \*\* p<.01, \*\*\* p<.001

<sup>1</sup> “Trends in College Pricing 2017.” 2017. *Trends in Higher Education Series*, CollegeBoard.

[https://trends.collegeboard.org/sites/default/files/2017-trends-in-college-pricing\\_0.pdf](https://trends.collegeboard.org/sites/default/files/2017-trends-in-college-pricing_0.pdf)

<sup>2</sup> “Consumer Price Index – All Urban Consumer (Current Series).” 2018. Bureau of Labor Statistics.

<https://data.bls.gov/pdq/SurveyOutputServlet>; “Real Median Household Income in the United States.” 2017. *FRED Economic Data*, Federal Reserve Bank of St. Louis.

<https://fred.stlouisfed.org/series/MEHOINUSA672N#0>

<sup>3</sup> CollegeBoard. (2019). *2018–19 tuition and fees at public four-year institutions by state and five-year percentage change in in-state tuition and fees*. Retrieved from

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<https://trends.collegeboard.org/college-pricing/figures-tables/2018-19-state-tuition-and-fees-public-four-year-institutions-state-and-five-year-percentage>; LendEdu. (2019). *Average student loan debt statistics by school by state 2019*. Retrieved from <https://lendedu.com/student-loan-debt-by-school-by-state-2019/#ASDS>;

- <sup>4</sup> Beverly, S., Clancy, M., & Sherraden, M. (2016). *Universal Accounts at Birth: Results from SEED for Oklahoma Kids*. Research Summary 1607, Center for Social Development; Nam, Y., Kim, Y., Clancy, M., Zager, R., & Sherraden, M. (2013). Do Child Development Accounts Promote Account Holding, Saving, and Asset Accumulation for Children's Future? Evidence from a Statewide Randomized Experiment: CDAs Promote Account Holding, Saving, and Asset Accumulation. *Journal of Policy Analysis and Management*, 32(1), 6–33. <https://doi.org/10.1002/pam.21652>; Kim, Y., Sherraden, M., Huang, J., & Clancy, M. (2015). Child Development Accounts and Parental Educational Expectations for Young Children: Early Evidence from a Statewide Social Experiment. *Social Service Review*, 89(1), 99–137. <https://doi.org/10.1086/680014>