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BACKGROUND

Growing evidence of the value of early childhood education (ECE) programs to young children's development has increased policy makers' interest in investing in such programs – and in elevating their quality. One of the most common tools used by state policy makers is the Quality Rating Improvement System (QRIS), a system that rates child care programs based on a variety of inputs and serves as a public information tool to signal quality. In some instances, it also rewards programs with additional subsidies in exchange for quality improvements. In Ohio, all child care centers receiving publicly funded child care (PFCC) subsidies are required to receive a "1-star" rating in the state's QRIS, Step Up to Quality (SUTQ), by September of 2020. Entry into SUTQ requires work on the part of providers, including finding quality staff, ensuring staff meet ongoing training requirements, and completing necessary paperwork. Just how onerous are these requirements? How great are the



up-front costs for providers – many of whom serve children in Ohio who are most in need of quality care and learning? Are these costs covered by the additional subsidy increases that providers receive in exchange for entering SUTQ? To our knowledge, no estimates of this exist, making it difficult to have data-informed discussions about the return on investment for child care providers under the current SUTQ system.

In this white paper, we seek to add data to this conversation to shed light on how subsidy rates and cost of living impact return on investment across the state of Ohio. Specifically, the paper determines the cost of entrance into SUTQ for currently unrated providers as well as the extent to which the resulting increases in subsidies may offset these costs. To determine the cost of entrance into the system, we estimated the costs of moving from an unrated status to a 1-star rating in SUTQ for providers. These costs are those related to 1) education, 2) training for educators and directors, and 3) paperwork. In terms of the return on these costs, we estimated the increased subsidy rates per child based on 1-star certification versus being unrated. In the majority of scenarios that we calculated, subsidy increases for 1-star credentialing should cover the cost of complying with SUTQ regulations, and in some instances, will provide extra funds for provider operations. Additionally, child care providers in the following scenarios would be able to recoup their cost within a relatively short amount of time.



Section 1: Costs for programs to enter the SUTQ system as a 1-star provider

Receiving a 1-star rating requires three categories of costs for both center-based and home-based ECE providers: (1) education costs, (2) training costs, and (3) paperwork costs, as depicted in Table 1.

▼ Table 1. Minimum requirements for SUTQ 1-star rating

Type of Provider	Director Education Standard	Teacher Education Standard	Staff Training Hours per Employee	Estimated Paperwork Hours
Child Care Center (center-based)	At least a CDA*	50% CDA	10 per year	10–20
Family Child Care (home-based)	High School Diploma	N/A	10 per year	10–20

^{*} CDA = Child Development Associate credential

EDUCATION COSTS FOR 1-STAR RATING

To receive a SUTQ 1-star rating, child care center administrators and 50% of teachers in a given center must have at least a CDA. Family child care administrators, on the other hand, can achieve Career Pathways Level 1, which requires a high school education.

To estimate the cost related to increased education requirements for administrators, we considered whether hiring administrators or teachers with these credentials would cost more than hiring staff with less credentialing – a cost borne by the center, not the individual. (While the costs for individuals to receive additional training are very real, they are not included in this analysis, which focuses specifically on costs and benefits to *programs*.) We used modeling from PayScale, which routinely surveys providers in a range of industries to determine wage differences driven by a bevy of factors. PayScale's modeling tools suggest that the average center director in Canton and Cincinnati makes the same salary whether she holds a CDA or not. Thus, in these settings there is no additional cost borne by programs in terms of the center-based administrator CDA requirement. In Columbus, however, the average center director with a CDA makes \$1,000 more than those without the CDA. Since the weekly payment bonus in Franklin County for a SUTQ 1-star rating is \$15.13 per preschooler receiving PFCC (per the ODJFS SUTQ payment estimator tool), a center with one classroom of nine children receiving PFCC would cover the cost of the CDA for the administrator in about nine weeks if the provider is able to collect 85% of subsidy payments, a standard estimate for the percentage of payments owed that will be collected by a child care center.

\$15.13 per-child weekly bonus x 85% collection rate x 9 children x 9 weeks = \$1,041.70

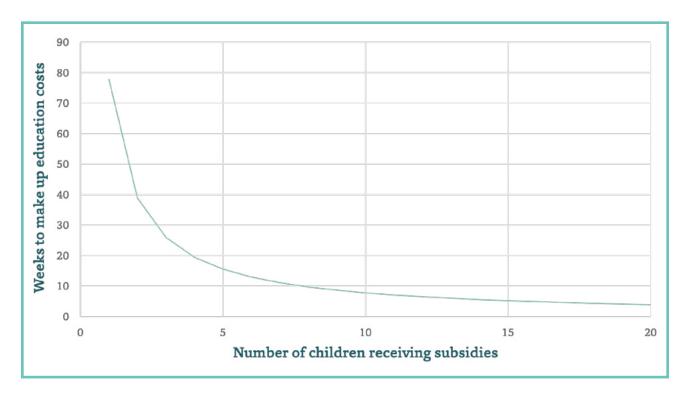
Family child care provider regulations require a high school diploma for directors, thus exacting no new costs on family child care providers since PayScale's data suggests preschool administrators do not make more money than those without a high school degree.

We then examined costs associated with education requirements for teachers in child care centers based on a SUTQ 1-star rating; at least 50% of teachers must have a CDA. PayScale's modeling tools did not show any difference in the average salary for teachers with or without CDAs in the three model cities. Thus, this education requirement does not impose any new costs on providers. Table 2 provides a summary of these education cost estimates.

▼ Table 2. Costs for credentialing of center directors and teachers for 1-star rating

	Center-based care		Home-based care		
City	Director Education Costs	Teacher Education Costs	Director Education Costs	Teacher Education Costs	
Cincinnati	\$ 0	\$ 0	\$ 0	\$ 0	
Columbus	\$1000	\$ 0	\$0	\$0	
Canton	\$ 0	\$ 0	\$ 0	\$ 0	

Using these data, we modeled how many weeks it would take for a center in Columbus, Ohio to recoup the additional education costs required by SUTQ 1-star credentialing. As shown in Figure 1, centers serving eight to 10 children receiving PFCC will make up the education costs of entering into SUTQ in about 10 weeks. Centers serving as few as two children receiving PFCC will recoup education costs within a year. In general, these data show that centers serving larger numbers of children receiving subsidies will recoup costs in a shorter period of time.



↑ Figure 1. More children receiving PFCC in a program means quicker recovery of costs of 1-star credentialing education requirements in the Columbus, Ohio model.

TRAINING COSTS FOR 1-STAR RATING

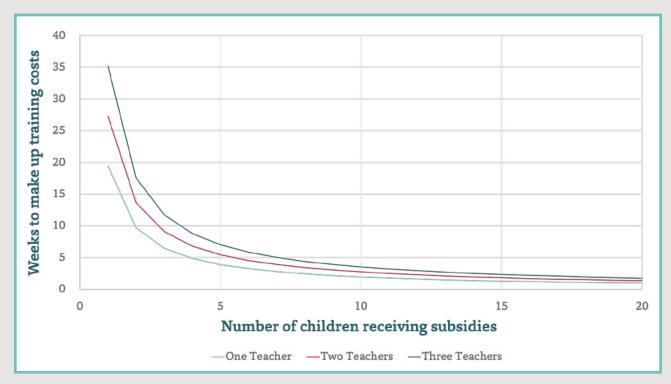
SUTQ 1-star credentialing requires all center-based and home-based staff to complete a total of 20 hours of professional development over two years. This comes out to an average of 10 hours of training per year per employee.

Salary data from PayScale indicates that 10 hours of training will cost the average center-based provider in Cincinnati and Columbus about \$150 for their center director and \$100 per teacher in training hours, and the average center in Canton about \$130 for their center director and \$90 per teacher. These are shown in Table 3.

▼ Table 3. Estimated training costs for center-based providers

City	Center Director Training Costs	Center Teacher Training Costs
Cincinnati	\$150	\$100
Columbus	\$150	\$100
Canton	\$130	\$90

Using these data, we modeled the costs of these 1-star training requirements relative to subsidy increases as a function of serving one or more children receiving PFCC. As the data in Figure 2 show, centers serving larger numbers of children receiving PFCC recover costs associated with training more rapidly than those serving fewer numbers of children receiving PFCC.



↑ Figure 2. More children receiving PFCC in a program means quicker recovery of costs of 1-star credentialing training requirements in the Columbus, Ohio model.

PAPERWORK COSTS FOR 1-STAR RATING

To enter into the state's SUTQ system, providers are required to submit paperwork documenting compliance with SUTQ requirements.

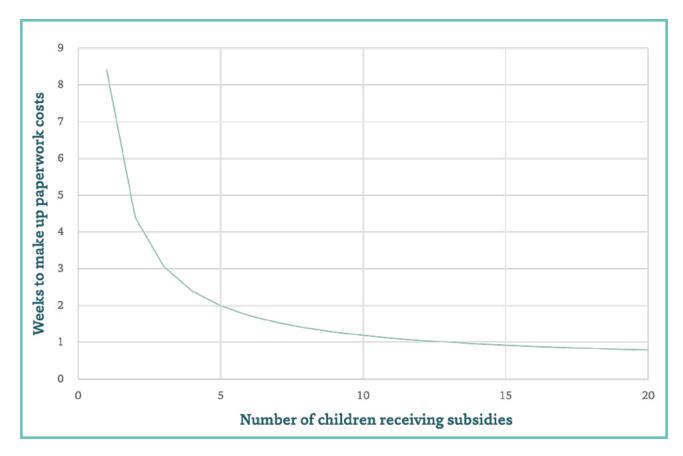
One way to estimate the cost of paperwork is to estimate the time necessary to fill out all required documentation. SUTQ requires 15 distinct pieces of documentation for 1-star certification. Under the assumptions provided in Table 4, a capacity-constrained center would have about 60 hours of paperwork at nine subsidized spaces, with the bulk of paperwork costs driven by mandatory reporting of weekly classroom activity plans.¹

▼ Table 4. Time estimates for paperwork costs to receive a 1-star rating.

Document	Estimated Time
Professional Registry	30 minutes
"Written Transition Information for One to Five-Star Ratings for Step Up To Quality (SUTQ)"	15 minutes
"Written Wage Structure for One to Five-Star Ratings for Step Up To Quality (SUTQ)"	10 minutes
"Description of Professional Development Planning Process for One to Five Star Ratings for Step Up To Quality (SUTQ)"	15 minutes
"Community Resources Information for One to Five-Star Ratings for Step Up To Quality (SUTQ)"	15 minutes
"Action Plan for Selecting a Curriculum for Step Up To Quality (SUTQ)"	15 minutes
"Developmental Screening Instrument Summary for Step Up To Quality (SUTQ)"	30 minutes
Post Early Learning and Development Standards	5 minutes
"Classroom Self-Assessment Tool Summary: One Through Five Star Rating for Step Up to Quality (SUTQ)"	10 minutes
"Family Information for Step Up To Quality (SUTQ)"	20 minutes PER CHILD
"Activity Plan for Step Up To Quality"	60 minutes PER GROUP
"Professional Development Plan for Step Up To Quality (SUTQ)"	30 minutes PER EMPLOYEE
Program Self-Assessment	120 minutes
OCLQS Registration Questions	10 minutes
Staff Worksheet for Step Up to Quality	30 minutes

¹ Estimates from consultation with staff from the A. Sophie Rogers School for Early Learning at The Ohio State University.

The time it takes for programs to recoup costs follows a similar pattern as we see with training and credentialing costs as shown in Figure 3. This is characterized by a longer time period to recoup costs for providers with few children receiving PFCC and a shorter time period for providers with more children receiving PFCC, which can push the time to recoup costs to under a year. It should be noted that these estimates assume that all paperwork requirements are met upon application. It does not account for time spent revising the paperwork, which would add a time burden to providers. For providers less familiar with navigating the state's child care regulatory systems and scoring frameworks, it is plausible that some of this paper's estimates may be on the low end.



↑ Figure 3. More children receiving PFCC in a program means quicker recovery of costs of 1-star credentialing paperwork. Modeling is for a capacity-constrained Columbus center with a director and one teacher.

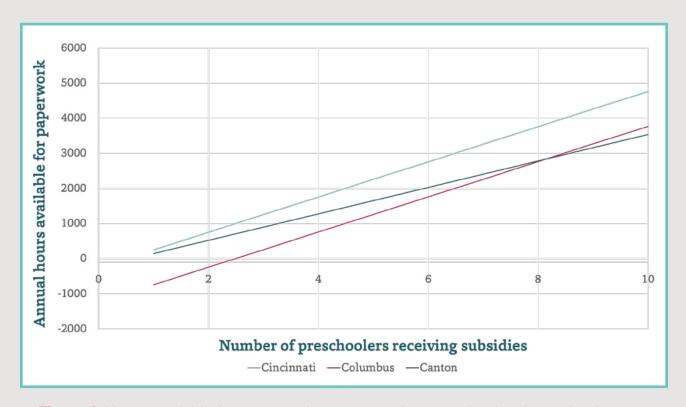
Table 5 details the fixed, per-child, per-group, and per-employee paperwork costs in the three simulated environments using our estimates of time costs valued at PayScale rates for employees likely to carry out this work.

▼ Table 5. PayScale marginal costs for provider paperwork

City	Fixed Paperwork Costs	Per-Child Paperwork Costs	Per-Group Paperwork Costs	Per-Employee Paperwork Costs
Cincinnati	\$42	\$9	\$775	\$11
Columbus	\$42	\$9	\$775	\$11
Canton	\$37	\$8	\$675	\$10

Another way to estimate the ability of providers to absorb the cost of paperwork is to evaluate the capacity that programs will have to conduct paperwork with the resources provided by marginal subsidy bonuses.

After subtracting education and training costs from the 1-star rating subsidy bonuses, centers with only a director and one teacher (thus the most capacity-constrained) would still have 11 hours of center director wages in Canton and 16 hours of center director wages in Cincinnati to do paperwork with *just one child who receives PFCC at nine months of education over the course of the year*, assuming an 85% collection rate for state payments. The collection rate would have to drop to 50% to dry up all extra paperwork hours in Canton and would have to drop to 40% to drop to zero resources for paperwork for Cincinnati centers. Columbus center director wage premium for CDA mean a center needs three children receiving PFCC to get into that range of subsidized hours for paperwork. Centers in all three simulated environments would have a surplus of a few thousand subsidy dollars to cover paperwork costs at nine children receiving PFCC as shown in Figure 4.

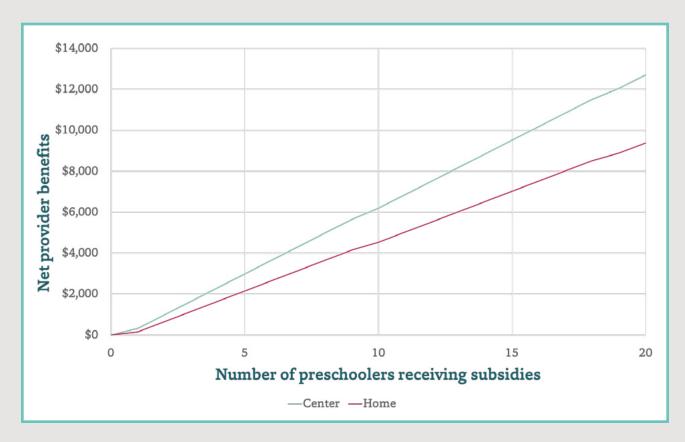


▲ Figure 4. Hours available for paperwork increase with more subsidized preschool spaces.

Section 2: Return on costs

Provider-Level Cost/Benefit Calculation: Subsidies provide benefits to child care providers – more money enables them to do their job better, yet any regulatory system, no matter how worthwhile, enacts costs that can take away from time spent directly on caregiving and educating. The graph below depicts provider net benefits for entering into SUTQ, as defined by the additional benefits providers receive in subsidies minus the education, training, and paperwork costs borne by providers, in short, the benefits of subsidies minus the cost of regulation.

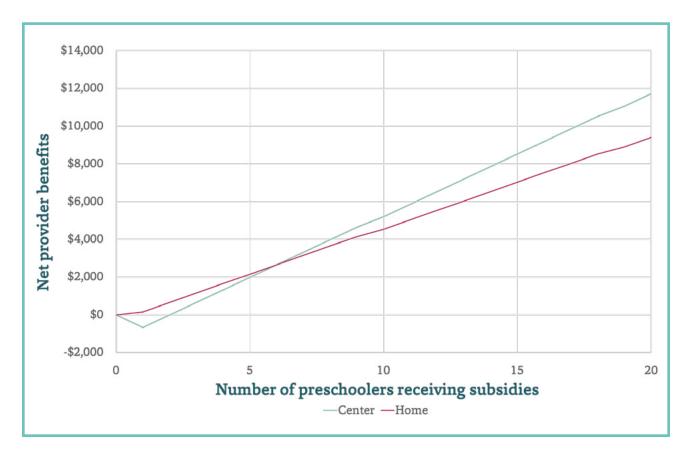
Figure 5 is a model for net benefits of 1-star certification for a Cincinnati preschool with different numbers of preschoolers receiving PFCC with a student-to-teacher ratio of no more than 9:1, a group size of no more than 18, and collection of 85% of subsidies owed.



↑ Figure 5. More subsidized spaces means more benefits for providers (SUTQ 1-Star Net Benefits for Cincinnati providers, Crane Center Provider Benefit Model).

In relatively high-cost Cincinnati, the breakeven point for centers is about two children and for homes is about three children as shown in Figure 5. Additional children utilizing PFCC (after the first) lead to higher benefits for providers, averaging almost \$700 for every child after the first for center-based providers and almost \$500 for each additional child for home-based providers. This disparity is due to different subsidy rates for centers and homes, even though their regulatory costs are the same.

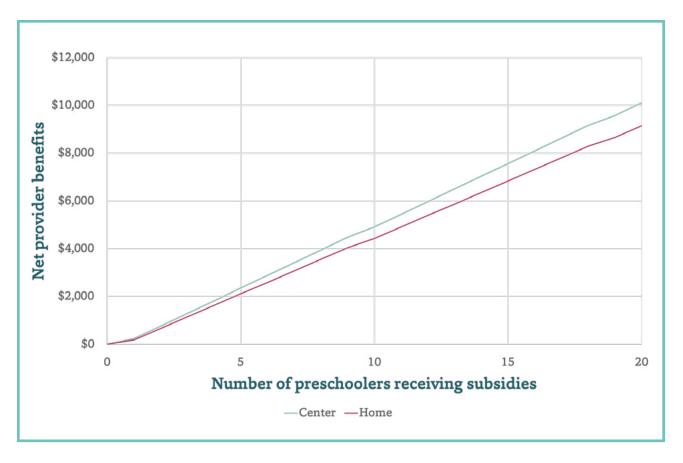
This distinction creates an incentive for creation of center-based care over home-based care. This annual incentive amounts to a couple hundred dollars for a provider with a few PFCC spots, while center reimbursement rates lead to an increase of more than a \$3,000 difference in subsidies between centers and homes with 20 PFCC spots. This difference in subsidy rates could encourage creation of large child care centers over large family child care providers in the Cincinnati area.



↑ Figure 6. Small providers in Columbus incentivized to organize as family homes (SUTQ 1-Star Net Benefits for Columbus providers, Crane Center Provider Benefit Model).

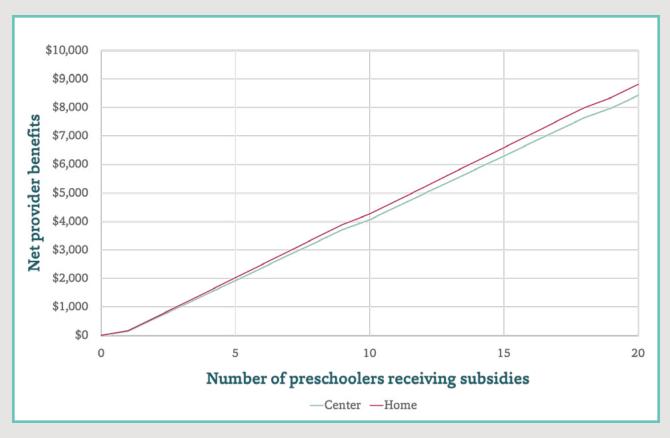
As shown in Figure 6, the model for medium-cost Columbus looks a little different than the Cincinnati model. This is because, while reimbursement rates are the same, the wage environment in Columbus raises the average wage of a center director by \$1,000 when a CDA is required, as SUTQ 1-star ratings require. This means that a 1-star center only receiving a subsidy for one child would not only receive less net benefits than a home-based provider (which does not have the CDA requirement for 1-star rating) with one child, but is the only scenario we modeled where centers would lose money by receiving a 1-star certification. If a center adds a second PFCC spot though, their balance sheet gets into the black, and by six subsidized spaces, benefits to certification for center-based providers equals that of home-based providers.

Overall, this means that there is a slight incentive under SUTQ 1-star regulations and subsidies for very small providers with less than six children receiving PFCC to organize as home-based programs while providers of seven or more have a smaller but still increasingly significant incentive to organize as a center-based program.



↑ Figure 7. Incentives to organize as centers are smaller in Canton (SUTQ 1-Star Net Benefits for Canton providers, Crane Center Provider Benefit Model).

Figure 7 shows that net benefits for SUTQ 1-star rating in low-cost Canton are very similar to those in Cincinnati, with just two or three preschoolers who receive PFCC covering the fixed costs of certification. The difference in reimbursement rates between centers and homes, however, are smaller in Canton than in Cincinnati and Columbus, resulting in an incentive to reorganize at less than a third the size in Canton as in Cincinnati. This incentive still increases with more subsidized spaces, growing to about \$1,000 as providers near 20 PFCC-subsidized spots.

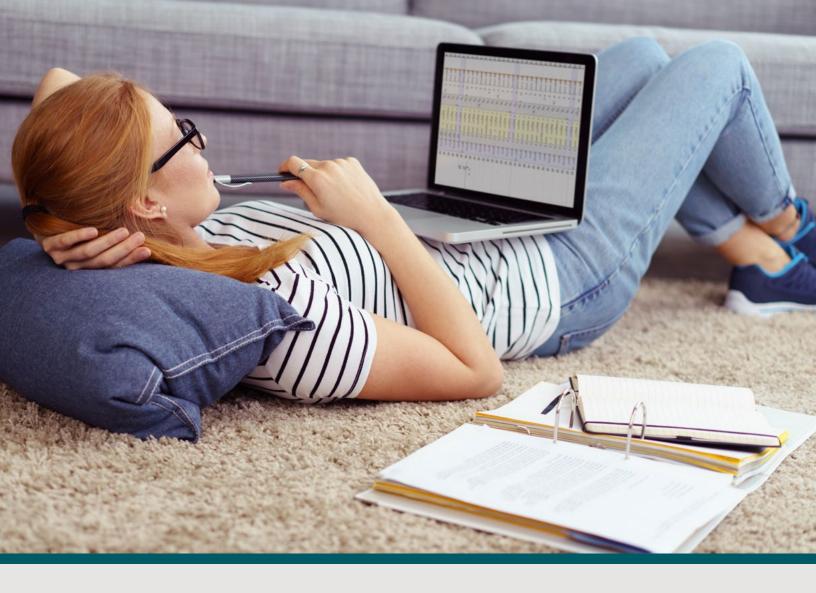


↑ Figure 8. Defiance subsidy schedule provides small incentive for providers to organize as a home (SUTQ 1-Star Net Benefits for Defiance providers, Crane Center Provider Benefit Model).

Though these three models show how SUTQ regulations and subsidies would impact providers in a high-, medium-, and low-cost area of the state, the state has a different tier of subsidies for a group of 20 predominantly rural counties. In order to model the impact of this subsidy schedule in a representative county, we modeled providers in Defiance, Ohio, as shown in Figure 8.

Centers in Defiance face the same costs as centers in Canton since, according to PayScale data, center manager and teacher costs are the same in both cities, and a provider in either city faces the same training and paperwork costs. The difference between the two cities is the different subsidy schedule providers enjoy. Defiance providers realize smaller net benefits than Canton providers. Also, this is the only area we modeled that showed a slight incentive for providers to organize as family child care providers: the higher reimbursement rate for preschoolers in family child care gives a slight advantage to providers organizing as home-based providers rather than center-based providers. This advantage, though, is less than half as large as the advantage centers hold over family child care in Canton and only one ninth the size of the advantage centers hold over family child care in Cincinnati.

In all models, these estimates would lead to larger benefits for infants and toddlers since quality bonuses are larger for infants and toddlers while costs are the same.



Discussion

Overall, these results suggest that costs levied by SUTQ 1-star credentialing pay off, so to speak, in exchange for increased subsidies. This was true for most scenarios we examined, though plenty of others across the state may warrant further study. Even the most expensive costs created by CDA requirements in Columbus are covered by the quality bonus of a few children receiving PFCC, with the rest leading to profits for providers.

These results suggest that the return on investment of Ohio's PFCC centers is there, financially speaking, and that programs which take on more children receiving PFCC will reap the benefits faster. There may be other reasons that programs opt to not increase PFCC spaces, but the costs imposed by SUTQ's regulations should not be one of them.



Costs that could nonetheless deter providers from taking part thus may stem from problems with information or misperception about costs of SUTQ 1-star credentialing. Assistance with credentialing could include awareness raising about the financial benefits and help to reduce barriers to entry to SUTQ which would ultimately improve the child care market under current SUTQ regulations.

We also find that costs levied by regulations are similar for family child care providers and child care centers. This means that there is an incentive for providers to organize as centers to receive higher reimbursement rates even though they face nearly the same regulations. This is more pronounced in Cincinnati and Columbus than in Canton and increases with the size of the provider: subsidy bonuses add up as the provider adds more subsidized spaces to its program.



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