Subsidy Policies and the Quality of Child Care Centers Serving Subsidized Children

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Over 1.4 million children from low-income families are in child care arrangements subsidized by federal and state governments through the Child Care and Development Fund (CCDF). Their development is affected by the quality of these arrangements, as children benefit from the supportive learning environments found in higher-quality programs. States have broad discretion in setting subsidy policies, and policies vary considerably from state to state. A key question is whether there is an observable relationship between the quality of child care centers serving subsidized children and state subsidy policies, such as the level of subsidy reimbursement rates, the use of tiered reimbursements to incentivize quality improvement, or the practice of paying for care when children are absent.

Findings from a statistical analysis of the 2012 National Survey of Early Care and Education (NSECE) generally reveal the expected relationships between state subsidy policies and the quality of centers participating in the subsidy program. That is, **the quality of these child care centers is higher in states with higher reimbursement rates and a larger gap between their highest and lowest reimbursement tiers, even after controlling for a variety of other state differences.** Although quality is measured using proxy indicators and we cannot be sure that the observed associations are causal, our findings suggest that state agencies can affect the quality of centers participating in the subsidy system through their policy choices regarding rates and related payment policies.

Findings and methods are highlighted in this brief, and a fuller description of study methods and findings can be found in our final report (Greenberg et al. 2018).

Findings at a Glance

Our key finding is that money matters: **payment rates are associated with the quality of centers accepting subsidized children.** Specifically, a $100 increase in a state's maximum monthly reimbursement rate for center-based care for 4-year-old children is associated with a 30 percent increase in the likelihood that centers serving subsidized children will meet our summary measure for quality (see box 1). In addition, among states that have tiered reimbursement policies—that is, they pay higher rates to centers that meet certain quality criteria—a $100 increase in the difference between payment rates in the lowest and highest tiers is associated with a 40 percent increase in the likelihood that centers serving subsidized children would be of higher quality. Finally, continuing payments during child absences is also associated with an increase in quality among centers serving subsidized children.

BOX 1

How Did We Measure Quality?

We classified a center as being of "higher quality" if it met at least two of the following three indicators:

- The center reports having a quality rating from a state or local agency or another institution.
- The center uses a specific curriculum, which demonstrates a programmatic commitment to quality.
- Teaching staff are provided with support for professional development through paid time off or financial support.

Although none of these three measures is a complete measure of quality, we expect that centers that meet at least two measures are generally of higher quality than centers that do not.

Other payment policies hypothesized to raise child care quality by increasing the levels and stability of provider revenues, such as the presence of a tiered reimbursement system, a greater use of contracted care, or continuing payments when centers are closed, did not have statistically significant relationships with our summary measure of quality.

These findings are from statistical analyses where we control for many other variables that might affect the quality of providers serving subsidized children, including state licensing standards, state-level CCDF funding per child, cost of living, state economic conditions, community-level poverty and urbanicity, and provider characteristics (e.g., program size, funding sources, and the socioeconomic status of children enrolled). This rich set of controls reduces but does not eliminate the possibility that our findings are explained by unobserved factors that influence both provider quality and subsidy policies.

Background and Motivation for Research

Quality matters. A large body of research has found that children who attend higher-quality child care programs have improved child development outcomes, particularly with regard to math and literacy skills (see, for example, Yoshikawa 2013). Moreover, the benefits of quality programs are greater for children from low-income families (Phillips et al. 2017), and many of these children are in child care arrangements subsidized by federal and state governments through the CCDF.

To enhance the quality of child care programs and services, federal law requires states to spend a certain amount of CCDF funds on quality improvement activities (4 percent in fiscal year 2015, rising to 9 percent in fiscal year 2020), and state policymakers devote considerable attention to strategically spending these funds. Yet the bulk of CCDF funds are not spent on quality improvement initiatives but on direct funding for child care subsidies. States have considerable latitude in how these funds are spent and must make difficult policy choices about subsidy reimbursement rates, income eligibility limits, family copayment amounts, and administrative procedures. In setting these policies, state administrators usually try to stretch their limited dollars to meet the competing goals of serving more working families, keeping care affordable, and improving quality of care.

The economic realities facing child care providers suggest that raising the subsidy reimbursement rate ceiling may result in higher quality of care among providers participating in the subsidy system. Many quality improvements (e.g., hiring additional staff to lower the child-to-staff ratio, paying for staff training, acquiring curriculum materials, etc.) would increase operating costs for providers. Thus, the decision to invest in quality is, in part, a financial one. The decision to accept subsidized children also has financial implications. State-set maximum reimbursement rates are often low relative to market rates for high-quality care, and providers with rates higher than the rate ceiling must either accept payment rates below what they charge private-paying parents or opt not to participate in the subsidy system. In addition, providers may hesitate to participate because revenues over the course of a year may be lower or less stable from subsidized families than from private-paying families because of state subsidy policies (e.g., no payment for child absences or short eligibility periods that cause families to frequently lose eligibility). There may also be administrative costs associated with receiving public subsidies. About one-third of all centers surveyed by the NSECE (that is, centers serving children ages 5 and under) served at least one subsidized child; the rest did not accept CCDF subsidies (Greenberg et al. 2018).

The question motivating this study is whether state policymakers could improve the quality of subsidized care by raising payment rates and adopting "provider-friendly" policies that increase the level and stability of funding and reduce administrative costs. The logic behind this is threefold:

- Higher subsidy payments and more provider-friendly policies might **persuade high-quality providers with higher costs to begin participating in the public subsidy program.**
- Higher revenue and a more stable revenue stream for subsidized children might **help participating centers afford and sustain quality improvements.**

- Tiered reimbursement systems (where providers with certain observable aspects of quality receive higher subsidy payment) may **increase the quality of providers serving subsidized children** by bringing in new, high-quality providers or by incentivizing current providers to invest in quality improvement.

This remainder of this brief outlines the subsidy policies we examined and how we measured quality. We then present our findings, first on the variation in subsidy policies and then on the relationship between these subsidy policies and child care quality in centers serving subsidized children. We conclude with a discussion of policy implications.

Study Approach

We use multivariate regression techniques to examine whether the quality of providers serving subsidized children, as measured in the NSECE, is associated with differences in state subsidy policies. These policies are compiled in the CCDF Policies Database, a comprehensive database of CCDF policies funded by the Office of Planning, Research, and Evaluation and maintained by the Urban Institute.[1]

What State Subsidy Policies Were Examined

Using the CCDF Policies Database, we identified several state subsidy payment policies that would logically be expected to affect the level or stability of subsidy funding and thus increase the likelihood that providers serving subsidized children would be of higher quality:

- the dollar amount of **subsidy reimbursement rates**
- whether a state has **tiered reimbursement rates** tied to the use of quality rating and improvement systems
- the **difference between payment rates in the lowest and highest tiers** of a tiered reimbursement system
- the share of subsidies provided through **contracted care**, as opposed to vouchers
- a **provider-friendly policy index,** measuring how many of the following policies states have documented in their policy manuals:
  - payment for days children are absent
  - payment for days programs are closed (e.g., holidays)
  - a maximum redetermination period of 12 months (as opposed to a shorter period)
  - family fee policies requiring families to pay any difference between provider tuitions and maximum reimbursement rates

Further information on these policies—why they were selected and their values for specific states—is provided below in our section describing the variation in state policies. We analyzed state policies

that were in effect during fiscal year 2012 (specifically, those in place as of October 2011) to align with our data on quality.

How Quality Was Measured

To examine the quality of child care providers accepting subsidized children, we relied on the National Survey of Early Care and Education (NSECE), which provides a nationally representative picture of center- and home-based providers, including some providers participating in the subsidy system. The NSECE data were collected in 2012, providing a baseline view of quality before the CCDF reauthorization. Though rich in data, the NSECE did not measure quality through direct observation. Therefore, we are limited to measuring quality through proxy indicators that are generally correlated with quality. Specifically, we classify providers as being of "higher" or "lower" quality based on whether they met at least two of the following three indicators:

- The provider reports having a quality rating from a state or local agency or another institution.
- The provider uses a specific curriculum, which demonstrates a programmatic commitment to quality.
- Teaching staff receive support for professional development through paid time off or financial support.

We expect that providers that meet at least two of these measures are generally of higher quality than centers that do not, even though the measures do not individually or collectively provide a comprehensive measure of quality. We found that 66 percent of centers serving subsidized children and 39 percent of home-based providers met at least two of these quality criteria in 2012. This brief focuses on the relationship of policies to our summary measure of quality among approximately 2, 640 center-based providers who reported serving at least one child with CCDF subsidy funding at the time of the survey. Our full report examines quality using a variety of different measures in both centers and homes (Greenberg et al. 2018).

Variation in State Subsidy Policies

State subsidy reimbursement rates and other policies related to subsidy payments vary considerably across the 50 states and the District of Columbia. All findings are based on data collected in 2012, before the reauthorization of the Child Care and Development Block Grant.

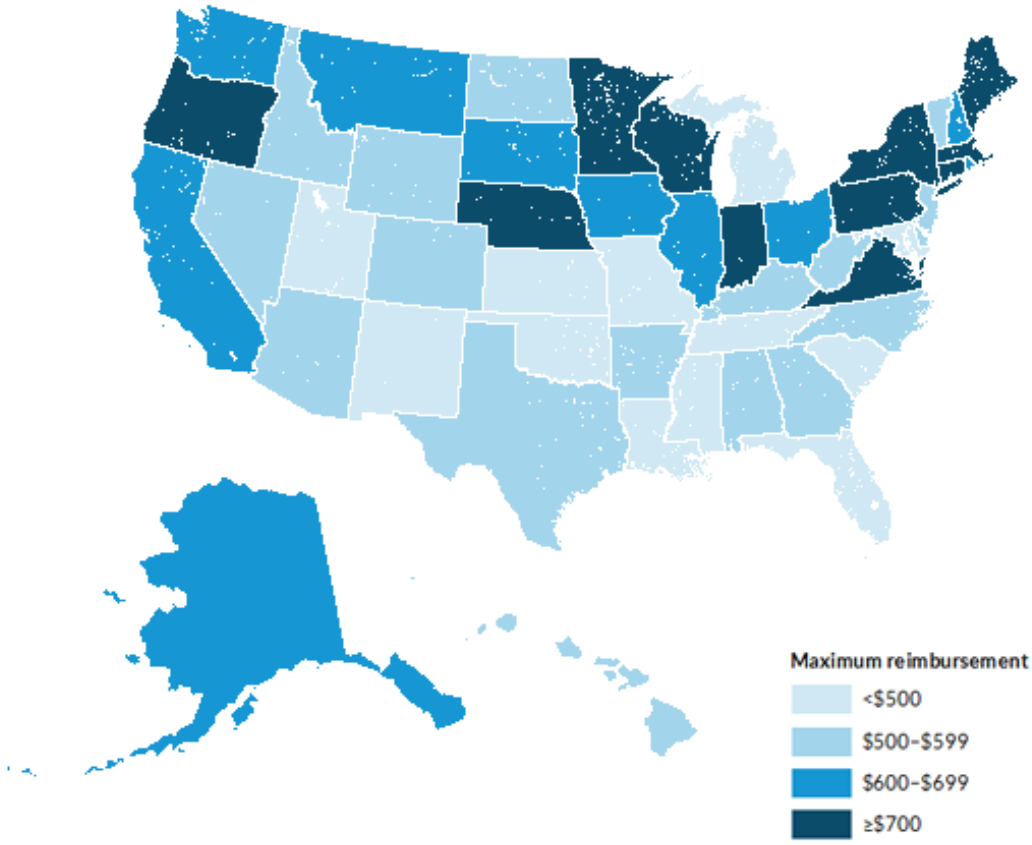
Subsidy Reimbursement Rates

Consistent with other studies, we found wide variation in the maximum reimbursement rate that establishes the ceiling for how much states reimburse centers that care for subsidized children. For example, the maximum monthly reimbursement for 4-year-olds in center-based care ranges from $292 in Oklahoma to $940 in New York (in unadjusted dollars). For our statistical analysis, we adjusted these

rates to account for state-to-state differences in cost of living. A dollar buys more in some states, such as Mississippi and Iowa, than it does in more expensive states such as Hawaii and New York. The range narrowed slightly from $325 in Oklahoma to $882 in Minnesota after adjusting for regional price parities. Northern states generally have higher reimbursement rates than southern states, even after adjusting for cost-of-living differences (see figure 1). States with higher reimbursement rates may be able to attract more high-quality centers to participate in their subsidy programs.

FIGURE 1

State Variation in Subsidy Reimbursement Rates



Source: The CCDF Policies Database.
Notes: Shading indicates reimbursement rates for center-based care for a 4-year-old child as of October 2011, adjusted for regional price parities.

Tiered Reimbursement Rates

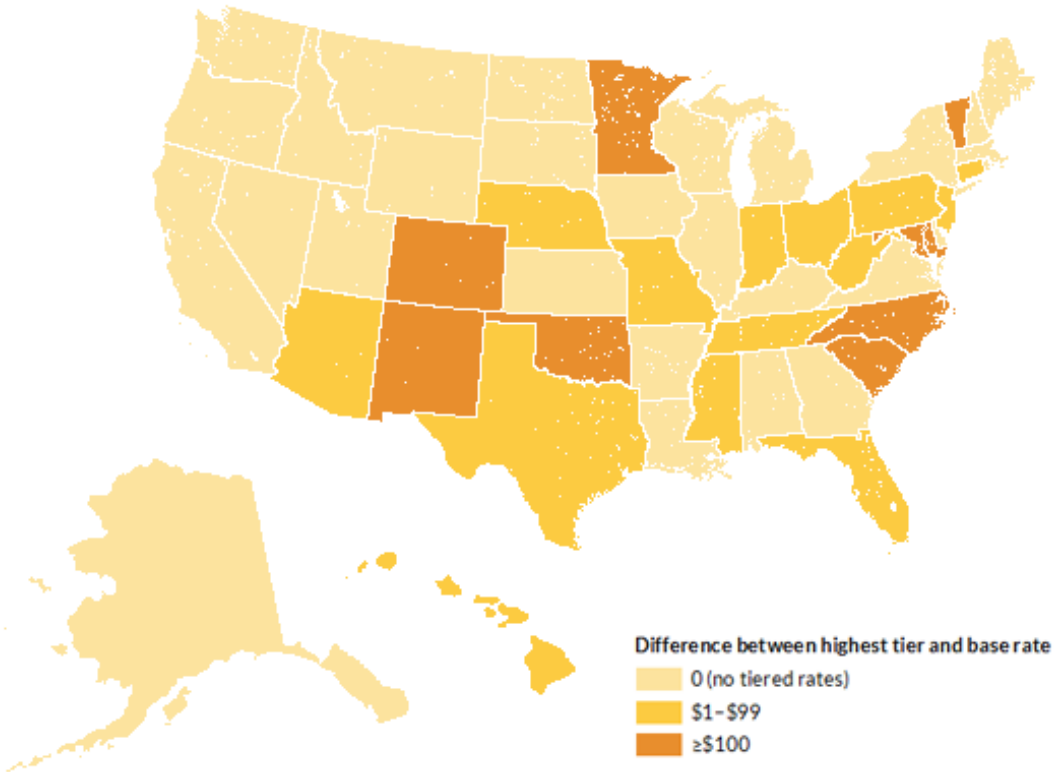
At the time of data collection for the NSECE, 22 states and the District of Columbia had tiered reimbursement policies offering higher reimbursement rates to providers meeting higher quality standards. Sometimes, the difference between the lowest and highest tiers was quite modest: $26 in Texas, $27 in New Jersey, $30 in Hawaii, and $31 in Mississippi (these amounts are for center-based

care for a 4-year-old and are adjusted for cost-of-living differences). In other states, providers in the highest tier were paid considerably more than the basic rate. In Oklahoma, center-based preschool care providers in the highest tier received more than twice as much (an additional $344 per month). Tiered reimbursement systems in South and North Carolina feature the second- and third-largest disparity between the highest and lowest tiers, at $258 and $246, respectively. As shown in figure 2, we find a moderate tendency for states with low "base" reimbursement rates to have a higher differential between payments for the highest and lowest tiers. However, there are exceptions to this pattern. Minnesota stands out as an example of a state with high subsidy rates and a large disparity between payments rates in the lowest and highest tiers.

We would expect the quality of subsidized care to be higher in states that associate greater financial rewards with higher levels of quality. The use of tiered reimbursement has grown in the past several years; as of October 2015, an additional 6 states had joined the previous 22 (and the District of Columbia) in using tiered reimbursements (Stevens et al. 2016).

FIGURE 2

State Variation in the Difference between Reimbursement Rates for the Highest and Lowest Tiers



Source: The CCDF Policies Database.

Notes: Shading indicates the difference between payments in the highest and lowest tiers of a tiered reimbursement system for center-based care for a 4-year-old child as of October 2011, adjusted for regional price parities.

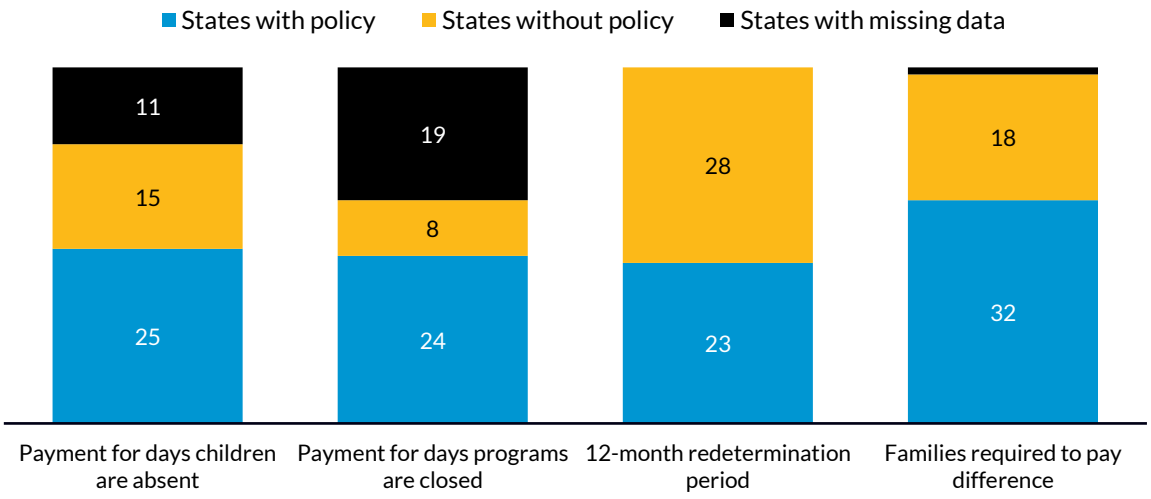
Contracted Care

Many states distributed their subsidies entirely through vouchers without the use of contracts. However, in 2012, California and Massachusetts distributed 40–42 percent of their subsidies through contracts, along with New York (25 percent) and seven other states that used contracts for between 1 and 18 percent of their subsidies (see table 1). We expect a positive association between use of contracts and higher-quality care because contracts provide a more stable revenue stream for providers, and some states require higher standards for contracted centers and/or provide higher payments. However, contracts are also used to increase supply in underserved areas, to serve populations with special needs (e.g., families involved with child welfare services in Massachusetts), and for other purposes (National Center on Child Care Subsidy Innovation and Accountability 2016; Schumacher, Irish, and Greenberg 2003). Moreover, it may be difficult to reliably estimate associations between contracts and quality given that so few states used contracts in 2012.[2]

Index of Provider-Friendly Policies

FIGURE 3

States with Selected Provider-Friendly Policies



Source: The CCDF Policies Database.
Notes: States were classified as having missing data if there was no information in the policy materials collected by the Urban Institute and no additional materials were obtained during the period when state and territory contacts reviewed the preliminary tables of policies. Policies are as of October 2011.

Finally, our analysis of the four provider-friendly policies detailed above suggests that six states (Florida, Louisiana, Missouri, New Jersey, North Carolina, and South Carolina) had all four policies in place in 2012. These states paid providers for days children were absent, paid providers for days programs were closed, had a 12-month maximum redetermination period (as opposed to a 6- or 8-month period), and allowed providers to charge families the difference between subsidy payment rates

and rates charged to private-paying families. For the purposes of this index, if state policy manuals were silent on a policy and further information was not provided by the state, the state was grouped with those that did not have the policy. As shown in figure 3, several states had missing data on policies related to paying for child absences and program closures.

Table 1 breaks down the policies examined in the study by state. Our selection of variables was guided by our understanding of the economic realities facing providers as well as data availability. Payment for days that children are absent or programs are closed was included in the provider-friendly policies index because these policies increase the stability and amount of revenue. A 12-month maximum certification period was viewed as more provider friendly than a 6- or 8-month period because it reduces the likelihood that subsidized children will leave care after short spells and may also reduce administrative burdens associated with recertification. However, note that the 12-month certification period reported here differs significantly from the requirements of the Child Care and Development Block Grant (CCDBG) Act of 2014; it represents a "maximum" certification period, and actual redetermination periods are often shorter for many families (Adams, Snyder, and Banghart 2008). Finally, allowing providers to charge families the difference between the subsidy payment rate and the rate for private-paying families could have positive effects on the quality of care provided to subsidized children if it persuades more high-quality providers to participate or supplies participating providers with additional revenue. However, it could have a negative effect on low-income families' access to higher-quality care if the higher cost of that care places a strain on their finances.

TABLE 1

State Subsidy Rates and Selected Policies

	Maximum reimbursement rate ($, adjusted for RPP)		Tiered reimbursement system	Difference between highest and lowest tiers ($, adjusted for RPP)	Share of subsidies that are contracted (%)	Provider-friendly policy index score (0–4)
Alabama	442	502	No	0	0	2
Alaska	650	607	No	0	0	3
Arizona	516	526	Yes	52	0	2
Arkansas	457	522	No	0	0	2
California	744	659	No	0	42	2
Colorado	520	512	Yes	174	0	2
Connecticut	770	704	Yes	35	0	1
Delaware	574	561	No	0	0	2
District of Columbia	633	536	Yes	234	0	3
Florida	403	408	Yes	82	0	4
Georgia	494	537	No	0	0	2
Hawaii	675	576	Yes	30	0	1
Idaho	492	526	No	0	0	1
Illinois	688	684	No	0	5	0
Indiana	693	761	Yes	77	1	3
Iowa	561	627	No	0	0	2
Kansas	395	439	No	0	0	2
Kentucky	455	512	No	0	0	3

	Maximum reimbursement rate ($, adjusted for RPP)		Tiered reimbursement system	Difference between highest and lowest tiers ($, adjusted for RPP)	Share of subsidies that are contracted (%)	Provider-friendly policy index score (0–4)
Louisiana	385	421	No	0	0	4
Maine	810	824	No	0	0	1
Maryland	474	426	Yes	111	0	3
Massachusetts	795	742	No	0	40	2
Michigan	433	459	No	0	0	3
Minnesota	860	882	Yes	132	0	3
Mississippi	312	361	Yes	31	3	2
Missouri	354	402	Yes	79	0	4
Montana	624	662	No	0	0	2
Nebraska	672	746	Yes	72	0	1
Nevada	498	507	No	0	18	2
New Hampshire	713	671	No	0	0	1
New Jersey	573	502	Yes	27	6	4
New Mexico	379	400	Yes	134	0	0
New York	940	815	No	0	25	3
North Carolina	477	521	Yes	246	0	4
North Dakota	486	538	No	0	0	1
Ohio	570	639	Yes	96	0	2
Oklahoma	292	325	Yes	344	0	0
Oregon	705	714	No	0	10	1
Pennsylvania	715	724	Yes	55	0	2
Rhode Island	680	689	No	0	0	0
South Carolina	390	430	Yes	258	0	4
South Dakota	546	619	No	0	1	1
Tennessee	426	470	Yes	95	0	2
Texas	508	526	Yes	26	0	3
Utah	450	465	No	0	0	1
Vermont	562	557	Yes	222	0	3
Virginia	845	819	No	0	0	3
Washington	684	663	No	0	0	1
West Virginia	460	519	Yes	90	0	0
Wisconsin	774	833	No	0	0	3
Wyoming	532	552	No	0	0	1

Sources: The CCDF Policies Database and "FY 2012 Final Data Table 2 - Percent of Children Served by Payment Method," US Department of Health and Human Services, Administration for Children and Families, Office of Child Care, last updated October 8, 2014, https://www.acf.hhs.gov/occ/resource/fy-2012-ccdf-data-tables-final-table-2.

Notes: RPP = Regional Price Parities. Regional Price Parities are developed by the Bureau of Economic Affairs to adjust for cost-of-living differences across states. The data are for policies in effect as of October 2011 (or fiscal year 2012, covering October 2011 through September 2012). The provider-friendly index measures how many of the following four policies states had in place: payment for days children are absent, payment for days programs are closed, maximum redetermination period of 12 months, and family fee policies requiring families to pay any difference between provider tuitions and maximum reimbursement rates.

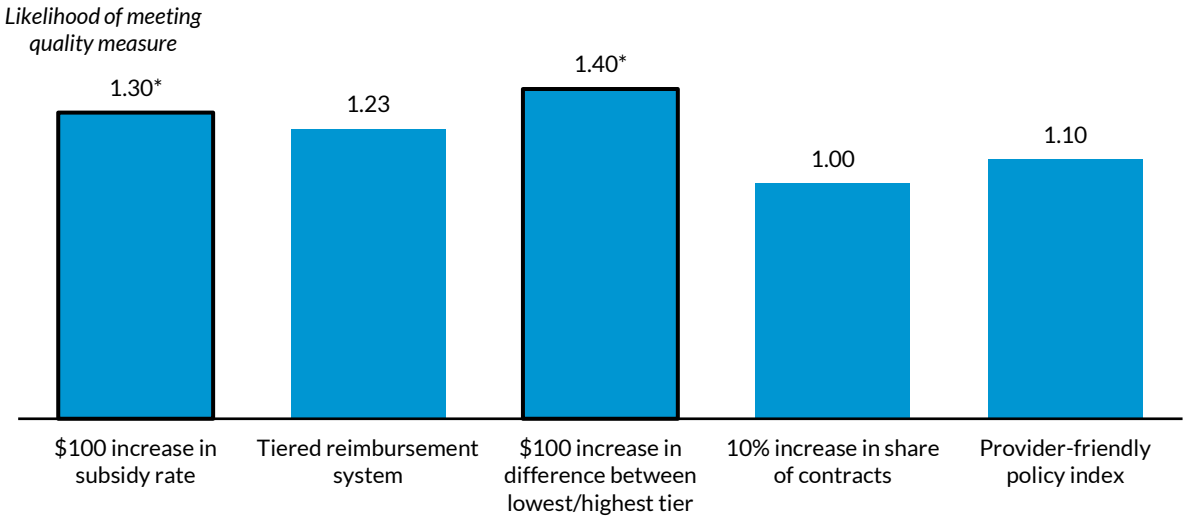
Relationship between Subsidy Policies and Quality of Care

Our key finding is that money matters for the quality of centers serving subsidized children. Specifically, a $100 increase in a state's monthly reimbursement rate for center-based care for 4-year-old children is associated with a 30 percent increase in the likelihood that centers participating in the subsidy system will meet our proxy measure for quality. In addition, a greater difference between base and maximum rates under tiered reimbursement policies is associated with gains in child care quality. A $100 increase in the difference between payment rates in the lowest and highest tiers is associated with a 40 percent higher likelihood of providers meeting our summary quality measure (see figure 4). These findings are both statistically and practically significant.

FIGURE 4

Associations between Subsidy Policies and Quality in Centers Serving Subsidized Children

Results from multivariate regression analysis



Sources: The CCDF Policies Database and the National Survey of Early Care and Education.
Notes: Control variables include provider-, neighborhood-, and state-level characteristics. A 1.30 coefficient associated with a $100 increase in the subsidy rate means the policy is associated with a 30 percent increase in the likelihood of subsidy-receiving centers meeting the quality measure.
* = $p < 0.05$. Other coefficients are not statistically significant.

In contrast, use of a tiered reimbursement system has only a weak association with quality, one that is in the expected positive direction but is not statistically significant. It seems that the payment rates of the tiers, not the existence of tiers, is what is associated with quality.

Other policies were less associated with quality. Providing subsidy payments through contracts rather than vouchers was not associated with our summary measure of quality. Additional analyses

reported in the full study suggest that increasing the share of contracted providers may be associated with some components of quality, including the use of a curriculum and staff turnover (Greenberg et al. 2018). Our index of provider-friendly policies also does not appear to predict any of the indicators of provider quality. However, when we look at each policy separately (in analyses detailed in the final report), we do find that subsidy-receiving providers in states that pay for days that children are absent are twice as likely to meet our summary indicator of quality. None of the other payment policies were associated with quality when examined independently.

How Confident Are We in the Results?

These findings are the result of statistical analyses where we control for many other variables that might affect the quality of providers serving subsidized children, including state licensing standards, state-level CCDF funding per child, cost of living, state economic conditions, community-level poverty and urbanicity, and provider characteristics (e.g., program size, funding sources, and the socioeconomic status of children enrolled). This rich set of controls reduces but does not eliminate the possibility that our findings are explained by unobserved factors that influence both provider quality and subsidy policies.

Our confidence in our findings is strengthened because we found no significant relationship between subsidy policies and center quality when we ran our model on the sample of centers that *do not* serve subsidized children. If we had found such a relationship, we would have worried that unobserved factors were driving our results (unless we thought the higher subsidy rates had spillover effects on unsubsidized providers). As another check, we ran our models on the subgroup of center-based providers that serve large numbers of subsidized children (25 percent or more of their enrollment). Subsidy policies may be particularly influential for these providers, given how much of their revenue is determined by public policies. Results for these centers were similar to the results for all centers serving at least one subsidized child, increasing our confidence in our results.

However, there are important study limitations. First, our measure of quality is a proxy for the unobserved quality of centers accepting subsidized children. Although we expect that many centers that have a quality rating, support the professional development of their teachers, and use a defined curriculum provide high-quality care, some will not. Similarly, some centers that fail to meet our criteria may still be of high quality. Second, our measure of subsidy rates uses one rate per state, even though many states allow for intrastate variation. Where rates varied within a state, the CCDF Policies Database reports the rate in the county with the highest population. For example, the rate for New York State is based on the rate for New York City. Our statistical analysis would be stronger (and would give a better measure of the relationship between reimbursement rates and child care quality) if we had been able to capture intrastate variation. It is possible that rates are more closely associated with quality than found here. Third, although we controlled for state differences in child care licensing standards and cost of living, we did not specifically control for the market rate of child care (i.e., the rates paid by parents). (Data on market rates were not measured with sufficient cross-state consistency to use in our analysis). Fourth, there may be substantial variation between the policies on the books and on-the-ground implementation. As already noted, families in states with a 12-month maximum

certification period may still receive shorter certifications than that maximum. Finally, our study examines policies and child care quality observed in 2012, before the implementation of the CCDBG Act of 2014. Our findings regarding the 12-month maximum redetermination or use of contracts as observed in 2012 may not apply to the implementation of these policies after the 2014 legislation.

In sum, we have not proven a causal connection, but we have provided additional evidence supporting the theory that higher subsidy payments—in general and for providers meeting the highest standards of quality—can improve the quality of center-based care for children receiving child care subsidies.

Policy Implications

Our findings suggest that state policymakers striving to improve the quality of center-based care available to children receiving subsidies should consider how their subsidy payment rates and policies may be affecting providers, rather than focusing exclusively on initiatives conducted under CCDBG quality set-aside funding. If subsidy rates are low or if payment policies reduce the level and stability of revenue, high-quality providers may decline to participate and participating providers may find it financially challenging to invest in quality improvement.

The amount of the additional payment provided to centers that qualify for higher payments under a tiered reimbursement system is associated with the quality of centers participating in the subsidy system. Merely having a tiered reimbursement policy may not be sufficient unless the difference between payments in the lowest and highest tiers provides sufficient financial incentive for higher-cost providers to join the program and for existing providers to make and sustain costly investments in quality improvement.

Raising the level of all subsidy payments also appears to be positively associated with the quality of center-based care available to children using subsidies, which may lead some states to increase their subsidy payment levels. However, this policy lever is expensive for states and may lead them to restrict service to fewer families, barring increases in state funding. Moreover, our results suggest that a $100 increase in the difference in tiered rates may yield greater returns than raising all rates by the same amount (and at lower cost).

The lack of findings for other provider-friendly policies is harder to interpret. It is possible that these policies are not, in fact, associated with quality. Another possibility is that the relationship between the policy and child care quality was not observable in our study because of data limitations (such as too few states adopting the policy, the policy not being adopted consistently throughout the state, or our measure of quality not capturing differences). For example, the 12-month maximum redetermination period may be linked with child care continuity but not with other measures of child care quality. It is also possible that a 12-month eligibility period would have a stronger association with quality if more consistently implemented across the state. A third possibility is that policies would be more strongly associated with quality if implemented differently. For example, although we did not

observe a difference in provider quality based on the share of contracted subsidies in a state, contracted care could still be a policy option to raise quality if contracts were constructed with that goal.

We hope that this exploratory analysis will encourage policymakers, administrators, and researchers to consider how subsidy rates and payment policies can influence the quality of child care supported through public subsidies.

Notes

[1] "CCDF Policies Database," Urban Institute, http://ccdf.urban.org/.

[2] Contract use has increased since 2012, partly as a result of Early Head Start-Child Care Partnership grants (National Center on Child Care Subsidy Innovation and Accountability 2016).

References

Adams, Gina, Kathleen Snyder, and Patti Banghart. 2008. *Designing Subsidy Systems to Meet the Needs of Families.* Washington, DC: Urban Institute.

Greenberg, Erica, Julia B. Isaacs, Teresa Derrick-Mills, Molly Michie, and Kathryn Stevens. 2018. *Are Higher Subsidy Payment Rates and Provider-Friendly Payment Policies Associated with Child Care Quality?* Washington, DC: Urban Institute.

National Center on Child Care Subsidy Innovation and Accountability. 2016. "Using Contracts and Grants to Build the Supply of High Quality Child Care: State Strategies and Practices." Washington, DC: US Department of Health and Human Services, Administration for Children and Families, Office of Child Care.

Phillips, Deborah A., Mark W. Lipsey, Kenneth A. Dodge, Ron Haskins, Daphna Bassok, Margaret R. Burchinal, Greg J. Duncan, Mark Dynarski, Katherine A. Magnuson, and Christina Weiland. 2017. *Puzzling It Out: The Current State of Scientific Knowledge on Pre-Kindergarten Effects.* Washington, DC: Brookings Institution.

Schumacher, Rachel, Kate Irish, and Mark H. Greenberg. 2003. *Untapped Potential? How States Contract Directly with Providers to Shore Up Child Care Choices for Low-Income Families*. Washington, DC: Center for Law and Social Policy.

Stevens, Kathryn, Sarah Minton, Lorraine Blatt, and Linda Giannarelli. 2016. *The CCDF Policies Database Book of Tables: Key Cross-State Variations in CCDF Policies as of October 1, 2015*, OPRE Report 2016-94, Washington, DC: US Department of Health and Human Services, Administration for Children and Families, Office of Planning, Research, and Evaluation.

Yoshikawa, Hirokazu, Christina Weiland, Jeanne Brooks-Gunn, Margaret R. Burchinal, Linda M. Espinosa, William T. Gormley, Jens Ludwig, et al. 2013. *Investing in Our Future: The Evidence Base on Preschool Education.* New York: Foundation for Child Development.

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