

# ENGAGING PROVIDERS AND CLIENTS

## Using Behavioral Economics to Increase On-Time Child Care Subsidy Renewals

OPRE Report 2015-73

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U.S. Department of Health and Human Services

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Contract Number: HHS-P23320095644WC-23337002T

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Suggested citation: Mayer, Alexander, Dan Cullinan, Elizabeth Calmeyer, Kelsey Patterson (2015). *Engaging Providers and Clients: Using Behavioral Economics to Increase On-Time Child Care Subsidy Renewals*. OPRE Report 2015-73. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

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## FUNDERS

MDRC is conducting the Behavioral Interventions to Advance Self-Sufficiency (BIAS) project under a contract with the Office of Planning, Research and Evaluation, Administration for Children and Families, in the U.S. Department of Health and Human Services (HHS), funded by HHS under a competitive award, Contract No. HHS-P23320095644WC-23337002T. The project officer is Emily Schmitt.

The findings and conclusions in this report do not necessarily represent the official positions or policies of HHS.

Dissemination of MDRC publications is supported by the following funders that help finance MDRC's public policy outreach and expanding efforts to communicate the results and implications of our work to policymakers, practitioners, and others: The Annie E. Casey Foundation, Charles and Lynn Schusterman Family Foundation, The Edna McConnell Clark Foundation, Ford Foundation, The George Gund Foundation, Daniel and Corinne Goldman, The Harry and Jeanette Weinberg Foundation, Inc., The JBP Foundation, The Joyce Foundation, The Kresge Foundation, Laura and John Arnold Foundation, Sandler Foundation, and The Starr Foundation.

In addition, earnings from the MDRC Endowment help sustain our dissemination efforts. Contributors to the MDRC Endowment include Alcoa Foundation, The Ambrose Monell Foundation, Anheuser-Busch Foundation, Bristol-Myers Squibb Foundation, Charles Stewart Mott Foundation, Ford Foundation, The George Gund Foundation, The Grable Foundation, The Lizabeth and Frank Newman Charitable Foundation, The New York Times Company Foundation, Jan Nicholson, Paul H. O'Neill Charitable Foundation, John S. Reed, Sandler Foundation, and The Stupski Family Fund, as well as other individual contributors.

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## OVERVIEW

The Behavioral Interventions to Advance Self-Sufficiency (BIAS) project is the first major opportunity to use a behavioral economics lens to examine programs that serve poor and vulnerable families in the United States. Sponsored by the Office of Planning, Research and Evaluation of the Administration for Children and Families in the U.S. Department of Health and Human Services, and led by MDRC, the project applies behavioral insights to social service programs and policies to learn how behavioral science can be used to deliver programs more effectively and improve the well-being of low-income children, adults, and families.

This report presents findings from a study designed in partnership with the Oklahoma Department of Human Services (DHS) to increase the number of clients who renew their child care subsidy on time. Only about one-third of an estimated 39,000 child care subsidy cases that are eligible for renewal each year in Oklahoma are renewed by the state's deadline. If a client fails to renew on time, DHS ceases payments to providers on behalf of the client. Providers can then require their clients to pay the amount of the subsidy in addition to any copayments. If clients do not pay the full cost of child care, providers may temporarily withhold services or clients may lose their place in the child care facility. On-time renewals, therefore, ensure consistent child care for families, stable payment for providers, and a reduced administrative burden for DHS.

The BIAS team diagnosed factors that might inhibit on-time renewal and designed three interventions for improvement: (1) a “provider intervention,” which gave child care providers more information about their clients’ renewal deadlines and prompted them to send reminders about and help clients with renewal; (2) a “client intervention,” which used early and clear communication to clarify the renewal process and continued follow-up communication; and (3) a “combined intervention,” which included both the client and provider interventions.

The interventions were tested in a randomized controlled trial including more than 9,000 clients who were randomly assigned to a client-only group (clients who received the client intervention but whose providers did not receive the provider intervention); a provider-only group (clients who did not receive the client intervention but whose providers received the provider intervention); a combined intervention group (clients who received the client intervention *and* whose providers received the provider intervention); and a control group (clients who were not exposed to any intervention on either the client or provider side).

### Key Findings

- The evidence suggests that the *provider intervention* helped clients renew on time, at an estimated cost of \$1.10 per provider per month, or approximately \$29,724 per year if extended to all providers in Oklahoma.
- The *client intervention*, which cost about \$1.00 per client, did not appear to improve on-time renewal, but it may have helped clients renew by the end of a 30-day grace period following the renewal deadline.
- Combining the client and provider interventions did not appear to be more effective than either intervention alone.

These findings suggest that behavioral strategies designed for staff who work directly with clients may be a fruitful area for future research.

# ACKNOWLEDGMENTS

The authors would like to thank several individuals at the Office of Planning, Research and Evaluation of the Administration for Children and Families in the U.S. Department of Health and Human Services. Emily Schmitt in particular was very helpful throughout the project. Mark Fucello, Brendan Kelly, and Jason Despain also provided useful suggestions during the early phases of the project, and Amanda Benton and Naomi Goldstein offered insightful comments on drafts of this report.

Many people contributed to the success of this project, particularly our partners at the Oklahoma Department of Human Services, including Debi Ream, Jim Struby, James Conway, Charles Pruett, Jennifer Dalton, Chad Lattin, and Helen Goulden. Drew McDermott and Eskedar Getahun, both formerly at MDRC, played important roles during the early phases of the project. Sebastien Gay provided helpful assistance in developing the interventions. Pete Novello consulted on the design of the intervention materials. Dilip Soman, Deborah Small, and Claire Tsai also provided valuable consultation during the design of the study.

We are also grateful to many MDRC staff members. Lashawn Richburg-Hayes and Nadine Dechausay provided excellent guidance and feedback throughout the project. In addition, Caitlin Anzelone, Gordon Berlin, Christopher Boland, David Butler, Asaph Glosser, Barbara Goldman, Patrick Landers, Erika Lundquist, Charles Michalopoulos, and Leigh Reardon of MDRC reviewed early drafts of the report and offered helpful critiques throughout the writing process. Mark Kaplan and Nikki Gurley helped with data processing. We thank the publications staff for their assistance, especially Alice Tufel, who edited the report, and Stephanie Cowell and Carolyn Thomas, who prepared it for publication. Daniella van Gennep did the design work.

The Authors

# EXECUTIVE SUMMARY

The Behavioral Interventions to Advance Self-Sufficiency (BIAS) project, sponsored by the Office of Planning, Research and Evaluation of the Administration for Children and Families (ACF) in the U.S. Department of Health and Human Services, is the first major opportunity to use a behavioral economics lens to examine programs that serve low-income families in the United States. Led by MDRC, the project applies behavioral insights to issues related to the operations, implementation, and efficacy of selected social service programs and policies, with the ultimate goal of learning how tools from behavioral science can be used to improve the well-being of low-income children, adults, and families.

This report presents findings from a study designed in partnership with the Oklahoma Department of Human Services (DHS) to increase the number of clients who renew their child care subsidy by their renewal deadline. The BIAS team and DHS designed three interventions to try to increase on-time renewals: one for DHS child care subsidy clients, one for child care providers who serve DHS clients, and one that combines the client and provider interventions. This pilot is the only BIAS study to date to evaluate an intervention designed for staff, in this case child care providers.

## BIAS Diagnosis and Design Process

The BIAS team used a method called “behavioral diagnosis and design” to identify potential behavioral obstacles — or “bottlenecks” — related to on-time child care subsidy renewal.<sup>1</sup> The behavioral diagnosis and design process comprises four phases:

1. *Define*: The project team defines the problem in a way that is precise enough to be testable.
2. *Diagnose*: The team collects both qualitative and quantitative data to identify factors that may be causing the problem.
3. *Design*: The team suggests theories based on behavioral research about why bottlenecks are occurring and uses behavioral insights to develop an intervention (or multiple interventions).
4. *Test*: The team evaluates the behavioral intervention using rigorous scientific methods.<sup>2</sup>

The BIAS team applied this process to the child care subsidy renewal process in Oklahoma and developed low-cost, behaviorally informed materials and processes intended to improve the renewal process and, as a result, increase the rate of on-time renewals.

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1 ideas42, an early partner in the BIAS project, developed a methodology called “behavioral diagnosis and design” for applying insights from behavioral economics to improve program outcomes. The process presented in this document, also called behavioral diagnosis and design, is a version that has been refined for the BIAS project. For a more detailed description of behavioral diagnosis and design, see Lashawn Richburg-Hayes, Caitlin Anzelone, Nadine Dechausay, Saugato Datta, Alexandra Fiorillo, Louis Potok, Matthew Darling, and John Balz, *Behavioral Economics and Social Policy: Designing Innovative Solutions for Programs Supported by the Administration for Children and Families*, OPRE Report 2014-16a (Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, 2014).

2 Under the BIAS project, behavioral interventions are tested using a random assignment design, where some portion of a given sample (the program group) is eligible to receive the intervention and the rest (the control group) continue with business as usual (the status quo). Randomized controlled trials are widely considered to be the most rigorous form of impact evaluation and the most accurate way to detect the impact of an intervention.

## Define

DHS identified increasing on-time renewal rates — renewal by the deadline — as a key goal. Data from previous years suggest that about 39,000 child care subsidy cases are eligible for renewal each year in Oklahoma. Before the study began, data from Oklahoma suggested that only one-third are renewed on time. If a client fails to renew on time, DHS stops submitting payments to providers on behalf of the client. Consequently, providers may require their clients to pay the amount of the subsidy in addition to any copayments the clients had been making previously. If clients fail to pay the full cost of child care, providers may temporarily withhold services or clients may lose their place in the child care facility. DHS does provide a 30-day grace period, described below, before a case is closed. However, when clients' cases are closed because they do not renew during the grace period, and their cases are reopened afterwards, DHS must reenter them into the system as new clients, a more intensive process that also requires DHS workers to reinterview them.<sup>3</sup> On-time renewals, therefore, ensure consistent child care for families, stable payment for providers, and a reduced administrative burden for DHS.

## Diagnose

The BIAS team learned about the renewal process from multiple perspectives through interviews with DHS leaders and administrators, workers and supervisors at county offices and at a call center, child care center providers (where services are provided at a facility), child care home providers (where services are offered in a family home), and DHS clients at DHS offices.<sup>4</sup>

About 45 days before a client's renewal deadline, DHS mails the client a renewal notice indicating that benefits will end unless the client provides DHS with updated information. Clients must then apply for renewal online, over the phone, or in person at their local DHS office. Clients must also submit documentation to verify their eligibility, including verification of their most recent 30 days of pay and a schedule showing work, school, and training commitments. If a client has not renewed 10 days before the deadline, then DHS sends a closure notice to the client and to the client's provider, stating that the client's benefits will end on the renewal date. DHS provides a 30-day grace period after the deadline, during which clients can still submit renewal applications before a case is closed. If a client is approved for renewal during this time, DHS will pay the providers retroactively for any service provided. Clients who do not renew by the end of the grace period must reapply as new clients, and the provider will not receive payment for any services rendered during the grace period. Providers may continue to offer care, but are under no obligation to do so. Child care providers receive no other information from DHS about their clients' renewal status, nor are they required to complete any paperwork during the renewal process.

The team identified four potential factors that could hinder on-time renewal rates: (1) the process and deadline are unclear to clients; (2) clients face challenges submitting the required documentation; (3) the renewal deadline is not reinforced; and (4) the renewal process does not communicate a sense of urgency. Figure ES.1 presents a timeline that illustrates the renewal process from the client's perspective, and potential bottlenecks reflecting points when the client might drop out of the process.

## Design

Based on findings from the behavioral diagnosis and design process, the BIAS team and Oklahoma DHS created three interventions to address the hypothesized behavioral bottlenecks: a client intervention, a provider intervention, and a combined intervention that included both the client and provider interventions.

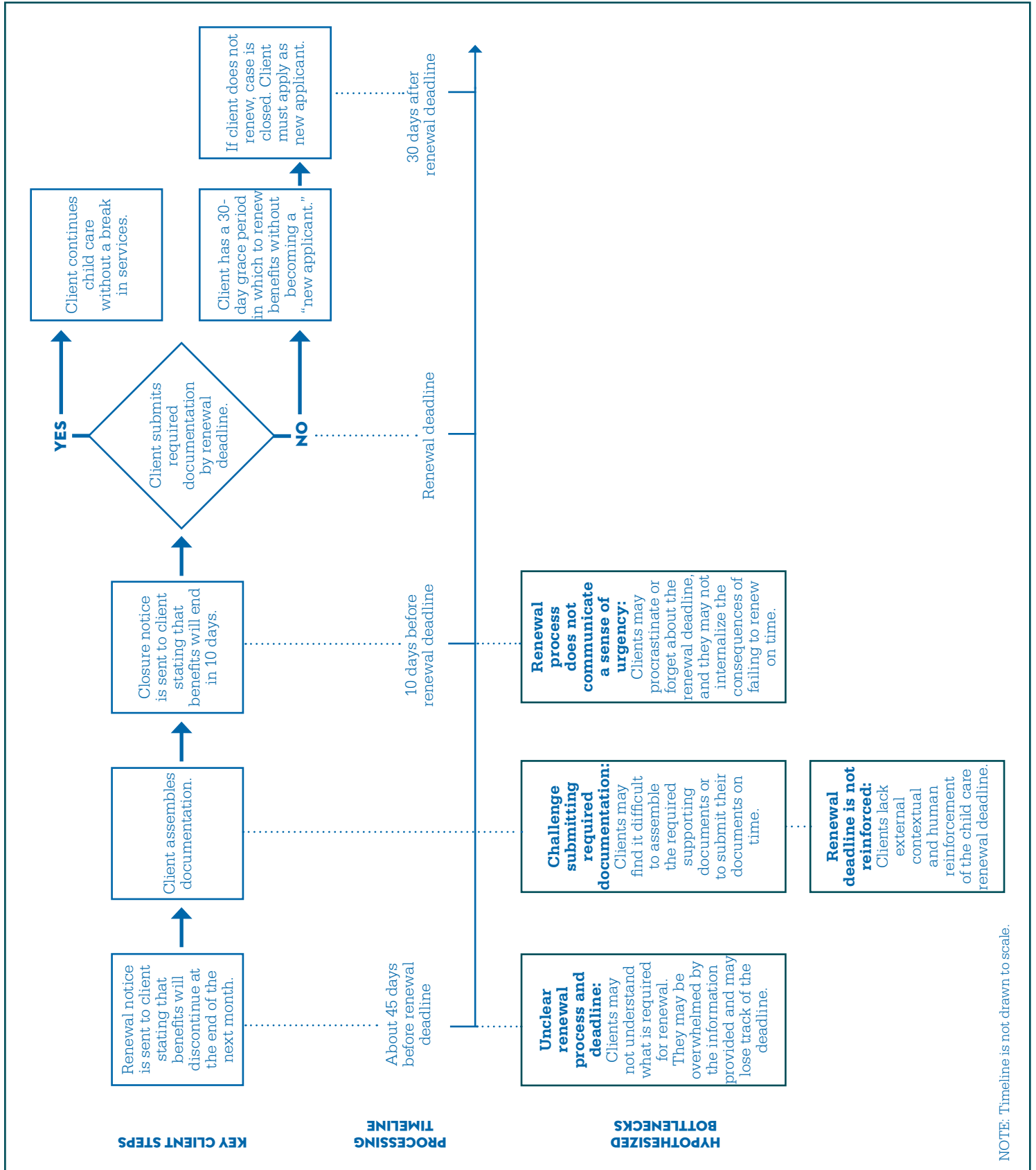
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<sup>3</sup> See [www.okdhs.org/programsandservices/cc/asst/docs/faq.htm](http://www.okdhs.org/programsandservices/cc/asst/docs/faq.htm).

<sup>4</sup> All interviews were informal, and the same question was not asked of more than nine people. The number of client interviews was limited because many clients call DHS on the phone with questions about the renewal process, or visit the DHS website, instead of going into DHS offices. Consequently, DHS workers who regularly work with clients and assist them with renewals provided most of the perspective on challenges that clients face during the renewal process.

# FIGURE ES.1 TIMELINE OF KEY CLIENT STEPS AND HYPOTHESIZED BOTTLENECKS IN THE CHILD CARE SUBSIDY RENEWAL PROCESS

OKLAHOMA DEPARTMENT OF HUMAN SERVICES



NOTE: Timeline is not drawn to scale.



The client intervention used two main strategies: (1) early and clear communication to clarify the renewal process; and (2) continued follow-up communication. The BIAS team created an early-alert postcard to send to clients 60 days before the renewal deadline (which is 15 days before DHS sends its standard renewal notice). The postcards encouraged clients to begin preparatory steps necessary for on-time renewal. Additionally, the team redesigned the existing renewal notice with simpler language, clearer instructions, and an emphasis on the consequences of not renewing on time. Finally, the team sent out a late-reminder postcard using language expressing an increased urgency about the deadline. This postcard was mailed to clients 20 days before the renewal deadline.

The provider intervention also used two main strategies: (1) it gave child care providers more information about their clients' renewal deadlines, and (2) it prompted providers to remind clients about renewal and help them through the process. The BIAS team created materials for the providers that supplied information about the renewal process and requirements, and alerted them as to which of their clients had subsidies that were up for renewal. Providers received a mailing at the beginning of each month that included a list of clients whose subsidies were due for renewal in two months and a separate list of clients whose subsidies were due for renewal in one month. Providers were asked to advise these clients to start collecting renewal documents in a specially created envelope, with a renewal timeline printed on it, that the BIAS team had designed and distributed to providers. Finally, providers received a list of clients whose cases were due for renewal 20 days before the deadline and were asked to tell those clients to call DHS immediately.

## Findings

The evaluation used a randomized controlled trial that created four research groups (three program groups and one control group) of clients:

1. Client-only group: clients who received the client intervention but whose providers did not receive the provider intervention
2. Provider-only group: clients whose providers received the provider intervention but who themselves did not receive the client intervention
3. Combined intervention group: clients who received the client intervention and whose providers received the provider intervention
4. Control group: neither clients nor providers received any intervention (status quo)

Table ES.1 shows the estimated impacts of the client, provider, and combined interventions relative to the control condition. The findings suggest that *the provider intervention was most effective at helping clients renew on time*. The first panel compares the provider-only group outcomes with the control group outcomes. It shows that the provider intervention increased the percentage of clients in the provider-only group who renewed before closure notices were sent by an estimated 2.9 percentage points (statistically significant at the 0.05 level). The same panel shows that the provider intervention increased the percentage of clients in the provider-only group who renewed before their renewal deadline by an estimated 2.4 percentage points (statistically significant at the 0.10 level). The provider intervention did not discernibly increase renewals by the end of the grace period; that is, there is no statistically significant difference in renewals at the end of the grace period. Supporting these findings, the responses to a survey that DHS administered to providers suggested that the intervention substantially increased providers' awareness of their clients' renewal status and increased their interactions with clients about renewal.

*The client intervention, on the other hand, does not appear to have improved the rate of on-time renewal* — that is, renewal before the benefits closure deadline. There is some evidence, however, that it helped clients renew their cases by the end of the grace period. The second panel in Table ES.1 compares the client-only group outcomes with the control group outcomes. It shows that, for this comparison, only the impact estimate of 2.4 percentage points for client renewals before the end of the grace period is statistically significant (at the 0.10 level) for the client intervention.

**TABLE ES. 1**  
**IMPACTS ON CHILD CARE SUBSIDY RENEWALS, BY RESEARCH GROUP**  
**OKLAHOMA DEPARTMENT OF HUMAN SERVICES**

OUTCOME	PROGRAM GROUP	CONTROL GROUP	DIFFERENCE	P-VALUE
<b>Provider-only group renewals (%)</b>				
Before closure notice	23.9	21.1	2.9**	0.023
Before benefits closure	36.7	34.4	2.4*	0.090
Before end of grace period	61.1	59.4	1.7	0.217
<i>Sample size</i>	<i>2,261</i>	<i>2,411</i>		
<b>Client-only group renewals (%)</b>				
Before closure notice	20.9	21.1	-0.2	0.855
Before benefits closure	35.1	34.4	0.8	0.565
Before end of grace period	61.9	59.4	2.4*	0.083
<i>Sample size</i>	<i>2,393</i>	<i>2,411</i>		
<b>Combined intervention group renewals (%)</b>				
Before closure notice	22.3	21.1	1.2	0.299
Before benefits closure	35.6	34.4	1.3	0.376
Before end of grace period	61.3	59.4	1.9	0.193
<i>Sample size</i>	<i>2,283</i>	<i>2,411</i>		

SOURCE: MDRC calculations using Oklahoma Department of Human Services data.

NOTES: A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Estimates are adjusted for child care parent baseline characteristics.

Data are clustered by provider (except for client-only group versus control condition).

The closure notice is mailed to clients 10 days before their benefits are scheduled to end (the benefits closure deadline). The grace period extends for 30 days after the benefits closure deadline. At the end of the grace period, the case is closed.

Finally, the results demonstrate that *combining the client and provider interventions is unlikely to be more effective than the provider intervention alone*. Although the third panel in the table shows that none of the estimated impacts for the combined intervention group relative to the control group is statistically significant, additional analyses (not presented here) show that the renewal outcomes for the combined intervention group are not statistically different from those of the provider-only group or the client-only group, either. In fact, for the outcomes where the provider intervention is estimated to have positive impacts, the estimated outcomes for the combined intervention group fall between the estimates for the control group and the provider-only group — in other words, the average outcomes for clients in the combined intervention group are higher than the average outcomes for clients in the control group, but lower than the average outcomes in the provider-only group. Random differences between the groups may explain this pattern of results, but the main purpose of the combined intervention was to test whether the combination of the provider and client interventions was more effective than either intervention alone. The results strongly suggest that combining the interventions does not produce additional benefits.

Given the cost figures provided by DHS, the BIAS team estimates that the client intervention costs about \$1.00 per client. The provider intervention costs approximately \$3.57 per provider, with \$1.91 of that amount being a one-time cost of an introductory mailing that was sent to providers to explain the intervention. Excluding this introductory mailing and a thank you mailing that was sent to all providers for participating in the study, the cost would be \$1.10 per provider per month, or approximately \$29,724 per year, if extended to all providers in Oklahoma. While staff time is not included, no additional staff were hired to do the extra work associated with the intervention.

## Conclusion

To date, BIAS studies have shown that behavioral interventions can positively change the behaviors of individuals and families who participate in human services programs.<sup>5</sup> The results of this pilot demonstrate that behavioral interventions can have an impact on staff as well, in ways that improve program outcomes. In fact, the intervention that was delivered to child care providers appears to be more effective at increasing clients' early renewal rates than the intervention that targeted clients directly. Child care providers participating in the provider intervention had financial incentives to ensure that their clients renewed on time (that is, by increasing on-time renewals, providers lower their risk of remaining unpaid for delivering services during the grace period), and providers regularly interacted with DHS clients at times when the benefits of the child care subsidy were likely to be most salient — when clients were at child care homes or centers with their children. The provider intervention took advantage of these interactions to deliver reminders and other assistance to clients in a salient context — from staff directly associated with the child care benefits. The improved outcomes, moreover, were mutually beneficial for clients and providers, as well as for DHS. Behavioral strategies that engage similarly situated staff in other contexts, or that take advantage of related incentive structures, are important areas for future research.

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5 Peter Baird, Leigh Reardon, Dan Cullinan, Drew McDermott, and Patrick Landers, *Reminders to Pay: Using Behavioral Economics to Increase Child Support Payments*, OPRE Report 2015-20 (Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, 2015); Nadine Dechausay, Caitlin Anzelone, and Leigh Reardon, *The Power of Prompts: Using Behavioral Insights to Encourage People to Participate*, OPRE Report 2015-75 (Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, 2015); Mary Farrell, Caitlin Anzelone, Dan Cullinan, and Jessica Wille, *Taking the First Step: Using Behavioral Economics to Help Incarcerated Parents Apply for Child Support Modifications*, OPRE Report 2014-37 (Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, 2014); Richburg-Hayes et al. (2014).

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2015. Peter Baird, Leigh Reardon, Dan Cullinan, Drew McDermott, and Patrick Landers.

*Taking the First Step: Using Behavioral Economics to Help Incarcerated Parents Apply for Child Support Order Modifications*

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