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Year 2 Demonstration Impacts of Using Medicaid Data to Directly Certify Students for Free School Meals

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EXECUTIVE SUMMARY

The Healthy, Hunger-Free Kids Act of 2010 (HHFKA; P.L. 111-296) required the U.S. Department of Agriculture (USDA) Food and Nutrition Service (FNS) to conduct a demonstration that directly certifies students for free school meals based on income eligibility identified through Medicaid data. Direct Certification-Medicaid (DC-M) is expected to expand the number of students who are certified to receive free school lunches and breakfasts without needing to complete an application. DC-M might also increase the total number of students who receive free meals by reaching students who are eligible but not certified for free meals under standard procedures. If DC-M leads to an increase in the number of free meals served, it will have an impact on Federal reimbursement costs. In addition, DC-M will likely affect the costs that States and districts incur for administering the National School Lunch Program (NSLP) and School Breakfast Program (SBP)—potential increases in the administrative costs incurred in directly certifying additional students might be offset by decreases in the burden of processing applications. FNS contracted with Mathematica Policy Research to examine the effects of DC-M on these and other outcomes.

A. The school meals programs and direct certification

The NSLP is the largest child nutrition assistance program in the United States, providing lunches to more than 30 million students each day in Federal fiscal year (FY) 2014 (FNS 2015). Along with the SBP, the NSLP is a cornerstone of the government's efforts to provide nutritious meals to schoolchildren. Although the USDA subsidizes all school meals that meet program requirements, the subsidies are much larger for meals provided to students certified for free or reduced-price meals. Students can become certified through two main methods: application and direct certification.

- **Certification through application.** Historically, most students who receive free or reduced-price school meals have become certified on the basis of household information reported in an application submitted to the school district. To become certified in this way, households must either (1) provide detailed information on household size and income or (2) demonstrate that they are "categorically eligible," because they participate in one of several public assistance programs, such as the Supplemental Nutrition Assistance Program (SNAP), the Food Distribution Program on Indian Reservations (FDPIR), or Temporary Assistance for Needy Families (TANF). The district assesses the application information to determine whether the household meets the eligibility requirements.
- **Direct certification.** In recent years, increasing numbers of students have been automatically determined eligible for free meals through direct certification rather than an application. Direct certification typically involves matching administrative records from programs that confer categorical eligibility with student enrollment records to identify and automatically certify eligible children for free school meals, without requiring an application.

Some school districts use alternative procedures that do not involve certifying individual students each year. Districts participating in Provision 2 or Provision 3 for NSLP and/or SBP serve all meals for free, conduct certification in a base year, and are reimbursed in later years based on claims from that base year. Under the Community Eligibility Provision (CEP),

authorized school districts and schools in high-poverty areas may choose to serve free breakfasts and lunches to all students, without requiring applications. Eligible schools or districts that choose to participate in CEP receive the Federal free reimbursement rate for up to 100 percent of meals served, depending on the school's or district's percentage of "identified students"—students who automatically qualify for free school meals based on their family's enrollment in other programs such as SNAP or TANF.

Opportunities for Direct Certification-Medicaid (DC-M). Direct certification through the Medicaid program extends the use of direct certification to Medicaid-enrolled students who are from low-income families but not directly certified through SNAP or other programs. Without DC-M, these students are either certified by application or not certified. Students receiving Medicaid are not categorically eligible for free meals, but the DC-M demonstration authorizes selected States and districts to use income information from Medicaid enrollment or eligibility files to determine eligibility and directly certify students found to be eligible for free meals. Thus, DC-M is a departure from typical direct certification in that it certifies students who are eligible for free meals based on their household income rather than on participation in a program that confers categorical eligibility. Under the DC-M demonstration, students are eligible if they are (1) enrolled in Medicaid and (2) in households with Medicaid gross income not exceeding 133 percent of the poverty level. Other students in a household with a child who meets these criteria are also eligible for direct certification for free meals under DC-M. The potential effect of DC-M on students' access to free school meals is limited, however, because a large proportion of Medicaid enrollees also receive SNAP benefits and thus could already be directly certified for free meals.

B. The DC-M demonstration and evaluation

FNS contracted with Mathematica Policy Research to evaluate a demonstration of DC-M in selected States and school districts. Based on a comparison of districts randomly assigned to either conduct DC-M or use normal certification procedures, this component of the study examines whether DC-M leads to changes in the percentage of students certified, the number of meals served, Federal reimbursements, and certification costs incurred by districts. It also assesses State-level administrative costs and identifies the challenges that States and districts face when implementing DC-M, based on the States included in the impact analysis and the universal implementation States. This report focuses on the experiences of States and districts in conducting DC-M during school year (SY) 2013-2014, the second year of the demonstration.

Demonstration States and districts. FNS solicited applications from States to participate in the DC-M demonstration and selected Florida, Illinois, Kentucky, New York City, and Pennsylvania to begin conducting DC-M in SY 2012-2013. Kentucky and Pennsylvania implemented DC-M statewide, while the others implemented DC-M in selected districts. One other State, Massachusetts, and additional districts in three of the original States (Florida, Illinois, and New York) were selected to join the demonstration in SY 2013-2014. In New York, only New York City participated in the first year of the demonstration. Because of a unique study design in this location, New York City continues to be treated as a separate "State" in the Year 2 analysis, and is not combined with the other New York State districts that joined the demonstration in SY 2013-2014. Massachusetts and New York State are collectively referred to

as Cohort 2 States, and the States that began DC-M in the first year of the demonstration are Cohort 1 States.

In Florida, Illinois, New York City, New York State, and Massachusetts, districts were randomly assigned to either a treatment group that implemented DC-M, or a control group that did not.[1] Such random assignment of districts permits a rigorous analysis of the impacts of DC-M, and the estimates from that analysis are the focus of this report. Illinois is not included in the quantitative analyses, however, because DC-M was implemented incorrectly in that State (as discussed in the challenges section).

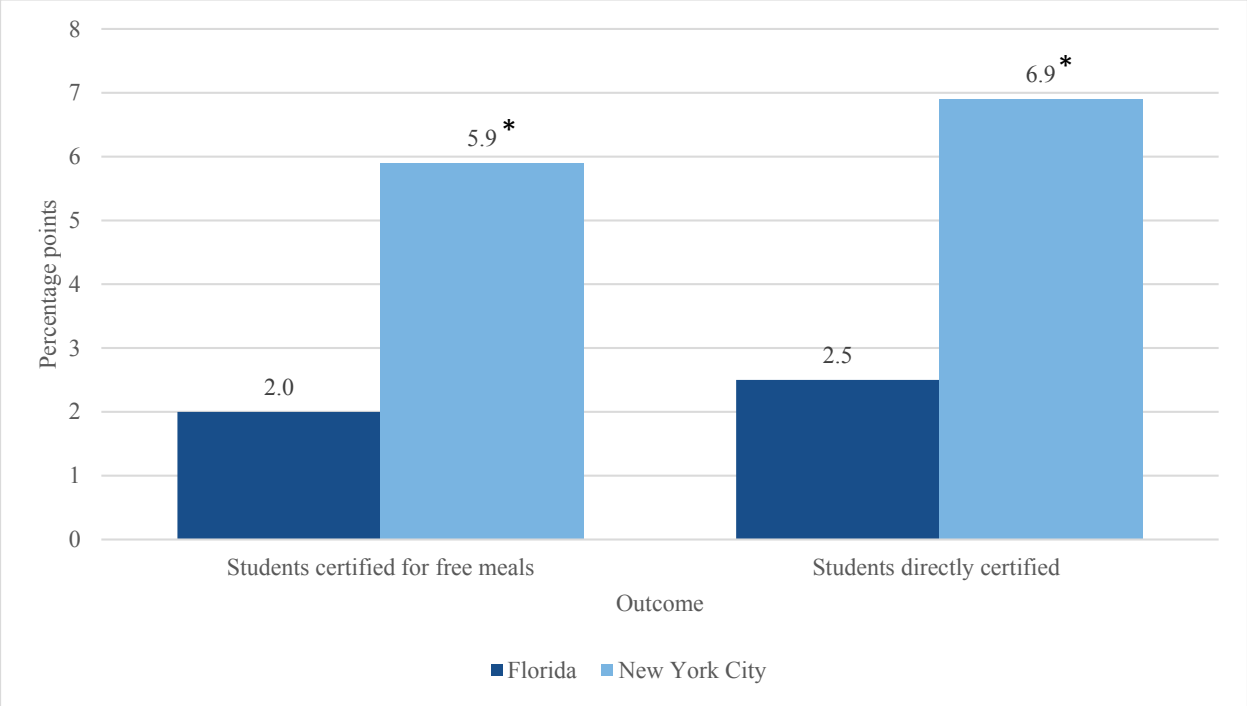
C. Summary of Year 2 findings

Certification. The evaluation estimated impacts of DC-M on the percentage of students directly certified for free meals and the total percentage of students certified for free meals (through all means, including those directly certified). The pattern of findings indicates that DC-M had mixed results across States on these certification outcomes. We found statistically significant impacts on both key certification outcomes for one of the two States included in the analysis, New York City (Figure ES.1). DC-M increased the percentage of students directly certified to receive free meals by 6.9 percentage points in New York City. The impact on the total percentage of students certified for free meals is smaller (5.9 percentage points in New York City) because some of the students directly certified under DC-M would have been certified for free meals by application in the absence of DC-M. The impact estimates were not statistically significant in Florida for either certification outcome.

Participation. The evaluation estimated impacts of DC-M on the percentages of lunches and breakfasts served for free and the number of NSLP and SBP meals served per enrolled student per day. The broad pattern of impacts indicates that DC-M increased the percentage of meals—particularly breakfasts—served for free but did not increase the number of meals served. DC-M had a positive, statistically significant impact on the percentage of lunches served for free in two of the four random assignment States (both Cohort 2 States), and on the percentage of breakfasts served for free in three of the States (all except Massachusetts) (Figure ES.2). The study found impacts of 1.1 and 1.5 percentage points, respectively, on the percentages of lunches served for free in Massachusetts and New York State. The impacts on the percentages of breakfasts served for free were 1.9, 3.7, and 1.6 percentage points, respectively, in Florida, New York City, and New York State. However, no statistically significant impact was found on the percentage of lunches served for free in either Cohort 1 State or on the percentage of breakfasts served for free in Massachusetts. In addition, the impacts on meals served for free did not translate into changes in the overall participation rates in most States.

[1] In New York City, the 32 community school districts—administrative units within the New York City Department of Education—were randomly assigned. These community districts are treated as separate districts in the demonstration data collection and analysis.

Figure ES.1. Impacts of DC-M on key certification outcomes in SY 2013-2014 in Cohort 1 States



Source: October certification data and monthly administrative claims data provided by the States and District Cost Survey.

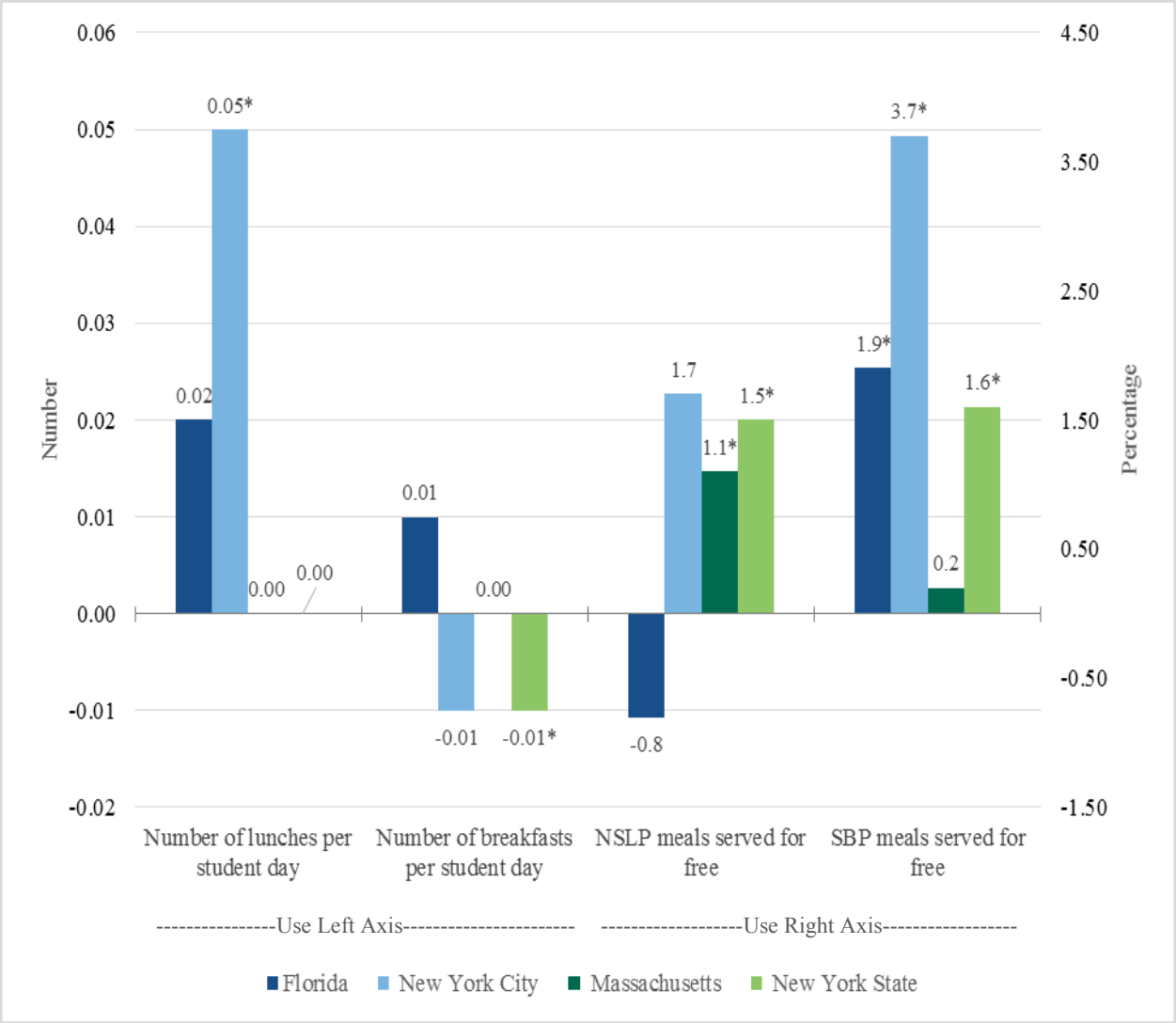
Note: Because districts in the Cohort 2 States did not implement DC-M until late in the school year, this figure includes the Cohort 1 random assignment States: Florida and New York City. Appendix A lists the variables included in the regression adjustments.

*Estimate for treatment districts is significantly different from the estimate for control districts at the 0.05 level.

SY = school year.

Federal reimbursement costs. The evaluation examined impacts on average Federal reimbursements per meal served and reimbursements per student. The pattern of findings across study States provides evidence of a positive impact on reimbursements per meal—particularly for breakfasts—but not on reimbursements per student. DC-M had a positive and significant impact on average per-lunch reimbursements in both Cohort 2 States but neither Cohort 1 State (Figure ES.3). It significantly increased average per-breakfast reimbursements in three of the four States (all but Massachusetts). The impact was 2 cents on the average per-lunch reimbursement rate in Massachusetts and 3 cents on the rate in New York State. For the per-breakfast reimbursement rate, DC-M had impacts of 4 cents in Florida, 6 cents in New York City, and 2 cents in New York State. These findings are generally consistent with findings on participation, which show that DC-M significantly shifted meals served from lower reimbursement reduced-price and paid statuses to the higher reimbursement free status. The per-meal reimbursement impacts did not translate into increased reimbursements per student per day in most States. However, in New York City, DC-M had an impact of 13 cents on NSLP reimbursements per student day.

Figure ES.2. Impacts of DC-M on key participation outcomes in SY 2013-2014



Source: October certification data and monthly administrative claims data provided by the States and District Cost Survey.

Note: The results for some outcomes reported in this figure are obtained by aggregating across months, excluding months during which the State used an incorrect measure of income for conducting DC-M (January 2014 through May 2014 for Florida). Appendix A lists the variables included in the regression adjustments.

*Estimate for treatment districts is significantly different from the estimate for control districts at the 0.05 level.

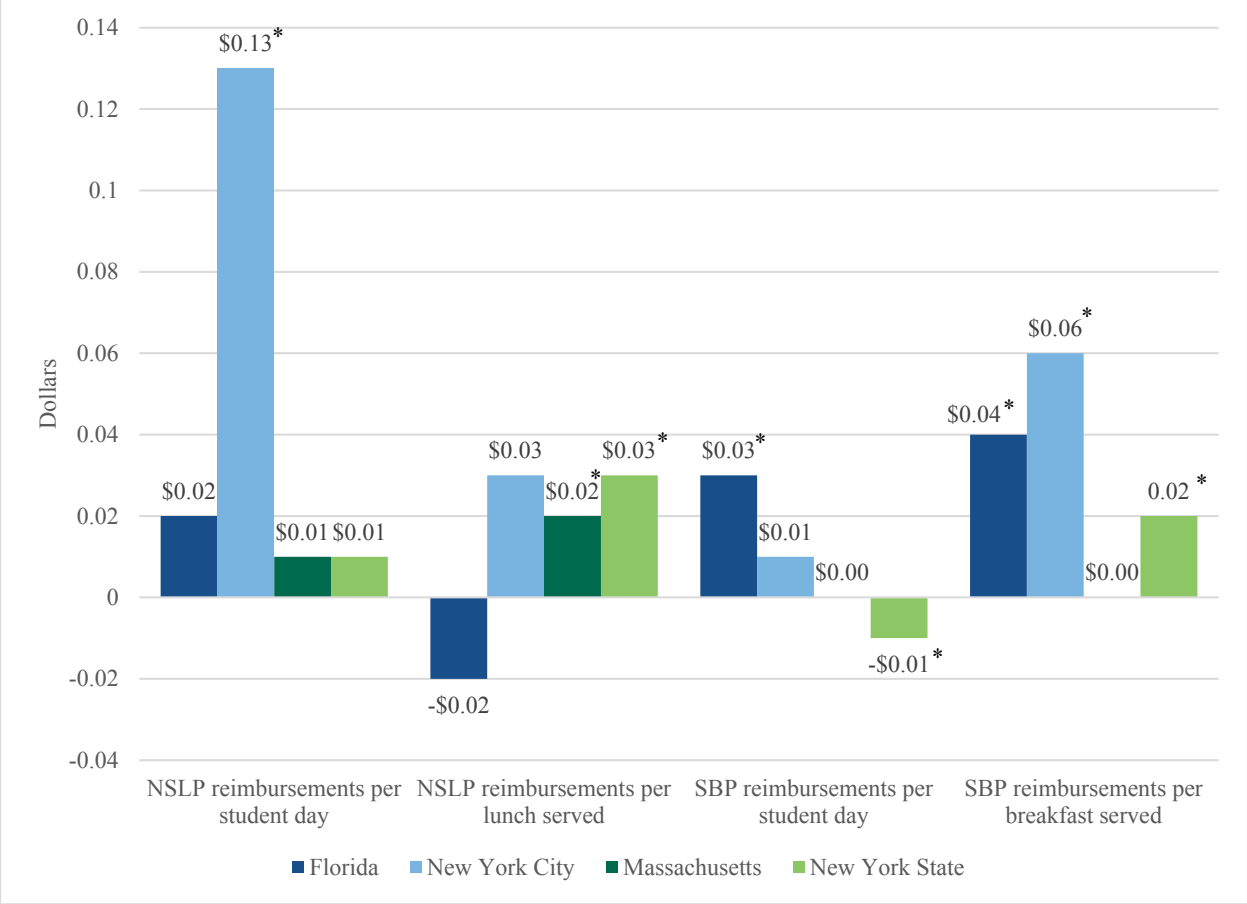
NSLP = National School Lunch Program; SBP = School Breakfast Program; SY = school year.

District administrative costs. Implementation of DC-M did not reduce district costs, but neither did it impose a financial burden on participating districts. There were no statistically significant impacts in any State on total district certification costs, or on the costs of any of the types of certification activities examined: direct certification, application, and other activities.

State administrative costs. The total State-level cost of DC-M, over and above other direct certification costs in Year 2, ranged from less than $8,000 to almost $78,000. Even in the State with the highest administrative costs, the cost per directly certified student in treatment districts was less than the reimbursement cost of one free school lunch. For all States, start-up costs were

substantially higher than ongoing costs. Start-up costs were highest when major data system revisions were required to incorporate DC-M.

Figure ES.3. Impacts of DC-M on key Federal reimbursement outcomes in SY 2013-2014



Source: October certification data and monthly administrative claims data provided by the States and District Cost Survey.

Note: The results for some outcomes reported in this figure are obtained by aggregating across months, excluding months during which the State used an incorrect measure of income for conducting DC-M (January 2014 through May 2014 for Florida). Appendix A lists the variables included in the regression adjustments.

*Estimate for treatment districts is significantly different from the estimate for control districts at the 0.05 level.

NSLP = National School Lunch Program; SBP = School Breakfast Program; SY = school year.

Challenges. One State, Illinois, used a different measure of income than that specified in the legislative guidelines for assessing eligibility for DC-M, and two other States used incorrect measures for part of Year 2.[2] Competing priorities and the time required to secure approval for interagency agreements resulted in lengthy delays in implementation in the Cohort 2 States; similar delays were experienced by some Cohort 1 States in their first year of DC-M implementation (Hulsey et al. 2015a). In addition to these two major challenges, across States, child nutrition agency staff noted that it took time to communicate with districts about DC-M

[2] Florida and Kentucky began using incorrect income measures for DC-M in January 2013 when changes to Medicaid eligibility occurred under the ACA.

guidelines, but the number of questions decreased as districts became familiar with DC-M. State and district respondents reported the same types of challenges in conducting direct certification with SNAP and other programs, such as matching difficulties and technological limitations, but district staff raised no issues specific to DC-M.

D. Limitations of the demonstration

The random assignment design used in Florida, New York City, Massachusetts, and New York State allows for the derivation of internally valid causal estimates of the impacts of DC-M, as implemented, on a broad set of outcome measures in the Year 2 evaluation sample districts. However, limitations of the demonstration implementation, the sample, and the data available necessitate caution in interpreting the findings.

Some States experienced difficulty in implementing the demonstration. For at least part of the school year, three States used different measures of income than the measure specified by the legislative guidelines for assessing eligibility for DC-M, and the two Cohort 2 States were not able to begin DC-M until the second semester of the school year. Both of these problems limited the data available; the quantitative analyses presented here include data for only the months during which DC-M was implemented using the correct measure of income in each State.[3] Delays in implementation might also have limited the potential for impacts in Cohort 2 States, because certification activities are concentrated at the beginning of the school year.

Due to these restrictions and other restrictions relevant to the analysis samples and the set of months included in earlier reports of the DC-M evaluation, direct comparisons between findings presented across reports could be misleading. In addition, although Illinois was included in the analyses presented in earlier reports, because it was not known at that point that the State was using an incorrect measure of income, those findings reported for Illinois do not represent the impacts of accurate implementation of DC-M.

The DC-M evaluation is based on a nonrepresentative sample of States and districts. The demonstration States were not selected randomly and differ systematically from other States in the nation (as discussed in Chapter II and Appendix A). Within these States, the selection of districts was subject to several constraints outside the control of the evaluation that limit the ability to define a meaningful universe of districts to which the demonstration and evaluation findings might generalize. The within-State findings presented in this report cannot be considered representative of any State as a whole, and the samples across the States are not representative of the combined set of States or the nation.

[3] The months during which an incorrect income measure was used are excluded from the quantitative analyses because the measure of income directly effects which students are certified—and thus the certification, participation, and Federal reimbursement outcomes—and influences the processes and efforts that districts and states must make in conducting DC-M. Thus, Illinois is excluded entirely from the quantitative analyses in this report. The analyses for Florida and Kentucky include data for only September-December (the months during which the correct income measure was used in Year 2), and the analyses for Massachusetts and New York State include data for only March-May and January-May, respectively (the months during which DC-M was conducted in Year 2).

E. Summary

In summary, the evaluation found that, in some demonstration States, DC-M positively affected certification outcomes and the percentage of meals served for free, but not the overall participation rate. In other words, for some States in the study sample, DC-M successfully reduced reliance on school meal applications and increased the proportion of students receiving free meals, although it did not affect the number of meals served overall. These increases resulted in additional Federal reimbursements in some States. However, there was no impact on district costs for certifying students. State DC-M administrative costs varied widely, but the per-student costs were low even in the highest cost states, and a large majority of the costs were start-up costs rather than ongoing costs. The impact findings for this study are internally valid estimates of the impact of DC-M for the participating evaluation districts in the participating States. However, this study was not intended to be nationally representative; study States and districts differ in important ways from States and districts nationally. Therefore, the findings cannot be generalized more broadly and interpreted as the effects that would be anticipated from an expansion of DC-M to a broader (or otherwise different) set of States and districts.

I. INTRODUCTION

The Healthy, Hunger-Free Kids Act of 2010 (HHFKA; P.L. 111-296) required the U.S. Department of Agriculture (USDA) Food and Nutrition Service (FNS) to conduct a demonstration that adds Medicaid to the list of programs used to directly certify students for free school meals. Direct Certification-Medicaid (DC-M) is expected to expand the number of students who are certified without completing an application. DC-M might also increase the total number of students who receive free meals by reaching students who are eligible but not certified under standard procedures. If DC-M leads to an increase in the number of free meals served, it will have an impact on Federal reimbursement costs. In addition, DC-M could affect the costs that States and districts incur for administering the National School Lunch Program (NSLP) and School Breakfast Program (SBP). Increased costs from conducting DC-M might be partially offset or more than offset by a reduction in costs from processing fewer applications.

FNS invited States to participate in the demonstration beginning in school year (SY) 2012-2013 and expanded the sample in SY 2013-2014. FNS contracted with Mathematica Policy Research, and its subcontractor Insight Policy Research, to examine the effects of DC-M on certification, participation, and cost outcomes. This report presents findings from the second year of the demonstration, SY 2013-2014. An earlier report (Hulsey et al. 2015a) presented findings from the first year of the demonstration.

A. The school meals programs and direct certification

The NSLP is the largest child nutrition assistance program in the United States, providing lunches to more than 30 million students each school day in Federal fiscal year (FY) 2014 (FNS 2015). Along with the SBP, the NSLP is a cornerstone of the government's efforts to provide nutritious meals to schoolchildren. These Federal programs are administered at the State level by child nutrition agencies and at the local level by local educational agencies (LEAs) and school food authorities (SFAs), which are typically school districts.[4,5]

Certification for program benefits. All students enrolled in schools participating in the school meals programs are eligible to receive subsidized school meals. Students in families with incomes at or below 130 percent of the Federal poverty level (FPL)—$30,615 for a family of four during SY 2013-2014—are eligible for free meals, as are students who participate in one of several public assistance programs (discussed below). Reduced-price meals are provided to students whose families have incomes between 130 and 185 percent of poverty (between

[4] Child nutrition agencies are typically located within State departments of education but in some states are part of the department of agriculture.

[5] The Richard B. Russell National School Lunch Act (NSLA) uses two terms to refer to the local entities that operate the school meals programs. The Child Nutrition and WIC Reauthorization Act of 2004 (P.L. 108-265) amended NSLA by using the term "*local educational agency"* when referring to the application, certification, and verification functions of the school meals programs. Sections of NSLA that deal with other aspects of the programs—such as meal pattern requirements, meal counting, and reimbursement claiming—use the term "*school food authority*," which current regulations define as the governing body that has the legal authority to operate the NSLP/SBP in one or more schools. Because nearly all schools in the NSLP/SBP are parts of entities commonly known as school districts, we use that term throughout this report.

$30,615 and $43,568 for a family of four during SY 2013-2014). Students who have not been certified for free or reduced-price meals pay full price for their school meals. Although the USDA subsidizes all school meals that meet program requirements, the subsidies are much larger for meals provided to students certified for free or reduced-price meals. Students can become certified through two main methods: (1) application and (2) direct certification.[6]

- **Certification through application.** Historically, most students who receive free or reduced-price school meals have become certified on the basis of household information reported in an application submitted to the school district. To become certified in this way, households must either (1) provide detailed information on household size and income or (2) demonstrate that they are "categorically eligible," because they participate in one of several public assistance programs, such as the Supplemental Nutrition Assistance Program (SNAP), the Food Distribution Program on Indian Reservations (FDPIR), or Temporary Assistance for Needy Families (TANF).[7] The district assesses the application information to determine whether the household meets the eligibility requirements.

- **Direct certification.** In recent years, increasing numbers of students have been automatically determined eligible for free meals through direct certification rather than an application. Direct certification typically involves matching administrative records from programs that confer categorical eligibility with student enrollment records to identify and automatically certify eligible children for free school meals, without requiring an application. All districts participating in the NSLP that certify students, including private schools, are required to directly certify students in SNAP households.[8] Beginning in SY 2011–2012, FNS regulations required districts that certify students to conduct direct certification with SNAP at least three times each year: (1) at the beginning of the school year, (2) three months after the beginning of the school year, and (3) six months after the beginning of the school year. FNS encourages more frequent direct certification with SNAP and also encourages direct certification of students in TANF and FDPIR households. In some States, the districts conduct direct certification; in other States, a State agency conducts direct certification and provides the results to the districts.

More than 12.4 million students were directly certified for free school meals in SY 2013-2014 (Moore et al. 2015). This number has risen dramatically in recent years due to a

[6] Some school districts use alternative procedures that do not involve certifying individual students each year. Districts participating in Provision 2 or Provision 3 serve all meals for free, conduct certification in a base year, and are reimbursed in later years based on claims from that base year. Under the Community Eligibility Provision (CEP), schools in high-poverty areas may choose to serve free breakfasts and lunches to all students, without requiring applications. Eligible schools or districts that choose to participate in CEP receive the Federal free reimbursement rate for up to 100 percent of meals served, depending on the school's or district's percentage of "identified students" certified for free meals through means other than applications.

[7] Students can be certified for free meals based on participation in certain other programs, including Head Start, the Migrant Education Program, and programs under the Runaway and Homeless Youth Act. Homeless children, as defined by the McKinney-Vento Homeless Assistance Act, and foster children are also considered categorically eligible for free school meals.

[8] Schools participating in Provision 2 or 3 in a non-base year or in the CEP do not certify students.

combination of an increase in the number of school-age children receiving SNAP benefits, expansion in the use of direct certification across the country, and the improved performance of direct certification systems in States and districts. The 2014 Report to Congress on direct certification shows that the number of States and districts implementing direct certification has increased steadily (Moore et al. 2015). In SY 2004-2005 (prior to the Congressional mandate for direct certification), 56 percent of districts directly certified SNAP participants; by SY 2013-2014, 93 percent of districts did so.[9] Those districts enrolled 99 percent of all students in NSLP-participating schools nationwide.

Opportunities for Direct Certification-Medicaid (DC-M). Direct certification through the Medicaid program extends the use of direct certification to Medicaid-enrolled students who are from low-income families but not directly certified through SNAP or other programs. Without DC-M, these students are either certified by application or not certified. Students receiving Medicaid are not categorically eligible for free meals, but the DC-M demonstration authorizes selected States and districts to use income information from Medicaid enrollment or eligibility files to determine eligibility and directly certify students found to be eligible for free meals. Students cannot be directly certified for reduced-price meals through DC-M.

Under the DC-M demonstration, students are eligible if they are (1) enrolled in Medicaid and (2) in households with Medicaid gross income not exceeding 133 percent of the poverty level.[10] Other students in a household with a child who meets these criteria are also eligible for direct certification for free meals under DC-M. The legislation specifies the use of gross income "before the application of any expense, block, or other income disregard" rather than net income for determining eligibility under DC-M. However, the determination of eligibility through DC-M relies on the definition of household used by the Medicaid agency, which may differ from that used on NSLP/SBP applications. Key provisions of the Affordable Care Act (ACA) that took effect in 2014 could affect the number of students that stand to benefit from DC-M and the Medicaid-eligibility data available for matching.[11]

The potential effect of DC-M on students' access to free school meals is limited, because a large proportion of Medicaid enrollees also receive SNAP benefits or assistance from other programs used to directly certify students for free meals. If these children are already directly certified, they will not receive any additional benefit from DC-M. The impact of DC-M also

[9] Of the 7 percent of districts that did not directly certify students in SY 2012-2013, about two-thirds are private, and three-quarters are single-school districts. Private-school districts sometimes are excluded from State-level direct certification matching systems, and smaller public school districts may face technical challenges in developing effective systems. In addition, some of these districts might not have SNAP participants among their students.

[10] The HHFKA allows a slightly higher income threshold (133 percent of the FPL) for Medicaid direct certification than is otherwise allowed (130 percent of the FPL).

[11] Under the ACA, the mandatory minimum upper income eligibility levels for Medicaid for children ages 6 to 19 increased from 100 to 133 percent of the FPL in 2014, increasing the number of school-age children covered by Medicaid and, in turn, potentially eligible for DC-M. The ACA also changes the financial criteria used for Medicaid eligibility determinations, eliminating the various State-specific income exclusions or disregards formerly used. In addition, under the ACA, a household is defined based on the tax filing unit, which might differ from the household composition under prior Medicaid rules.

depends on the ability of State agencies and school districts to identify children in Medicaid eligibility files, assess their households' gross income, and match them to student enrollment files.[12]

B. The DC-M demonstration and evaluation

The DC-M evaluation examines the impacts of DC-M on certification for free school meals; participation in the school meals programs, that is, receipt of school meals; and costs associated with the meals programs. This report focuses on the experiences of States and districts in conducting DC-M during SY 2013-2014, the second year of the demonstration.

The DC-M demonstration, mandated in the HHFKA, might expand the number of students who receive free meals by reaching students who are eligible but not yet certified for free meals. The demonstration might also affect the costs that States and districts incur. Although matching students to Medicaid data will likely increase direct certification costs for State agencies and some districts, DC-M can generate cost savings for districts if it leads to fewer families submitting school meal program applications that need to be processed. DC-M will also have an impact on Federal costs if it leads to an increase in the number of free meals served, which could result from any increases in either the number of students certified for free meals (whose meals would have been reimbursed at the reduced-price or paid levels otherwise) or the number of meals those students choose to receive.

The evaluation measures the impact of DC-M on certification, participation, and costs observed over two years of the demonstration (SY 2012-2013 and SY 2013-2014). Based on a comparison of districts randomly assigned to either conduct DC-M or use normal certification procedures, this component of the study examines whether DC-M leads to changes in the percentage of students certified, the number of meals served, Federal reimbursements, and certification costs incurred by districts. It also assesses State-level administrative costs and identifies the challenges that States and districts face when implementing DC-M, based on both States included in the impact analysis and universal implementation States. The evaluation findings are detailed in two Reports to Congress:

- This report (the Year 2 Report to Congress) presents findings from the second year of DC-M implementation in the States that began conducting DC-M in Year 1, and findings from additional States and districts that began implementation in SY 2013-2014. It includes analyses of certification, participation, and Federal reimbursement outcomes; administrative costs incurred by States and districts; and an exploration of challenges encountered at the State and district levels. It also includes national extrapolations of Federal reimbursement costs.

- The Year 1 Report to Congress (Hulsey et al. 2015a) examines the experiences of States and districts in implementing DC-M during SY 2012-2013, the first year of the demonstration.

[12] In each State in the demonstration, responsibility for assessing income eligibility was assigned to the Medicaid agency. Direct certification matching is conducted at the State level in some places and by district staff in others.

It focuses on certification, participation, Federal reimbursements, and State-level costs and challenges.

Additional reports address other components of the DC-M study. The Access Evaluation Report presents an assessment of the potential impacts of DC-M on students' access to free school meals by conducting simulations of DC-M using data from the year before the demonstration began and comparing the simulated certification outcomes with districts' actual certifications (Hulsey et al. 2015b). A future report will present findings from a substudy that will use varying levels of match stringency to independently validate DC-M matches made in a small sample of districts conducting DC-M.

1. Demonstration States and districts

FNS solicited applications from States to participate in the DC-M demonstration and selected Florida, Illinois, Kentucky, New York, and Pennsylvania to begin conducting DC-M in SY 2012-2013.[13] One other State, Massachusetts, and additional districts in three of the original States (Florida, Illinois, and New York) were selected to join the demonstration in SY 2013-2014.

Kentucky and Pennsylvania implemented DC-M statewide. In each of the other States, districts were randomly assigned to either a treatment group that implemented DC-M, or a control group that did not. Such random assignment of districts permits a rigorous analysis of the impacts of DC-M, and the estimates from that analysis are the focus of this report.

In New York, only New York City participated in the first year of the demonstration. In SY 2012-2013, the 32 community school districts in the city were randomly assigned to either conduct DC-M or not and are treated as districts in the data collection and analysis. Because of this unique aspect of the study design in this location, New York City continues to be treated as a separate "State" in the Year 2 analysis, and is not combined with the other New York State districts that joined the demonstration in SY 2013-2014.[14] In contrast, the relatively small number of Florida and Illinois districts that joined the demonstration in Year 2 are pooled in the analyses with other districts in those States that participated in DC-M in Year 1. The next chapter and Appendix A detail the evaluation sample and methods.

2. DC-M implementation

The procedures that demonstration States use for conducting DC-M in many ways mirror their existing direct certification processes for SNAP and other programs. In each State, the agency responsible for Medicaid data creates an eligibility file containing children receiving Medicaid who meet the DC-M income requirements, and provides the file to the child nutrition agency. In some States, a single agency produces both the DC-M eligibility file and the DC-SNAP eligibility file (or a combined file); in other States, different agencies produce the files. With the DC-M eligibility file, State child nutrition agencies follow the same procedures as they do with the DC-SNAP eligibility files: either matching the files to a statewide student

[13] Illinois is not included in the Year 2 quantitative analyses, due to implementation issues discussed later in this report. A sixth State, Alaska, was initially selected but withdrew before implementing DC-M.

[14] For convenience, New York City and New York State are referred to as separate *States* throughout the report.

database or providing the eligibility files to school districts for local matching to the district-level enrollment data. In random assignment States, only students in treatment districts are certified through DC-M matching. Chapter IX provides additional details on the DC-M implementation process in each demonstration State.

3. Objectives

This report focuses on the following research questions:[15]

- What is the impact of DC-M on the number of students certified to receive free meals? On the number certified without completing a household application?
- What is the impact of DC-M by reimbursement category (free, reduced-price, paid) on (a) the number of reimbursable meals served; (b) average daily participation; and (c) the participation rate for each of the categories?
- Based on demonstration data, what is the projected Federal meal reimbursement cost at the meal take-up rates observed?
- What is the impact of DC-M on State and local administrative costs and Federal meal reimbursement costs (for lunch, breakfast, and total programs) for the demonstration period, 2012-2013 and 2013-2014? What is the estimated impact if (a) DC-M were implemented nationwide and (b) DC-M were implemented in a subset of States where it would be feasible given current data capabilities?
- What are the quantitative and/or qualitative answers to each of the following questions?
    - What challenges were encountered in implementing the match to Medicaid data in the study States? How was each of these challenges resolved?
    - For how many students was the match performed at the State level, the school district level, or both?
    - What was the gap between the date of determination of Medicaid income and the date of determination of DC-M eligibility for free school meals? How did this gap differ among different districts and States? What led to particularly short and long gaps?
    - How much time was required for State and local employees to complete the match? How did staff time differ among the different districts and States? What led to particularly large and small staff time burdens?
    - How did success in matching vary by State, school district, and recipient characteristics?

To address these questions, the study team collected several types of data for SY 2013-2014: (1) certification and participation records for school districts selected for the demonstration, (2) a web survey of certification costs incurred by districts, (3) logs of costs incurred by State agencies in implementing DC-M, and (4) qualitative information on challenges State and district staff encountered during implementation. Impacts are measured by comparing the certification,

[15] The Year 1 Report to Congress focused on a subset of the research questions. The Year 2 report expands the set to include estimates of local administrative costs and challenges experienced at the district level. This report also addresses research questions related to the socioeconomic survey certification alternative.

participation, and cost outcomes of treatment districts with those of control group districts that year.

C. Overview of report

This report presents the findings from SY 2013-2014, the second year of the DC-M demonstration. Chapter II summarizes the methods used to collect data and conduct analyses. Chapters III through VI contain key findings on the impacts of DC-M on certification, participation, Federal reimbursement, and district administrative cost outcomes. Chapter VII discusses findings related to State administrative costs. Chapter VIII discusses challenges faced by States during implementation of DC-M, and Chapter IX summarizes our conclusions and the limitations of the findings. Appendices provide additional detail on methodology and supplemental tables and analyses—including an exploration of the costs of a socioeconomic survey (SES) certification alternative—as well as data collection instruments.

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II. METHODS

This evaluation measures the impact of DC-M on certification, participation, and cost outcomes, based on a comparison of districts randomly assigned either to conduct DC-M or to use normal certification procedures. It also assesses State-level administrative costs and identifies the challenges faced in implementing DC-M, using data from both States included in the impact analysis and those in which DC-M was implemented statewide. This chapter summarizes the data collection and analysis methods used. Appendix A provides additional details.

A. Sample

The Year 2 report discusses the implementation of DC-M in seven States. FNS solicited applications from States to participate in the DC-M demonstration and selected Florida, Illinois, Kentucky, New York City, and Pennsylvania to begin conducting DC-M in SY 2012-2013. FNS repeated the application process the following year and selected Massachusetts to join the demonstration, as well as expanding the sample to include districts beyond New York City in New York State and smaller numbers of additional districts in Florida and Illinois.[16] This report refers to the States that began DC-M in Year 1 as Cohort 1 States, and the two that began in Year 2 as Cohort 2 States.

DC-M was implemented statewide in two of the demonstration States (Kentucky and Pennsylvania, called universal implementation States) and was conducted in randomly selected districts within the other demonstration States (called random assignment States).[17] In the random assignment States, we matched districts into pairs based on district characteristics and randomly assigned one district from each pair to conduct DC-M (treatment districts) and one to carry out normal certification procedures without DC-M (control districts).[18] Appendix A presents additional details on the random assignment procedures.

The Year 2 sample included all treatment and control districts in the random assignment States and a sample of districts in the universal implementation States (see Table II.1).[19] However, specific analyses focused on different subsets of this overall sample. Due to implementation issues discussed later in this report, Illinois is not included in the quantitative analyses but is included in the discussion of implementation challenges.[20] The two universal

[16] New York City, which entered the demonstration in Year 1, will continue to be considered a separate site from the approximately 300 New York State districts that entered in Year 2. In Florida and Illinois, relatively few new districts joined in Year 2.

[17] FNS determined which States were designated for random assignment and which for universal implementation based on the State's application to participate in the demonstration and subsequent discussions with the applicants.

[18] Throughout the report, "*we*" refers to the DC-M evaluation team at Mathematica and Insight.

[19] Because rigorous impact estimates could be estimated only in the random assignment States, we sampled 30 districts in each universal implementation State to maximize the number of random assignment districts that could be included within contractual limits on the total number of districts from which data are collected.

[20] Illinois used an incorrect measure of income in conducting DC-M, as described in more detail in Chapter VIII. Because the measure of income used in conducting DC-M directly affects which students are certified (and thus

implementation States are included in the analyses of challenges and State administrative costs, but impact analyses are based on the States in which districts were randomly assigned. Analyses of certification impacts are based only on Cohort 1 random assignment States, due to delays in DC-M implementation in Cohort 2 States. For the interviews on implementation challenges, we selected six districts in each State where local staff are primarily responsible for direct certification matching and three districts in each State that conducts matching at the State level. Appendix A presents additional detail on the selection process for each sample.

Table II.1. Sample for Year 2 (SY 2013-2014)

State[a]	Number of districts			
	Selected for evaluation	Eligible sample[b]	Complete certification and participation data available	District cost survey respondents
Random assignment States				
Florida	56	30	30	30
Massachusetts	300	294	273	227
New York City	32	32	32	--
New York State	300	285	280	266
Random assignment State total	**688**	**641**	**615**	**523**
Universal implementation States[c]				
Kentucky	30	25	25	25
Pennsylvania	30	30	30	25
Universal implementation State total	**60**	**55**	**55**	**50**

Note: The following districts are excluded from the analyses presented in this report:

- Districts, and their matched pairs, that became ineligible after random assignment because they closed, stopped participating in the school meals programs, or began implementing the CEP. These districts are included in the "Selected for evaluation" column but excluded from the remaining columns of this table.
- Any districts for which either certification or participation data for either the baseline year or Year 2 were unavailable or clearly problematic. The districts in this category are included in the "Eligible sample" column but not in the last two columns of this table.

[a]An additional 728 districts were selected and randomly assigned in Illinois, but that State is excluded from all quantitative analyses due to implementation issues.

[b]Three charter schools in New York State were deemed ineligible for the survey because direct certification was conducted centrally by charter management organization staff located in another state.

[c]Universal implementation States are included in the analyses of State costs and State- and district-level challenges but are not included in the impact analyses.

CEP = Community Eligibility Provision.

influences the outcomes examined in Chapters III-V of this report) and potentially affects the costs incurred by State and district staff in conducting DC-M (discussed in Chapters VI-VII), Illinois has been excluded from the analyses presented in those chapters.

Although the expansions of the demonstration discussed above resulted in a larger sample in Year 2 than in the prior year, some districts in the Year 1 sample became ineligible in Year 2 because they closed, stopped participating in the school meals programs, or began implementing the CEP.[21] Notably, Florida was authorized by FNS to begin the CEP in Year 2, resulting in the exclusion from the Year 2 analysis sample of the 12 district pairs containing schools that adopted the CEP. Other changes in the sample between years are discussed in Appendix A.

B. Data collection

For the second year of the demonstration, we collected the following data:

- **Certification and participation data.** Key data collected fall into two broad categories: (1) information on enrolled students by school meal benefit certification status and basis for certification and (2) information on monthly participation—that is, meals served—for the NSLP and SBP. In Cohort 2 States, we collected these administrative data for both SY 2013-2014, the year they joined the demonstration, and for the year prior to the demonstration, SY 2012-2013. For Cohort 1, we collected data on SY 2013-2014, the second year of the demonstration, to use along with the baseline (SY 2011-2012) data collected earlier.
- **District cost survey data.** Data on district-level administrative certification costs were collected from respondents in both treatment and control groups through a web survey administered in four rounds, covering July through April. The survey asked in detail about each possible step in the certification process, the types of staff who worked on each task, and the number of hours worked. A separate section of the survey collected salary and benefit data for each staff category, as well as non-labor certification costs. The survey achieved a response rate of 80 percent or higher for all rounds in both treatment and control group districts in each State.
- **State cost data.** We collected monthly data on the administrative costs of setting up and operating DC-M at the State level—over and above time spent on other direct certification activities—through Excel logs completed by staff for the State child nutrition and Medicaid agencies. We conducted follow-up telephone conversations and exchanged emails as needed, to ensure accurate interpretation of the data provided.
- **Implementation challenges data.** Our subcontractor, Insight Policy Research, conducted two rounds of semi-structured telephone interviews in SY 2013-2014 to learn about the challenges experienced and lessons learned during DC-M implementation. We interviewed representatives of selected districts and both the State child nutrition agency and the State Medicaid agency involved in the demonstration in each State.

C. Key outcome measures

In Year 2, we examined outcomes measured at the district level in four domains: certification; participation (that is, student receipt of school meals); Federal reimbursement costs; and district certification costs. Valid impact estimates can be computed only for random assignment States (as discussed in detail in Appendix A), and are the focus of the certification,

[21] Across the Cohort 1 States, 27 districts from the Year 1 sample were excluded in Year 2.

participation, Federal reimbursement, and district cost analyses in this report, although estimated outcomes for districts in all demonstration States are presented in appendix tables. All demonstration States are included in analyses of State-level administrative costs and challenges encountered by States and districts.

1. Certification outcomes

DC-M offers two potential benefits to students and their families: (1) certification for free meals when they might otherwise be required to pay the full price or a reduced price for school meals and (2) certification without having to complete an application. Aligned with these benefits, our two primary certification measures are as follows:

- **The percentage of students certified for free meals,** defined as the number of students in the district who are certified for free meals (as of the last operating day in October) divided by the number of students enrolled.
- **The percentage of students directly certified for free meals**, defined as the number of students in the district who are certified without needing to submit an application (as of the last operating day in October) divided by the number of students enrolled.[22]

These certification outcomes are measured as of the last operating day in October to align with certification data that States regularly report to FNS. Because the Cohort 2 States did not implement DC-M until later in the school year, Massachusetts and New York State are excluded from the certification analyses.

2. Participation outcomes

Because the number of school meals served to students depends on the size of the district, as well as the certification status and participation behavior of students, we focus on outcome measures that account for size, rather than comparing raw numbers of meals served. Our two primary participation measures, each computed separately for the lunch and breakfast programs, are as follows:

- **The average number of meals served per student per school day,** defined as the total number of reimbursable meals served divided by the product of the number of students enrolled in schools participating in either the NSLP or the SBP in the district (as of the end of October) and the number of operating days in the relevant set of months.[23]
- **The percentage of meals served for free,** defined as the number of meals served for free divided by the number of reimbursable meals served.

[22] Most States provided the number of students not subject to verification as a proxy for the number directly certified. This number includes students directly certified based on information from the SNAP, FDPIR, TANF, or Medicaid agency; children on the homeless liaison list; income eligible participants in Head Start, -or residing in Residential Child Care Institutions (RCCIs); and nonapplicants who are approved by local officials.

[23] In Appendix C, we also show participation rates defined separately for each reimbursement category (free, reduced-price, paid).

The set of months included in these participation measures varies by State. Each measure excludes months in which either (1) an incorrect measure of income was used for determining eligibility under DC-M or (2) DC-M had not yet begun in the State. The analyses for two States (New York City and Pennsylvania) cover the full school year, the analyses for Florida and Kentucky are based only on the months during the first semester, and those for the Cohort 2 States include only months in the second semester, beginning with January for New York State and March for Massachusetts.[24]

For each State, the measures used for the baseline year are based on the same set of months during that year as are used for Year 2.

3. Federal reimbursement outcomes

Our primary measures of the impact of DC-M on Federal reimbursements are also defined to control for the size of districts:

- **Reimbursement costs per student per school day** are defined as total Federal reimbursement costs for meals served to students divided by the product of the total number of students enrolled in the district (as of the end of October) and the number of operating days in the relevant set of months.
- **The blended reimbursement rate (BRR)** is defined as total Federal reimbursement costs divided by the number of meals served. The BRR measures the average reimbursement per meal served.

Within each State, the two Federal reimbursement outcomes are calculated for Year 2 and the year before DC-M began, using the same set of months as used for the participation outcomes.

4. District administrative cost outcomes

Our primary measure of district administrative costs is total costs of certification, per student enrolled in the district. We also examine the breakdown of these costs by certification activity: (1) certification by application, (2) direct certification, and (3) certification activities that may apply to all certified students. Similar to the participation and Federal reimbursement outcomes, the district administrative cost outcomes are measured over the months during which the correct measure of income was used and after districts in the State began implementing DC-M in Year 2.[25]

[24] Florida and Kentucky used the correct measure of income initially but did not correctly revise their DC-M eligibility assessment process in January 2013 when changes to Medicaid eligibility occurred under ACA. Because the measure of income used in conducting DC-M affects the outcome measures, those measures for Florida and Kentucky are based on data for the fall semester only.

[25] We define the beginning of DC-M as the point at which the State distributed to districts either the lists to use for DC-M matching (in States where matching is conducted by the districts) or the match results (where matching is conducted at the State level). Although State agency staff may have provided information about DC-M to districts in advance, the involvement of district-level staff before this point in time was likely minimal.

5. State administrative cost outcomes

The key outcome for the State administrative cost analysis is the total additional cost of implementing DC-M in each State, relative to existing costs of NSLP certification. Total costs are broken down by agency (child nutrition or Medicaid), by quarter, and by start-up versus ongoing costs. Start-up costs are defined as costs incurred up to and including the month when DC-M was first conducted, except for a few agencies where some start-up activities (such as executing data sharing agreements) were still occurring within a few months after DC-M was implemented. Ongoing costs were all costs incurred after the first month of DC-M, except as noted. The measures of State administrative costs exclude those months during which an incorrect measure of income was used for DC-M.[26]

D. Analysis

This report presents results of both quantitative and qualitative analyses. Quantitative analyses include estimation of impacts in random assignment States and an analysis of administrative costs incurred by State agency staff in both random assignment and universal implementation States. All demonstration States are also included in qualitative analyses of challenges encountered.

1. Quantitative analyses

Impact analyses. In Florida, Massachusetts, New York City, and New York State, we randomly assigned districts to either a treatment group in which DC-M was conducted or a control group in which regular certification procedures were used.[27] Comparing outcomes for the treatment group with outcomes for the control group allows us to obtain unbiased estimates of the impacts of DC-M on certification, participation, reimbursement costs, and district administrative costs. Unbiased estimates cannot be obtained for the two universal implementation States (Kentucky and Pennsylvania) in which random assignment was not conducted, because all districts from those States are in the treatment group and there is no rigorous method for constructing a valid comparison group of districts. Therefore, our quantitative impact analyses focus on estimates from the random assignment States.

The impact estimates are regression-adjusted to improve precision by controlling for random differences between the treatment and control groups' district-specific characteristics, as measured before random assignment. Appendix A includes details of the regression models.

State cost analyses. Because States were not randomly assigned to the demonstration, the estimates of costs State agencies incurred in conducting DC-M are not impact estimates. Instead, they rely on the reports of staff at State child nutrition and Medicaid agencies in all

[26] The measure of income used for DC-M could affect the costs incurred by State agencies because the State-level processes or degree of effort necessary to identify students could vary by measure. For example, using a measure of income that is more readily available in a State agency's database would require a lower level of effort by State staff to implement DC-M, leading to underestimates of administrative costs.

[27] We also randomly assigned districts in Illinois, but they are excluded from the quantitative analyses due to implementation issues in that State.

demonstration States of the time spent and other costs incurred for DC-M over and above those that would be necessary for direct certification with SNAP and other programs.

Pooled estimates. Within each State, district-level results are aggregated to present an estimate for demonstration districts across the State. To summarize the results from different States, we present in some tables "pooled estimates" that are derived by aggregating across States. Because DC-M was implemented late in the year in Cohort 2 States, we present pooled estimates separately by cohort.

Pooled estimates pertain only to the particular collection of districts included in an analysis; they are not intended to have any broader generalizability. In particular, they do not estimate the likely effects of DC-M if it were implemented throughout the demonstration States or across the country.

Extrapolations. To satisfy a requirement of the evaluation and provide a rough sense of the potential effects on Federal reimbursement costs if DC-M were adopted nationwide, we present national cost extrapolations. We derive the national extrapolations by weighting the treatment and control districts in the random assignment States to represent all districts in the country. The weight for each district is estimated using propensity score modeling methods, described in detail in Appendix A. Extrapolations of reimbursements per student day are multiplied by national data on student enrollments and serving days for the full school year to yield an estimate of the total dollar amount of Federal reimbursements. The very severe limitations of the national extrapolations are discussed later in this chapter and in Appendix A.

Measures of precision. For the impact estimates, we have provided 95 percent confidence interval (CI) "half-widths." These measures indicate the margin of error in the impact estimates. If, for example, an estimated impact of 5 percentage points for the direct certification rate has a margin of error of plus or minus 2 percentage points, it is likely that estimates of the direct certification rate from different samples would fall in the range of 3 to 7 percentage points. Appendix A discusses the methods used to derive the CI half-widths and important limitations of those methods.[28]

Comparisons to earlier reports. Findings presented in earlier reports of the DC-M evaluation are summarized after discussions of the Year 2 results in each outcome domain. However, direct comparisons between findings across reports could be misleading due to differing restrictions on the analysis samples and the set of months included in each. In addition, Illinois was included in the earlier reports because, although that State used an incorrect measure of income for DC-M from the beginning, this issue was not discovered until Year 2. We do not discuss the Illinois results here because those findings reported for Illinois do not represent the impacts of accurate implementation of DC-M.

[28] One important limitation is that the methods are valid only when applied to random samples. However, the States in the demonstration are not a random sample, although they are treated as such for the derivation of the confidence interval half-widths.

2. Qualitative analyses

Interviews with State and district staff about challenges encountered when implementing DC-M were recorded, transcribed, and imported into NVivo 10, a software program used for coding qualitative data. We developed a draft coding scheme based on the research questions, interview protocols, and a small sample of transcripts, and reviewed and coded each transcript using the scheme. Staff examined coded data to identify patterns relating to the challenges and experiences of State agencies implementing DC-M.

E. Limitations of the demonstration and evaluation

Several limitations of the DC-M demonstration sample, data, and methods should be considered in interpreting the results. Appendix A provides a more detailed discussion of these and other limitations.

1. Demonstration sample is not representative of the States or the nation

The DC-M evaluation is based on a sample that is not representative of all districts in the demonstration States or nationally. The States that applied to participate in the evaluation differ systematically from other States in the nation. Among other characteristics, NSLP State agency applications to participate required them to provide evidence of readiness to carry out the demonstration and preliminary steps already taken in working with their Medicaid State agency on data-sharing agreements, which suggests that their State-level data systems and interagency relationships might be conducive to a greater willingness and, likely, a greater ability than in other States to implement DC-M. The demonstration also includes a larger proportion of States in which direct certification matching is conducted at the local level than the nation as a whole.

Within these States, the selection of districts was subject to several constraints.[29] First, States did not always include all of their districts or schools in their applications for DC-M. Notably, New York City included in the demonstration sample only schools that (1) were not participating in Provision 2 and (2) had electronic point-of-sale systems, which resulted in a sample containing approximately one-third of the public school students in the city, with a higher proportion of high schools than the city as a whole. In addition, the demonstration sample was not designed to represent schools operating under special provisions rather than traditional certification methods, because key outcomes, such as the percentage of students certified, cannot be measured in these schools. Districts in which more than 20 percent of schools were operating under Provision 2 or Provision 3 were excluded from the sample (and Provision 2 and Provision 3 schools in other districts were excluded from the data and analyses to the extent possible).

[29] An additional limitation on the Year 1 sample was relaxed in Year 2. Because of a Congressionally imposed limit on the number of students certified for free and reduced-priced meals in DC-M districts, some of the largest districts—with substantial fractions of the State student populations—had to be excluded from the demonstration and evaluation in Year 1. The HHFKA specified that districts conducting DC-M in SY 2012-2013 in States where DC-M is conducted only in selected districts collectively must include no more than 2.5 percent of all students certified for free and reduced-price meals in the nation. For SY 2013-2014, the limit increased to 5 percent of all students certified, allowing us to add to the sample several of the largest districts in Florida.

Districts that included any CEP schools were also excluded.[30] FNS required this exclusion in Year 1 to avoid overlap with another FNS study, and we maintained that approach for Year 2. Notably, Florida's authorization to begin conducting CEP in its second year of the DC-M demonstration resulted in the exclusion of 12 district pairs from the Year 2 analysis sample. These 24 districts represent a large proportion of the State's demonstration districts, and they differed from the other districts in the Florida sample along relevant characteristics.[31] The expansion of CEP nationwide and its adoption by additional districts in the years since the DC-M data collection further limit the generalizability of the findings.

These limitations on the selection of the samples severely limit the ability to define a meaningful universe of districts to which the demonstration sample and evaluation findings might generalize. The estimated impacts presented in this report for the States should not be interpreted as indicative of the likely effects of statewide adoption of DC-M. Furthermore, the estimates for the sample of districts pooled across the demonstration States pertain to that specific sample only and do not generalize more broadly to the combined set of those States or to the nation. Finally, although the national extrapolations attempt to estimate the potential effects of DC-M if its implementation were expanded nationwide, they are based on a sample of only four random assignment States.[32] Thus, the extrapolations have very large margins of error, even when the States and districts are treated as random samples, an invalid assumption that leads to understatement of the error in the estimates.[33]

2. Implementation challenges in some States affect outcomes

Two of the implementation challenges discussed in Chapter VIII have implications for the quantitative analyses. First, three States did not use the correct measure of income for DC-M for at least part of Year 2.[34] This resulted in the exclusion of one State, Illinois, entirely—exacerbating the sample limitations discussed in the previous section—and the exclusion of data for the second semester of the school year in two other States (Florida and Kentucky). Illinois had a larger sample of districts in the demonstration than any other State; its removal reduced the overall sample size by approximately half.

Second, this report focuses on data from the second year of DC-M implementation for Cohort 1 States but the first year of implementation for Cohort 2 States. Although all Cohort 1

[30] For States authorized to conduct CEP before district selection for DC-M, such districts were excluded from the sample frames before random assignment. Districts that implemented CEP after random assignment were excluded from the analysis sample, along with their matched pairs.

[31] For example, 39 percent of students in district pairs in which schools adopted CEP in Year 2 were directly certified at baseline, compared to 30 percent of students in pairs with no CEP schools.

[32] Moreover, one of these States is New York City, in which the sample includes a nonrepresentative sample of schools.

[33] Given the limitations on sample selection, there is no valid basis grounded in statistical sampling theory for generalizing beyond those districts to a broader collection of districts, such as all districts in the nation.

[34] As discussed in Chapter VIII, Illinois used net income, rather than gross income in assessing eligibility for DC-M. Florida and Kentucky used the correct income measure during Year 1 and the first semester of Year 2, but following ACA implementation, Kentucky used an incorrect income standard and Florida used income after disregards, rather than before disregards.

States implemented DC-M from the beginning of the school year, neither Cohort 2 State began DC-M until the second semester. New York State and Massachusetts first conducted DC-M in January and March, respectively, both after the reference point for certification data, so the measures of certification used in the study cannot reflect the effects of DC-M in those States. In addition, the measures of other outcomes in these States are based only on the months after implementation and thus do not represent a full school year.

The substantial differences in the sets of months used for the analyses in different States (September-December for Florida and Kentucky, January-May for New York State, March-May for Massachusetts, and the full school year for New York City) make cross-State comparisons potentially misleading and limit the ability to pool findings across States. This limitation is particularly relevant for analyses of certification costs, because certification activities are largely concentrated at the beginning of the school year.

3. Data are subject to respondent error

Estimates of costs incurred at the district and State levels are based on staff reports and could suffer from recall or data entry error. Administrative data provided by the States omitted some requested data elements and some sample districts. In addition, there were some inconsistencies across files. Districts with clear errors in the data were excluded from the analysis, but unidentified errors could remain. Appendix A discusses these issues further.

III. IMPACTS ON CERTIFICATION OUTCOMES

DC-M aims to increase access to free meals among eligible students while easing the burden of the certification process on families and school districts by reducing the number of applications for school meal benefits. To assess progress toward these goals in the second year of the demonstration (SY 2013-2014), the study team examined two key certification outcomes—the percentage of students directly certified for free meals and the total percentage of students certified for free meals—as of the end of October 2013 (the point in the school year when certification outcomes are typically reported to FNS.) This chapter presents findings on the impact of DC-M on certification outcomes in the three random assignment States that had implemented DC-M by October 2013. Then, comparisons to results from earlier DC-M demonstration evaluation reports are discussed

A. Year 2 impacts in random assignment States

DC-M had positive, statistically significant impacts on both key certification outcomes in one of the two Cohort 1 random assignment States in SY 2013-2014. Treatment group districts in New York City directly certified 41.7 percent of enrolled students, 6.9 percentage points more than control group districts (Table III.1). The impact on the percentage of students directly certified was not statistically significant in Florida. Differences between States' Medicaid eligibility rules in SY 2013-2014 could contribute to different impacts across States. In New York, children ages 6 to 19 years with family incomes up to 133 percent of poverty were eligible for Medicaid coverage, and thus potentially eligible for free meals under DC-M. In Florida, however, the maximum family income for those children was 100 percent of poverty; those with incomes between 100 and 133 percent were covered by S-CHIP at that time. Although the ACA required States to transition children from S-CHIP to Medicaid (M-CHIP) by January 2014, Florida received a waiver that allowed it to delay the transition until August 2014.

The impact on the total percentage of students certified for free meals is also statistically significant for New York City (5.9 percentage points) but not for Florida.[35] The impact on the free certification rate is smaller than the impact on the direct certification rate because some of the students directly certified under DC-M would have been certified for free meals by application in the absence of DC-M.

By definition, increases in the percentage of students certified for free meals must be offset by decreases in the percentage certified for reduced-price meals, the percentage not certified (eligible for only "paid" or full-price meals), or both. In New York City, there was a statistically significant decrease in the percentage of students in the paid category (Appendix B, Table B.3).[36]

[35] The findings in Florida are highly sensitive to the inclusion of the districts that began DC-M in the second year of the demonstration; these districts are the largest in the State. Appendix J presents sensitivity analyses that explore how the findings differ when these districts are excluded and when a different baseline is used.

[36] In treatment districts, 34.2 percent of students were not certified to receive either free or reduced-price meals, compared to 39.8 percent of students in control group districts.

Impacts on certification outcomes are not shown for Massachusetts and New York State, because certification was measured before DC-M was conducted in those States. However, the study team did examine the data for these two States and, as expected, found no statistically significant differences in key certification outcomes between their treatment and control group districts (not shown).[37]

Table III.1. Impacts of DC-M on key certification outcomes in SY 2013-2014 (regression adjusted)

	Percentage of students					
	Directly certified for free meals[a]			Total certified for free meals[b]		
State	Treatment districts	Control districts	Impact (CI)	Treatment districts	Control districts	Impact (CI)
Florida	38.9	36.5	2.5 (± 3.8)	55.3	53.4	2.0 (± 3.7)
New York City	41.7	34.7	6.9* (± 1.5)	59.4	53.5	5.9* (± 1.8)
Pooled sample	**39.4**	**36.2**	**3.3* (± 3.1)**	**56.1**	**53.4**	**2.7 (± 3.0)**

Source: October certification data provided by the States.

Notes: Values in this table are regression adjusted. Appendix A lists the variables included in the regression adjustments. Certification outcomes are measured as of the end of October, at which time the Cohort 2 States—Massachusetts and New York State—had not yet implemented DC-M. Impacts shown in the table may differ slightly from calculated differences due to rounding.

[a]Includes all students certified to receive free meals but not subject to verification, including those directly certified based on information from the SNAP, FDPIR, TANF, or Medicaid agency; children on the homeless liaison list; income-eligible Head Start -participants; residential students in RCCIs; and nonapplicants approved by local officials.

[b]Including by application, direct certification, or other categorical eligibility.

*Percentage for treatment districts is significantly different from the percentage for control districts at the 0.05 level.

CI = 95 percent confidence interval half-width; FDPIR = Food Distribution Program on Indian Reservations; RCCI = residential child care institution; SNAP = Supplemental Nutrition Assistance Program; SY = school year; TANF = Temporary Assistance for Needy Families.

B. Comparisons with findings from earlier reports

This report is the third produced under the DC-M evaluation. The first presented findings from the Access Evaluation component based on simulations of DC-M using student-level data from the year before DC-M began (Hulsey et al. 2015b). The second (the Year 1 report) reported on experiences during the first year of DC-M implementation using district-level data (Hulsey et al. 2015a). Both provided estimates of the impact of DC-M on the certification outcomes examined in this chapter.[38] The Access Evaluation simulations indicated that DC-M could have increased the percentage of students who were directly certified to receive free meals in October 2011 in all States in that analysis—including Florida and New York City—but the magnitude of the estimates varied by State. The Year 1 report analyzed certification in New

[37] Appendix B includes tables showing unadjusted certification outcomes data for the Cohort 2 random assignment States and the universal implementation States.

[38] The Access Evaluation examined only certification outcomes.

York City (but not Florida) and found statistically significant impacts on both key certification outcomes in that State.[39]

However, direct comparisons between findings presented in this report and those in the earlier reports could be misleading. First, the analysis samples differ across reports. As discussed in Chapter II, several community districts in New York City that were excluded from the Year 1 analysis due to special circumstances after Hurricane Sandy were included in the Year 2 analysis. Thus, any differences observed between Table III.1 in this report and the corresponding table in the Year 1 report might be due to differences among the districts included in the sample rather than changes over time within districts. The sample for the Access Evaluation similarly differs from the sample in this report. Notably, due to limitations on approved data collection, the Access Evaluation included only three districts in Florida. Just one of these three districts is included among the 30 districts in the Year 2 analysis sample, due to the exclusion of districts with schools that adopted CEP in Year 2 from the Year 2 analysis.

Differences between the findings presented in this report and those from the Access Evaluation Report reflect substantial differences in methodology. This report presents outcomes of DC-M as actually conducted by the States and districts in the second year of the demonstration. In contrast, for the Access Evaluation, the research team conducted simulations of DC-M matching procedures using data for SY 2011-2012, the year before the demonstration began. Simulating DC-M involved (1) matching student enrollment and Medicaid data using individual identifiers, such as name and birth date, and (2) for each match, assessing the school meal eligibility category suggested by the income information in the Medicaid file. The simulated result for each student was compared with the student's actual certification status to determine the potential impact of DC-M. In addition to differences in the sample and methods used in the two study components, potential limitations in the data available for the simulations could also contribute to the differences in the findings. Additional details on the methodology and data limitations can be found in the Access Evaluation Report (Hulsey et al. 2015b).

[39] Florida was excluded from the analysis of certification outcomes in Year 1, because those outcomes were measured before DC-M was conducted in the State that year. Illinois was included in the earlier reports, because although that State used an incorrect measure of income for DC-M from the beginning, this was not discovered until Year 2. We do not discuss the Illinois results here, however, because the measure of income used influences the outcomes.

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IV. IMPACTS ON PARTICIPATION OUTCOMES

DC-M might increase participation—that is, the number of meals served—if more students are certified to receive free meals and those students choose to obtain school meals more often in response to the reduction in cost from full or reduced-price to free. Even if the behavior of students does not change and overall participation does not rise, the proportion of meals served for free could increase if students who had been participating at full or reduced-price continue to participate but now receive free meals.

The participation analysis focuses on two main outcomes:

1. The average number of meals served per student per day. This measure can be thought of as the average daily proportion of enrolled students that choose to take a reimbursable meal.
2. The percentage of meals that were served for free.

These outcome measures exclude months in which either (1) an incorrect measure of income was used for DC-M or (2) DC-M had not yet begun in the State in Year 2.[40] Because the set of months included in these participation measures varies by State, cross-State comparisons could be misleading, as differences might be due to the different time periods. Because DC-M was implemented late in the year in Cohort 2 States, we present pooled estimates separately by cohort.

This chapter presents findings on the impact of DC-M on these two participation outcomes in the five random assignment States, and discusses how these findings relate to earlier reports of the DC-M demonstration evaluation. Supplemental tables in Appendix C present numbers of meals served and alternative participation measures.[41]

A. Impacts on NSLP participation outcomes

Generally, DC-M did not significantly increase NSLP participation. Although it had a statistically significant impact on the average number of lunches served per student per day in New York City, DC-M did not significantly impact this outcome in any of the other three random assignment States (Table IV.1).

DC-M had a positive, statistically significant impact on the percentage of lunches served for free in two of the four random assignment States. In Massachusetts and New York State, DC-M resulted in statistically significant differences between treatment districts and control districts of 1.1 and 1.5 percentage points, respectively. DC-M had no statistically significant impact on the percentage of lunches served for free in either Cohort 1 State.

[40] Florida used an incorrect measure of income for DC-M in the spring semester of Year 2 (SY 2013-2014), so these measures of participation are based only on data for the fall semester (September-December) of each year—the baseline and Year 2—for that State. Students were first certified through DC-M in January in New York State and in March in Massachusetts, so the participation measures exclude months before then in those Cohort 2 States. For New York City, these measures are based on the full school year (September-May).

[41] Appendix C also includes tables showing unadjusted participation outcomes data for the universal implementation States.

Table IV.1. Impacts of DC-M on key NSLP participation outcomes in SY 2013-2014 (regression adjusted)

State	Lunches served per student per day			Percentage of lunches served for free		
	Treatment districts	Control districts	Impact (CI)	Treatment districts	Control districts	Impact (CI)
Cohort 1 States						
Florida	0.58	0.57	0.02 (± 0.02)	72.6	73.4	-0.8 (± 1.2)
New York City	0.42	0.38	0.05* (± 0.03)	76.9	75.2	1.7 (± 1.7)
Pooled Sample (all districts in Cohort 1 random assignment States)	**0.55**	**0.53**	**0.02* (± 0.02)**	**73.2**	**73.6**	**-0.5 (± 1.1)**
Cohort 2 States						
Massachusetts	0.45	0.45	0.00 (± 0.01)	42.6	41.5	1.1* (± 0.6)
New York State	0.46	0.47	0.00 (± 0.01)	42.3	40.8	1.5* (± 0.6)
Pooled Sample (all districts in Cohort 2 random assignment States)	**0.46**	**0.46**	**0.00 (± 0.01)**	**42.5**	**41.2**	**1.3* (± 0.4)**

Source: Monthly administrative claims data provided by the States.

Notes: The results reported in this table are obtained by (1) aggregating across the months after each demonstration State implemented DC-M in SY 2013-2014 (the beginning of the school year for all Cohort 1 States, January for New York State, and March for Massachusetts) and (2) excluding months during which the State used an incorrect measure of income for conducting DC-M (January through May for Florida). Values in this table are regression adjusted. Appendix A lists the variables included in the regression adjustments. Impacts shown in the table may differ slightly from calculated differences due to rounding. In the Year 1 version of this table, the average number of meals served per student per day was multiplied by 100. In this report, the scale was changed to help with data interpretation.

*Estimate for treatment districts is significantly different from the estimate for control districts at the 0.05 level.

CI = 95 percent confidence interval half-width; NSLP = National School Lunch Program; SBP = School Breakfast Program; SY = school year.

B. Year 2 impacts on SBP participation outcomes

DC-M did not significantly impact SBP participation in most States (similar to the results for the NSLP), but did increase the percentage of breakfasts served for free. The only statistically significant impact on the number of breakfasts served per student day across the four random assignment States was a negative impact (of -0.01) in New York State.[42] DC-M had no statistically significant impact on this outcome in any other State (Table IV.2).

[42] This unexpected finding is highly sensitive to the inclusion of one control group district in which an unusually high participation rate in the SBP was combined with a large, unexplained, increase in Year 2 in the number of students directly certified. When that district was excluded from the analysis, the impact in New York State was no longer statistically significant.

Table IV.2. Impacts of DC-M on key SBP participation outcomes in SY 2013-2014 (regression adjusted)

State	Breakfasts served per student per day			Percentage of breakfast served for free		
	Treatment districts	Control districts	Impact (CI)	Treatment districts	Control districts	Impact (CI)
Cohort 1 States						
Florida	0.24	0.23	0.01 (± 0.01)	78.0	76.2	1.9* (± 1.1)
New York City	0.13	0.14	-0.01 (±0.02)	72.4	68.7	3.7* (± 2.2)
Pooled Sample (all districts in Cohort 1 random assignment States)	**0.22**	**0.21**	**0.01 (± 0.01)**	**77.4**	**75.3**	**2.1* (± 1.0)**
Cohort 2 States						
Massachusetts	0.11	0.12	0.00 (± 0.01)	73.0	72.8	0.2 (± 1.3)
New York State	0.14	0.15	-0.01* (± 0.01)	66.5	64.9	1.6* (± 1.1)
Pooled Sample (all districts in Cohort 2 random assignment States)	**0.13**	**0.13**	**-0.01 (±0.01)**	**69.3**	**68.3**	**1.0* (±0.8)**

Source: Monthly administrative claims data provided by the States.

Notes: The results reported in this table are obtained by (1) aggregating across the months after each demonstration State implemented DC-M in SY 2013-2014 (the beginning of the school year for all Cohort 1 States, January for New York State, and March for Massachusetts) and (2) excluding months during which the State used an incorrect measure of income for conducting DC-M (January through May for Florida). Values in this table are regression adjusted. Appendix A lists the variables included in the regression adjustments. Impacts shown in the table may differ slightly from calculated differences due to rounding. In the Year 1 version of this table, the average number of meals served per student per day was multiplied by 100. In this report, the scale was changed to help with data interpretation.

*Estimate for treatment districts is significantly different from the estimate for control districts at the 0.05 level.

CI = 95 percent confidence interval half-width; NSLP = National School Lunch Program; SBP = School Breakfast Program; SY = school year.

Although DC-M did not increase SBP participation overall, it had positive, statistically significant impacts on the percentage of breakfasts served for free in three of the four States. DC-M had impacts of 1.9 and 3.7 percentage points on the percentage of lunches served for free in Florida and New York City, respectively, and a 1.6 percentage point impact in New York State.

C. Comparisons with other findings

The statistically significant impact on the percentage of breakfasts served for free in New York City is consistent with the significant impact on the percentage of students certified for free meals in that State reported in the previous chapter, although that certification impact did not translate into a statistically significant impact on the percentage of lunches served for free. Although Massachusetts and New York State did not implement DC-M early enough for its effects to be captured in the certification data for October, both States show statistically significant impacts of DC-M on the percentage of meals (lunches in both States and breakfasts in New York State) served for free during the months after DC-M began. Although the Cohort 2 States began DC-M too late in the school year for it to be reflected in the certification outcomes,

this participation finding would be consistent with an increase in the underlying free certification rate of students in these States after DC-M was implemented.

The Year 1 report (Hulsey et al. 2015a) on experiences during the first year of implementation provided estimates of the impact of DC-M on the participation outcomes examined in this chapter. It analyzed participation in Florida and New York City and found no statistically significant impacts for the average number of meals served per student per day, except in Florida, where there was a negative impact for breakfast. The Year 1 report found statistically significant impacts of DC-M on the percentage of lunches served for free in one of the two States (New York City) and a statistically significant impact on the percentage of breakfasts served for free in the other State (Florida). However, direct comparisons of those findings with the findings presented in Table IV.1 of this report could be misleading. As discussed in Chapter III, differences observed between outcomes presented in this report and those in the Year 1 report could be due to differences in the districts included in the sample rather than changes over time. In addition to the sample differences for Florida and New York City that were noted in that chapter, additional districts were added to the demonstration in Florida in Year 2, as discussed in Chapter II. Another factor to consider in comparing findings across years is that the measures are based on different sets of months for Florida. In addition to the exclusion of spring semester data from the Year 2 analysis due to the use of an incorrect income measure during that time period, Florida did not implement DC-M at the beginning of the school year in Year 1, and the analyses of participation and Federal reimbursement costs focus on the months after a State implemented DC-M. Thus, for Florida, the Year 1 analyses were based on February-May, whereas the Year 2 analyses are based on September-December.[43]

[43] New York City implemented DC-M at the beginning of the school year in Year 1, and used the correct measure of income in conducting DC-M, so both reports included the full school year for that State.

V. IMPACTS ON FEDERAL REIMBURSEMENT COSTS

If DC-M influences the number of free, reduced-price, and paid meals served, as discussed in the previous chapter, it will also affect the Federal reimbursements provided to districts. These reimbursements are revenues for the districts but are costs from the Federal perspective. This chapter examines the impact of DC-M on Federal reimbursements per student per day and on the blended reimbursement rate (BRR), which measures the average reimbursement rate per meal served, for the random assignment States in the demonstration. Then, it presents extrapolations of the effect on total reimbursements in SY 2013-2014 if DC-M had been implemented nationally.

The NSLP and SBP reimbursement rates are published in the Federal Register. They increase annually based on the Food Away From Home series of the Consumer Price Index for All Urban Consumers (CPI-U). Rates are highest for free meals, slightly less for reduced-price meals, and much less for paid meals, and they are higher for lunches than for breakfasts. Districts or schools that qualify for needs-based NSLP rates or severe-needs SBP rates receive slightly higher reimbursements.[44] In addition, starting in October 2012, districts that met new school nutrition regulations received an extra 6 cents per lunch served. The -base) NSLP rates (excluding the needs-based extra 2 cents and the performance-based extra 6 cents) in SY 2013-2014 were $2.93 for free lunches, $2.53 for reduced-price lunches, and $0.28 for paid lunches. Free breakfasts were reimbursed at a base (non severe-needs) rate of $1.58, reduced-price breakfasts at $1.28, and paid breakfasts at $0.28. Table A.2 in Appendix A presents the full sets of rates for school years 2011-2012, 2012-2013, and 2013-2014.[45]

Because the reimbursement to a district varies with the number of meals served, which, in turn, varies with the number of students in the district, it is useful to examine outcome measures that standardize reimbursements by district size. Accordingly, the focus is on two outcomes measures:

1. ***Reimbursements per student per day***—average daily reimbursement per student enrolled.
2. ***Blended reimbursement rate (BRR)—***average reimbursement per meal served.

The BRR reflects the distribution of meals served across the free, reduced-price, and paid categories, and thus is influenced by changes in certification status of students who participate in the school meals programs. The reimbursement cost per student per day equals the BRR multiplied by the average number of meals served per student per day (one of the outcomes presented in Chapter IV), and thus, also reflects any change in the total number of meals per student resulting from DC-M. Similar to the participation outcomes in Chapter IV, the Federal reimbursement outcome measures are constructed excluding months in which either (1) an

[44] For the NSLP, entire districts may qualify for needs-based rates if at least 60 percent of the lunches served in the school year two years prior were free or reduced-price. For the SBP, severe-needs rate eligibility varies by school; those where at least 40 percent of the lunches served two years prior were free or reduced-price may qualify.

[45] In addition to cash payments, USDA provides commodity foods to districts participating in the NSLP. These commodity payments are not included in the reimbursement measures in the analysis.

incorrect measure of income was used for DC-M or (2) DC-M had not yet begun in the State in Year 2.

A. Year 2 impacts on NSLP Federal reimbursement outcomes

DC-M had a statistically significant positive impact on the average daily reimbursement per student for lunches in one of the four random assignment States (Table V.1). In New York City, DC-M increased NSLP reimbursements per student per day from about $0.95 in the control districts to $1.09 in the treatment districts, a statistically significant impact of about 13 cents. No statistically significant impacts were found in Florida, Massachusetts, or New York State.

Table V.1. Impacts of DC-M on key NSLP Federal reimbursement cost outcomes in SY 2013-2014 (regression adjusted)

	Federal reimbursement costs per student per day ($)			Blended reimbursement rate ($)[a]		
State	Treatment districts	Control districts	Impact (CI)	Treatment districts	Control districts	Impact (CI)
Cohort 1 States						
Florida	1.44	1.42	0.02 (± 0.06)	2.47	2.49	-0.02 (± 0.03)
New York City	1.09	0.95	0.13* (± 0.08)	2.57	2.54	0.03 (± 0.04)
Pooled sample (all districts in Cohort 1 random assignment States)	**1.37**	**1.33**	**0.04 (± 0.05)**	**2.48**	**2.49**	**-0.01 (± 0.02)**
Cohort 2 States						
Massachusetts	0.72	0.71	0.01 (± 0.02)	1.61	1.58	0.02* (± 0.02)
New York State	0.78	0.77	0.01 (± 0.01)	1.68	1.66	0.03* (± 0.01)
Pooled sample (all districts in Cohort 2 random assignment States)	**0.75**	**0.74**	**0.01 (± 0.01)**	**1.64**	**1.62**	**0.02* (± 0.01)**

Source: Monthly administrative claims data provided by the States.

Notes: The results reported in this table are obtained by (1) aggregating across the months after each demonstration State implemented DC-M in SY 2013-2014 (the beginning of the school year for each Cohort 1 State, January for New York State, and March for Massachusetts) and (2) excluding months during which the State used an incorrect measure of income for conducting DC-M (January through May for Florida). Values in this table are regression adjusted. Appendix A lists the variables included in the regression adjustments. Impacts shown in the table may differ slightly from calculated differences due to rounding.

[a]The blended reimbursement rate is the per-meal reimbursement rate.

*Cost for treatment districts is significantly different from cost for control districts at the 0.05 level.

CI = 95 percent confidence interval half-width; NSLP = National School Lunch Program; SY = school year.

DC-M had a statistically significant impact on the average reimbursement rate per lunch served in each of the Cohort 2 States but in neither of the Cohort 1 States. The average reimbursement per lunch was 2 cents higher for treatment districts than control districts in Massachusetts and 3 cents higher for treatment districts than control districts in New York State.

B. Year 2 impacts on SBP Federal reimbursement outcomes

For breakfasts, DC-M had a statistically significant positive impact of 3 cents on the average daily reimbursement per student in Florida and a statistically significant negative impact of 1 cent on the average daily reimbursement per student in New York State (Table V.2).[46] There was no statistically significant impact in New York City or Massachusetts.

Table V.2. Impacts of DC-M on key SBP Federal reimbursement cost outcomes in SY 2013-2014 (regression adjusted)

State	Federal reimbursement costs per student per day ($)			Blended reimbursement rate ($)[a]		
	Treatment districts	Control districts	Impact (CI)	Treatment districts	Control districts	Impact (CI)
Cohort 1 States						
Florida	0.39	0.36	0.03* (±0.03)	1.63	1.59	0.04* (±0.03)
New York City	0.20	0.21	-0.01 (±0.03)	1.54	1.48	0.06* (±0.04)
Pooled sample (all districts in Cohort 1 random assignment States)	**0.35**	**0.33**	**0.02* (±0.02)**	**1.62**	**1.58**	**0.04* (±0.02)**
Cohort 2 States						
Massachusetts	0.17	0.18	0.00 (±0.02)	1.51	1.51	0.00 (±0.02)
New York State	0.20	0.21	-0.01* (±0.01)	1.45	1.43	0.02* (±0.02)
Pooled sample (all districts in Cohort 2 random assignment States)	**0.19**	**0.20**	**-0.01 (±0.01)**	**1.48**	**1.47**	**0.01 (±0.01)**

Source: Monthly administrative claims data provided by the States.

Notes: The results reported in this table are obtained by (1) aggregating across the months after each demonstration State implemented DC-M in SY 2013-2014 (the beginning of the school year for each Cohort 1 State, January for New York State, and March for Massachusetts) and (2) excluding months during which the State used an incorrect measure of income for conducting DC-M (January 2014 through May 2014 for Florida). Values in this table are regression adjusted. Appendix A lists the variables included in the regression adjustments. Impacts shown in the table may differ slightly from calculated differences due to rounding.

[a]The blended reimbursement rate is the per-meal reimbursement rate.

*Cost for treatment districts is significantly different from cost for control districts at the 0.05 level.

CI = 95 percent confidence interval half-width; SBP = School Breakfast Program; SY = school year; $000s = thousands of dollars.

Additionally, DC-M had a statistically significant positive impact on the average reimbursement rate per breakfast served in three of the four random assignment States. The impact was 6 cents in New York City, 4 cents in Florida, and 2 cents in New York State. It had

[46] Like the similar finding for average daily breakfasts served per student, this finding is sensitive to the inclusion of one control group district in which an unusually high participation rate in the SBP was combined with a large increase in Year 2 in the number of students directly certified.

no statistically significant impact on the average reimbursement rate per breakfast served in Massachusetts.

C. Comparisons with other findings

These findings on Federal reimbursements are generally consistent with the participation findings presented in Chapter IV, as would be expected given the definitions of these outcomes. All NSLP impacts that are statistically significant for the participation outcomes are also statistically significant for the related Federal reimbursement outcomes. Specifically, the finding that DC-M had a significant impact on NSLP reimbursements per student per day in New York City (but none of the other three States) is consistent with the finding of a significant impact on the number of lunches served per student per day in that State only, and the finding of significant impacts on the average reimbursement rate per lunch served in the Cohort 2 States but not the Cohort 1 States reflects the finding that DC-M significantly increased the percentage of lunches served for free in the Cohort 2 States but not the Cohort 1 States. Among SBP outcomes the statistically significant impacts on the average reimbursement rate per breakfast served in three of the four random assignment States (all but Massachusetts) is consistent with the finding of significant impacts on the percentage of breakfast served for free in the same three States. The only difference between the participation and Federal reimbursement finding patterns is in Florida, where DC-M had a statistically significant impact on the average daily reimbursement per student but not on average daily meals per student. --Together, the sets of findings presented in these two chapters show that DC-M significantly shifted meals served from lower reimbursement reduced-price and paid statuses to the higher reimbursement free status.

The Year 1 report (Hulsey et al. 2015a) provided estimates of the impact of DC-M during the first year of the demonstration on the outcomes examined in this chapter. It analyzed Federal reimbursements in Florida and New York City and found no statistically significant impacts in either State. However, as noted in Chapters III and IV, direct comparisons between findings presented in the two reports could be misleading, due to differences in the analysis samples and in the set of months included in the analyses.

D. National extrapolations of Federal reimbursement costs based on Year 2 findings

Although the States and districts that conducted DC-M in Year 2 are not nationally representative, this section presents extrapolated cost estimates to provide a rough sense of the potential effects of DC-M if it had been implemented by a broader set of States and districts than in the demonstration—assuming the impacts observed for the demonstration sample are similar to those that would be experienced under wider implementation. National extrapolations of NSLP and SBP DC-M impacts on total Federal reimbursement costs in SY 2013-2014 were computed under two scenarios: (1) that all States implemented DC-M, and (2) that only a subset of States that are most likely to be able to implement DC-M did so.[47] The extrapolations are derived by weighting the treatment and control districts in the random assignment States such

[47] The subset includes the 23 States that meet any of the following criteria: (1) were included in the DC-M demonstration in SY 2012-2013, SY 2013-2014, or SY 2014-2015; (2) submitted an intent to apply for the DC-M demonstration, indicating that they had the ability to conduct DC-M; (3) used Medicaid data to conduct direct verification; or (4) had performed modified adjusted gross income (MAGI) conversions with their own data, which suggests that they have the ability to measure income in their Medicaid files using the definition relevant for DC-M.

that the weighted characteristics of the demonstration districts align with the characteristics of all districts nationally, or the subset of districts. The weight for each district is estimated using propensity score modeling methods, described in detail in Appendix A. To yield an estimate of the total dollar amount of Federal reimbursements, extrapolations of reimbursements per student day are multiplied by national data on student enrollments and serving days for the full school year. Appendix A describes the extrapolation methods and their limitations in more detail.

The extrapolations suggest that if all States had implemented DC-M in SY 2013-2014, total Federal reimbursement costs for the NSLP would have been about $135 million higher and SBP costs would have been about $322 million higher than if no districts had implemented DC-M, for a total combined cost impact of slightly over $457 million (Table V.3). For comparison, total national reimbursement costs were approximately $12.5 billion for the NSLP and $2.2 billion for SBP in SY 2013-2014.[48] If only a subset of 23 States had implemented DC-M, it is estimated that the NSLP and SBP cost impacts would have been about $92 million and $156 million respectively, for a combined total of nearly $249 million.

Table V.3. National extrapolations of impacts of DC-M on Federal reimbursement costs, by program, in SY 2013-2014

Program	Extrapolated impact on total Federal reimbursement costs ($000s)	
	If all States adopted DC-M (CI)	If a subset of States adopted DC-M[a] (CI)
NSLP	135,198 (±190,844)	92,668 (±134,524)
SBP	322,253 (±585,193)	156,242 (±345,136)
Total	**457,451 (±684,948)**	**248,910 (±424,291)**

Source: Monthly administrative claims data provided by the States.

[a]States were identified for this subgroup based on the following criteria: (1) inclusion in the DC-M demonstration in SY 2012-2013, SY 2013-2014, or SY 2014-2015; (2) submission of an intent to apply for the DC-M demonstration, indicating that they were able to conduct DC-M; (3) use of Medicaid data to conduct direct verification; or (4) performing modified adjusted gross income conversions with their own data, which suggests that they can measure income in their Medicaid files using the definition relevant for DC-M. The following 23 States met one or more of these criteria: Arizona, California, Florida, Illinois, Indiana, Kentucky, Maine, Massachusetts, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Mexico, New York, Ohio, Pennsylvania, South Carolina, Texas, Utah, Washington, Wisconsin, and Wyoming.

*Percentage for treatment districts is significantly different from percentage for control districts at the 0.05 level. There are no statistically significant differences in this table.

CI = 95 percent confidence interval half-width; NSLP = National School Lunch Program; SBP = School Breakfast Program; SY = school year; $000s = thousands of dollars.

Among their severe limitations, these estimates are highly imprecise. For the extrapolated values, the margin of error is extremely large and includes $0 as well as negative values. This indicates that DC-M might have had no effect on or might have reduced Federal reimbursement costs. For example, the Federal reimbursement cost impact estimate of approximately $457 million with a margin of error of plus or minus $685 million suggests that estimated impacts

[48] Source: National Data Bank tables received from FNS on December 5, 2014.

from different samples would usually range from negative $228 million to positive $1.1 billion. Moreover, the imprecision is probably even greater than this because the estimated margins of error do not account for error in the propensity score models used to derive the weights for extrapolating from the sample to the entire nation. In any case, to the extent that these models do not effectively correct for the lack of representativeness of the sample, the national extrapolations might substantially misrepresent the effects of DC-M were it to be implemented nationwide.

The Year 1 report (Hulsey et al. 2015a) extrapolated Federal reimbursement outcomes to the national level based on the findings from the first year of the demonstration. Although direct comparisons of findings in the two reports could be misleading for reasons noted earlier in the chapter, the extrapolation findings are consistent in that, as in the current report, the confidence intervals for the national extrapolations presented in the Year 1 report include zero.

VI. IMPACTS ON DISTRICT CERTIFICATION COSTS

If DC-M increases the number of students directly certified, it could reduce district costs associated with certifying students via applications. Conversely, DC-M could increase district costs for direct certification if it substantially increases the number of cases districts need to directly certify (depending on the extent to which DC-M is an automated versus a manual process). This chapter examines district-level administrative costs to assess the impact of DC-M on the costs of certification for school meal benefits.

Data about district-level administrative costs were collected in a web survey administered in four rounds. Each round collected data on staff wages and labor hours devoted to certification activities, as well as non-labor certification costs.[49] These data were combined to calculate the total certification cost per student enrolled in the district and to examine the breakdown of these costs by certification activity: (1) direct certification; (2) certification by application; and (3) other certification costs.

As in Chapters III through V, these impact estimates analyses exclude the universal implementation States because unbiased estimates cannot be obtained for States in which random assignment was not conducted. In addition, the analysis of district certification costs excludes New York City. Although the community districts in New York City were randomly assigned, those administrative units play no role in certification and therefore were not respondents to the district cost survey. This makes it impossible to isolate treatment and control district certification costs without making strong assumptions; therefore, impact estimates for New York City are not presented in this chapter.[50]

As in Chapters IV and V, the analyses of district certification costs exclude months in which either (1) an incorrect measure of income was used for DC-M or (2) DC-M had not yet begun in the State in Year 2.[51] The analyses presented here are based on data for July through December in Florida, January through April in New York State, and March and April in Massachusetts. These substantial differences in the sets of months used for the analyses in different States make cross-State comparisons potentially misleading. Because certification activities are largely concentrated at the beginning of the school year, certification costs measured using data for the fall semester are quite different from measurements based on spring semester data.[52]

[49] Each round requested information for a two- or three-month period. Districts in Massachusetts first conducted DC-M in March, and they were not asked to complete Round 3 of the survey, to reduce burden. Appendix A provides more information about how the data were collected.

[50] Although unbiased estimates of the impacts of DC-M cannot be derived, estimates of New York City's administrative costs are presented in Appendix F.

[51] The measure of income used for DC-M affects the number of students identified as eligible for DC-M and thus the costs incurred by districts to certify them.

[52] Because of these differences, we do not present pooled estimates across States for the district certification cost outcomes.

A. Year 2 impacts on total district certification costs

DC-M did not have a statistically significant impact on total certification costs per student (Table VI.1). Across States, total certification costs incurred per student enrolled ranged from $1.48 to $3.00 in treatment districts and from $1.33 to $2.50 in control group districts, with no significant difference between treatment and control districts in any demonstration State.[53]

One factor behind these findings is the timing of DC-M implementation. Neither Cohort 2 State began DC-M until the second half of the school year, after the bulk of applications for free school meals had already been submitted and processed, severely limiting potential cost savings from DC-M. That said, there were also no significant effects in Florida, which had implemented DC-M in the previous year and was thus directly certifying students from the beginning of SY 2013-2014.[54] This suggests that the timing of DC-M implementation is not the only factor affecting the results.

Table VI.1. Impacts of DC-M on district certification costs per student in SY 2013-2014 (regression adjusted)

		District certification costs per student ($)		
State	Months included in analysis[a]	Treatment districts	Control districts	Impact (CI)
Cohort 1 States				
Florida	July-December	3.00	2.16	0.84 (±2.03)
Cohort 2 States				
Massachusetts	March-April	1.57	1.57	0.00 (±1.17)
New York State	January-April	2.25	2.65	-0.40 (±0.91)

Source: DC-M Demonstration District Cost Survey, SY 2013-2014.

Notes: Values in this table are regression adjusted. Appendix A lists the variables included in the regression adjustments. Impacts shown in the table may differ slightly from calculated differences due to rounding.

[a]The results reported in this table are obtained by (1) aggregating across the months after each demonstration State implemented DC-M in SY 2013-2014 (the beginning of the school year for Florida, January for New York State, and March for Massachusetts) and (2) excluding months during which the State used an incorrect measure of income for conducting DC-M (beginning in January for Florida).

* Cost per student for treatment districts is significantly different from cost per student for control districts at the 0.05 level. There are no statistically significant differences in this table.
CI = 95 percent confidence interval half-width.

[53] Appendix E presents descriptive tabulations of total certification costs (and totals for major cost categories) for both the random assignment and the universal implementation States (Tables E.1). It also presents labor hours by key staff categories for all States (Table E.2), and additional tabulations referenced below.

[54] Although 2 of the 15 Florida treatment districts in the Year 2 analysis sample were new to the demonstration in Year 2 and were conducting DC-M for the first time that year, the State's process for DC-M was established, and lists of students eligible for DC-M were provided to districts (along with lists of students eligible for direct certification through other programs) before the school year began.

B. Year 2 impacts on key components of district certification costs

DC-M could affect different parts of the certification process in different directions. For example, any increases in the number of students on the lists provided by the State for direct certification could increase the time district staff spends on direct certification activities. On the other hand, increases in the number of students directly certified could reduce the number of applications submitted and the associated costs. To explore whether DC-M had any effects on the costs of these components of the process, we examined costs of direct certification, certification by application, and other certification-related activities separately.

Direct certification costs. If adding Medicaid to the list of programs for which direct certification is conducted created additional costs for districts, that would be reflected in higher direct certification costs in districts conducting DC-M. However, there were no statistically significant impacts on district-level direct certification costs per student for any DC-M State (Table VI.2).

One possible explanation for the lack of effects on district-level direct certification costs is that direct certification activities are sufficiently automated that directly certifying additional students does not greatly affect the amount of staff time involved. In some States, another factor might be that much of the work of matching income-eligible children on Medicaid to school district enrollment records is conducted at the State level (see Chapter VIII).

Application processing costs. Because directly certified students' households do not need to submit applications for free meals, lower applications processing costs might be expected in DC-M districts. However, there were no statistically significant differences in costs of processing household applications between treatment and control districts in the demonstration (Table VI.2).

As noted earlier, the late implementation of DC-M in Cohort 2 States limited the potential for reducing the number of applications processed in those States. Another factor that might limit application cost savings is that many districts process applications electronically. Approximately 48 percent of treatment and control districts reported that they have a fully automated process in place for determining applicants' certification status (Table E.3). Thus, even if DC-M reduced the number of applications received, the policy might not have an impact on the staff time required to process them.

Other costs. Other certification costs include labor hours for documenting certification status, notifying parents of their children's status, responding to certification questions, and making certification results available to school food service cashiers. They also include postage and other delivery costs for certification-related communications. There were no clear hypotheses about whether or how DC-M might affect these costs. Ultimately, there were no statistically significant impacts on other certification costs per student in any demonstration State (Table VI.2).

Table VI.2. Impacts of DC-M on district certification costs per student in SY 2013-2014, by certification procedure (regression adjusted)

States	Months included in analysis[b]	Direct certification costs ($)			Application processing costs ($)			Other certification costs[a] ($)		
		Treatment districts	Control districts	Impact (CI)	Treatment districts	Control districts	Impact (CI)	Treatment districts	Control districts	Impact (CI)
Cohort 1 random assignment State										
Florida	July-December	0.29	0.18	0.11 (±0.32)	1.60	1.38	0.21 (±1.09)	1.12	0.60	0.51 (±0.93)
Cohort 2 random assignment States										
Massachusetts	March-April	0.62	0.80	-0.17 (±0.70)	0.67	0.45	0.22 (±0.33)	0.28	0.33	-0.05 (±0.32)
New York State	January-April	0.41	0.40	0.01 (±0.19)	1.32	1.64	-0.32 (±0.61)	0.52	0.61	-0.09 (±0.28)

Source: DC-M Demonstration District Cost Survey, SY 2013-2014.

Notes: Values in this table are regression adjusted. Appendix A lists the variables included in the regression adjustments. Impacts shown in the table may differ slightly from calculated differences due to rounding.

[a]Other costs consist of labor hours for documenting certification status, notifying parents of their children's status, and responding to certification questions. They also include postage and other delivery costs for certification-related activities.

[b]The results reported in this table are obtained by (1) aggregating across the months after each demonstration State implemented DC-M in SY 2013-2014 (the beginning of the school year for Florida, January for New York State, and March for Massachusetts) and (2) excluding months during which the State used an incorrect measure of income for conducting DC-M (beginning in January for Florida).

*Cost per student for treatment districts is significantly different from cost for control districts at the 0.05 level. There are no statistically significant differences in this table.

CI = 95 percent confidence interval half-width.

VII. IMPACTS ON STATE ADMINISTRATIVE COSTS

In all States, the DC-M process has both State and district components. The previous chapter presented the impact of DC-M on administrative certification costs incurred at the district level. In this chapter, we examine State-level administrative costs. At the State level, both Medicaid and child nutrition agencies incur costs in implementing DC-M. Medicaid agencies produce files of eligible children enrolled in Medicaid, and child nutrition agencies incorporate this new data source into existing direct certification matching processes and provide training and technical assistance to districts. More details on these processes are described in Chapter IX.

In this chapter, we assess the following outcomes:

- Total State-level administrative costs of DC-M
- The percentage of these costs that are start-up costs versus ongoing costs
- The cost amounts incurred by the different agencies
- Categories of costs, such as labor hours or other direct costs, to explore variations in burdens on State staff (a topic also discussed in Chapter IX)

The focus is on costs for implementing DC-M in Year 2 of the demonstration. However, when describing start-up and ongoing costs, we use information from both Year 1 and Year 2 so that we can observe costs for States in both cohorts. The two types of costs are:

- Start-up costs for each State were incurred within that State's first year of DC-M implementation. Therefore, those for Cohort 1 States occurred in Year 1 (SY 2012-2013), and those for Cohort 2 States occurred in Year 2 (SY 2013-2014).

- Ongoing costs were incurred during the period from the month following DC-M implementation through the end of Year 2. For Cohort 2 States, we calculate average monthly ongoing costs in Year 2 in the months following DC-M implementation. For Cohort 1, we calculate average monthly ongoing costs for two periods: (1) the period following DC-M implementation in Year 1 and (2) the months during which the State used the correct measure of income for DC-M in Year 2.[55] Thus, for Year 1 the ongoing cost analysis includes March 2013-June 2013 in Florida and October 2012-June 2013 in Kentucky and Pennsylvania. For Year 2, it includes July 2013-December 2013 in Florida and Kentucky, July 2013-June 2014 in Pennsylvania, April 2014-June 2014 in Massachusetts, and February 2014-June 2014 in New York State.

States were not randomly assigned to conduct DC-M, so we do not have an experimental design from which to estimate the impacts of DC-M on State-level administrative costs. Instead, because DC-M was a new task for the States, the analysis of State administrative costs for both random assignment States and universal implementation States is based on staff reports of the

[55] The measure of income used for DC-M could affect the costs incurred by State agencies because the State-level processes for identifying students could vary depending on how readily available a particular measure is in their databases.

incremental costs of DC-M, beyond costs associated with existing State work on direct certification through other programs such as SNAP.

For all States except for New York City, the methods are the same as they were for Year 1 of the evaluation. We collected data from both State child nutrition agencies and the State agencies that provided the Medicaid data to the child nutrition agencies. Data were collected via quarterly cost logs, provided as Excel workbooks (images are included in Appendix L).[56] In general, the main evaluation contact at each State agency completed the cost logs, collecting data from other staff about time spent. To resolve any questions, the evaluation team used follow-up telephone interviews and emails as needed. Because the State agencies did not receive additional funding for DC-M implementation, State staff were not required to account for the time spent directly on this activity. Therefore, they were asked to estimate time spent on a set of standardized DC-M implementation activities in each month of the quarter, excluding activities related to the evaluation. These estimates of time spent should be considered approximate due to the potential for recall error and difficulties associated with accurately separating costs attributable to DC-M from other costs.

Although New York City is treated as a State for most analyses, the analysis of administrative costs is an exception. All direct certification activities are conducted centrally in New York City, separately from those conducted in the rest of the State and with no involvement of staff from within the community districts, so the cost data collection process there differed in some ways from those in other States, and the analysis of these data for New York City uses different methods from that conducted for other States.[57] These differences are discussed in greater detail in Appendix A. In addition, because the New York City child nutrition agency was responsible for aspects of DC-M that were conducted by districts in other States as well as those aspects conducted by State child nutrition agencies, the administrative costs incurred by the New York City child nutrition agency cannot be considered either entirely State-level or entirely district-level costs. For these reasons, we do not present New York City findings in this chapter, nor do we include New York City in any aggregate administrative cost estimates. Appendix Table F.1 provides a summary of cost data for New York City.

A. Total State administrative costs

Among the three States for which this analysis is based on a full school year, our estimates of the additional (start-up and ongoing) cost of implementing DC-M beyond the costs of other types of direct certification at the State level in Year 2 ranged from approximately $8,000 in Pennsylvania to almost $78,000 in Massachusetts (Table VII.1). Pennsylvania is a Cohort 1 State, which had implemented DC-M the year before and had minimal ongoing costs. Costs were higher for the Cohort 2 States, which were planning for and newly implementing DC-M in

[56] Appendix A describes our approach to collecting data on salaries and other costs.

[57] For example, the Medicaid data used for DC-M in New York City come from the New York City Human Resources Administration and were passed directly to the New York City Department of Education for matching. Although the New York State Department of Education attended meetings related to DC-M in Year 1 in support of New York City's participation, the State agency did not play an active role in conducting DC-M, and the New York State Department of Health was not involved in any way until Year 2.

Year 2. Among the Cohort 2 states, costs were higher in Massachusetts ($78,000) than in New York State ($26,000), in part due to a $45,000 one-time contractor cost incurred by Massachusetts' Medicaid agency (the Executive Office for Health and Human Services) to update the legacy computer system that conducts direct certification for SNAP and TANF to include Medicaid, and to test the updates. Costs were particularly low (less than half of Pennsylvania's costs) in Florida and Kentucky, the two Cohort 1 States for which only six months of SY 2013-2014 costs were included in this analysis.[58]

Table VII.1. State administrative costs of DC-M in SY 2013-2014, by State agency type

State (district count)[a]	Months included in analysis[b]	Administrative costs ($)		
		Child nutrition agency	Medicaid agency[c]	Total
Random assignment States				
Cohort 1 State				
Florida (30 districts)[d]	July-December	1,133	174	1,307
Cohort 2 States				
Massachusetts (273 districts)	July-June	9,227	68,476	77,703
New York State (280 districts)	July-June	18,286	7,755	26,042
Universal implementation States (Cohort 1)				
Kentucky (200 districts)	July-December	1,120	1,006	2,126
Pennsylvania (894 districts)	July-June	7,933	0	7,933

Source: Cost tracking logs completed quarterly by State administrators.

Notes: Because the agencies implementing DC-M in New York City are not State agencies and the analysis conducted for New York City uses different methods from that conducted for other States, we do not include New York City in this table.

[a]Approximate numbers of districts implementing DC-M are shown in parentheses. For the random assignment States, these are the number of treatment group districts included in the analysis. For the universal implementation States, these numbers are the number of districts in the SY 2013-2014 Verification Summary Report (VSR, Form FNS-742) data for the State.

[b]In Florida and Kentucky, the months during which the State used an incorrect measure of income for conducting DC-M were excluded from the analysis.

[c]Medicaid agency staff in Pennsylvania reported no ongoing costs specifically related to DC-M (that is, costs in addition to those necessary for direct certification with other programs) in their second year of implementation.

[d]In most States, a single child nutrition agency—typically, the State Department of Education—coordinates DC-M. In Florida, however, both the Florida Department of Education and the Florida Department of Agriculture are involved. Reported costs include those from both agencies.

SY = school year.

State administrative costs per thousand enrolled students in districts implementing DC-M ranged from less than $5 in Pennsylvania (a Cohort 1 State) to $250 in Massachusetts among the three States for which this analysis is based on data for a full year (Appendix Table F.2). State administrative costs per thousand directly certified students ranged from about $17 in Florida to $1,523 in Massachusetts.[59] Even in Massachusetts, however, the cost per directly certified

[58] Even if the costs over a full school year were assumed to be twice as high as for the first semester, Florida and Kentucky's costs would still be lower than those of the other States. Appendix Table F.3 shows that for Pennsylvania—the only Cohort 2 State with a full year of data—costs were lower in the second semester than in the first semester.

[59] Among the two Cohort 1 States for which only six months of SY 2013-2014 costs were included in this analysis, costs per thousand enrolled students were also less than $5, and costs per thousand directly certified students were approximately $3 in Florida and $13 in Kentucky.

student ($1.52) was relatively low compared to the reimbursement rate for providing *one* free school lunch (which would be at least $2.93).[60]

B. Start-up and ongoing costs

Start-up costs are the costs involved in planning and putting in place the procedures and matching programs needed to conduct DC-M, whereas ongoing costs are those involved in conducting monthly or quarterly matches after the process has been set up. For the purposes of this study, start-up costs are defined in most State agencies as those that occur up to and including the DC-M implementation month, whereas costs that occur throughout the following months are classified as ongoing.[61,62] Using these definitions, we found that most State administrative costs were start-up costs, and that this finding held true for States in both cohorts. Figure VII.1 shows start-up costs, all of which occurred in the first year of the demonstration for Cohort 1 States and in the second year of the demonstration for Cohort 2 States. Start-up costs ranged from nearly $5,000 in Florida to more than $185,000 in Pennsylvania. The relatively high start-up costs in Pennsylvania were primarily incurred by the Medicaid agency (the Department of Public Welfare) and were paid to their data systems contractor to add Medicaid data to their existing direct certification process. Start-up costs were around $73,000 and $19,000 in Massachusetts and New York State, respectively.

In Year 2, total ongoing costs in the Cohort 2 States were substantially lower than start-up costs. Ongoing costs were nearly $5,000 in Massachusetts and about $7,000 in New York State (Appendix Table F.3). All costs in Year 2 for Cohort 1 States were classified as ongoing, because those States had begun DC-M in the prior year. Ongoing costs ranged from about $1,300 in Florida to nearly $8,000 in Pennsylvania.[63]

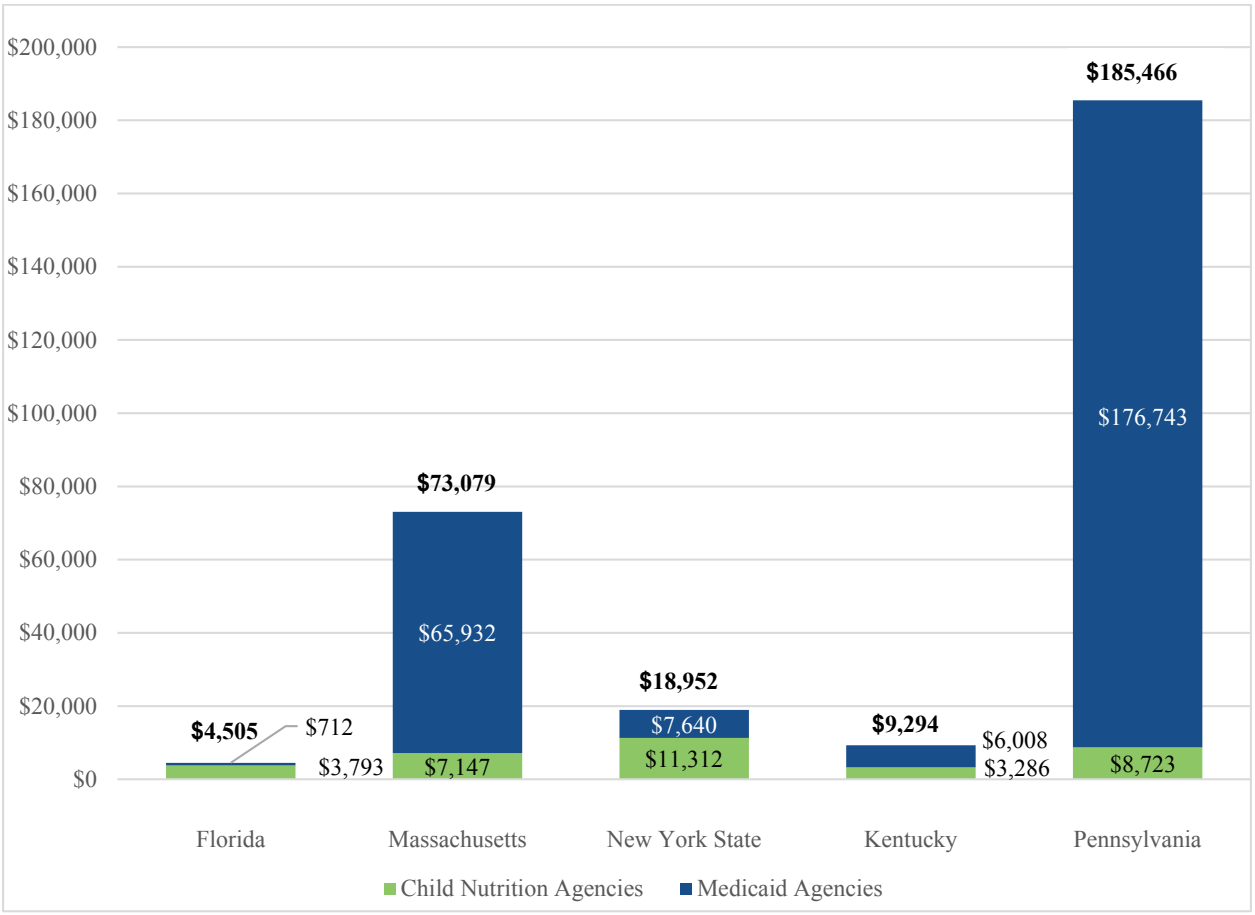
[60] This value excludes commodity, needs-based, and performance-based reimbursements.

[61] The ongoing costs are defined, unless otherwise noted, as those occurring through SY 2013-2014 that were reported after March 2014 in Massachusetts, January 2014 in New York State, February 2013 in Florida, and September 2012 in Pennsylvania and Kentucky.

[62] The exceptions in Year 2 are for two types of costs that occurred in Massachusetts in the months following the first DC-M match that are classified as start-up: Medicaid contractor costs reported in the spring (April-June), and time spent reviewing and finalizing the State data-sharing agreement reported in April-June. The exception in Year 1 was for costs incurred within two months after the implementation month in Kentucky's Medicaid agency. Because the matching process in Kentucky was not fully integrated with the automated direct certification procedures for other programs at the time of the initial match, Kentucky's Department for Medicaid Services spent time developing and testing programs for a fully integrated extract in October and November.

[63] As discussed earlier in the chapter, Year 2 ongoing costs in Florida and Kentucky only include those incurred from July through December, in contrast to the Cohort 1 costs described in the previous paragraph, which include those from the spring semester.

Figure VII.1. Start-up costs incurred by States in their first year of DC-M implementation



Source: Cost tracking logs completed quarterly by State administrators.

Notes: Start-up costs for all States in this analysis were incurred within the first year of DC-M implementation. Cohort 1 States began implementing DC-M in SY 2012-2013 (during which both Florida and Kentucky used the correct measure of income for DC-M, so all months are included in the analysis), and Cohort 2 States implemented DC-M in SY 2013-2014.

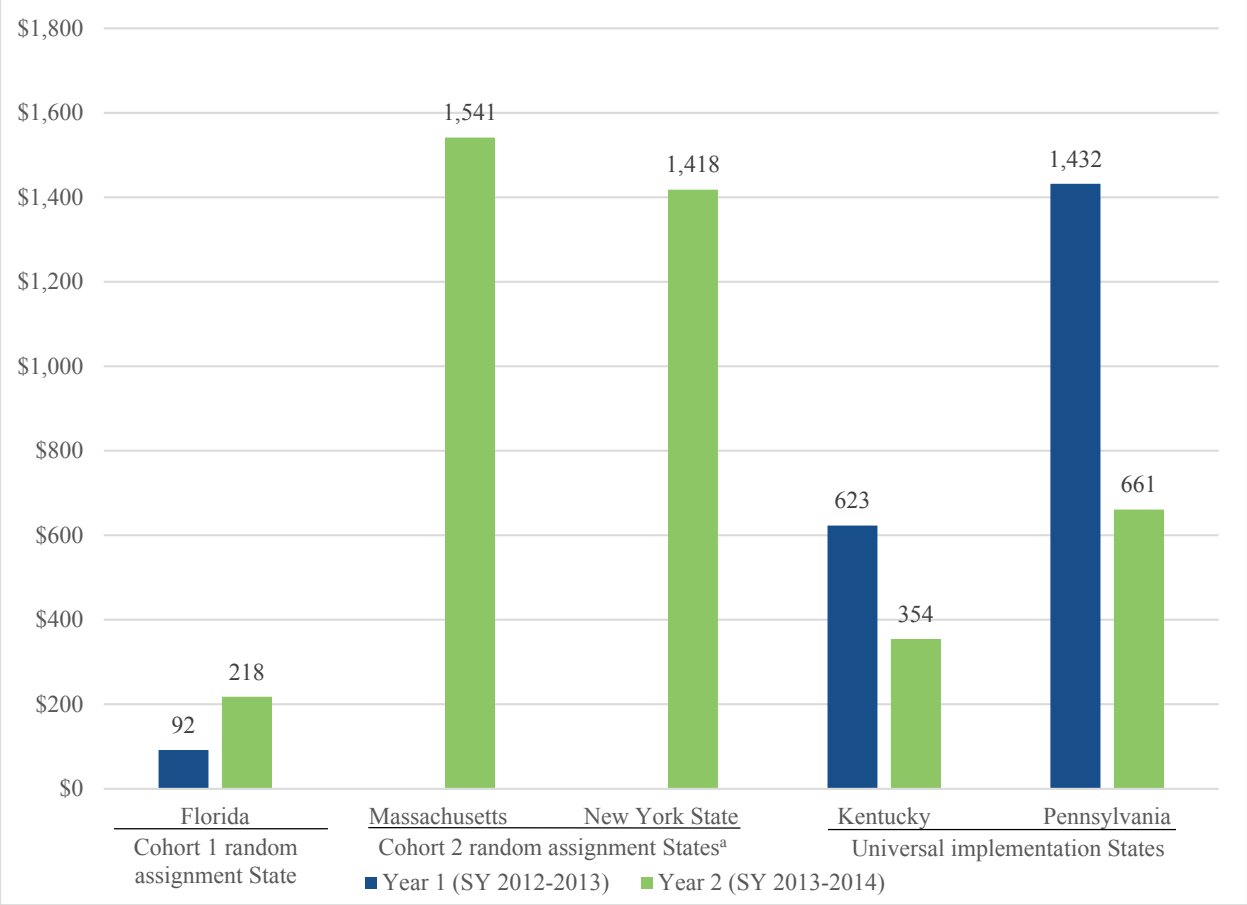
Average monthly ongoing costs in Year 2 were less than $1,600 per month in each State (Figure VII.2). They were higher for Cohort 2 States than for Cohort 1 States, possibly because State staff in Cohort 2 were still adjusting to the DC-M process, having more recently begun implementing the demonstration. For Cohort 1 States, average monthly ongoing costs were generally higher in Year 1 than in Year 2, dropping from $623 in Year 1 to $354 in Year 2 in Kentucky and from $1,432 to $661 in Pennsylvania. The only exception is Florida, where average monthly ongoing costs were very low in both Year 1 and Year 2 ($92 per month and $218 per month, respectively).

C. Costs by agency type

Total costs in Year 2 for State Medicaid data providers varied based on whether substantial contractor costs were required to incorporate Medicaid data into an existing data system or process. Medicaid agency costs in Massachusetts were more than $68,000, due mostly to a

$45,000 data systems contractor cost invoiced late in the school year (Appendix Table F.3).[64] Medicaid agency costs in Year 2 were much lower in the other States; they were less than $8,000 in New York State and, for Cohort 1 States, they were reported as negligible (around $1,000 in Kentucky and less than $200 in Florida) or zero (in Pennsylvania). Medicaid costs were particularly low for Cohort 1 States in their second year of DC-M implementation because, after the agencies had set up their systems, the process of producing the Medicaid enrollment lists for DC-M was generally automated and often done in conjunction with producing the files for SNAP, TANF, and other direct certification programs. Thus, minimal or no additional costs for DC-M were incurred.

Figure VII.2. Average monthly ongoing costs incurred by States



Source: Cost tracking logs completed quarterly by State administrators.

Notes: For average monthly ongoing costs in Year 1 in this figure, we average total ongoing costs, as defined in the text, over 9 months in Pennsylvania and Kentucky (October 2012-June 2013) and 4 months in Florida (March 2013-June 2013). For Year 2, total ongoing costs are averaged over 12 months (the full year) in Pennsylvania, 6 months in Florida and Kentucky (July 2013-December 2013), 5 months in New York State (February 2014-June 2014), and 3 months in Massachusetts (April 2014-June 2014).

[a]Because Massachusetts and New York State began DC-M in Year 2, they did not incur any costs in Year 1.

[64] As mentioned previously, Pennsylvania Medicaid agency costs reached nearly $177,000 in Year 1, the year the State implemented DC-M, due primarily to more than $170,000 in contractor costs.

Total child nutrition agency costs for DC-M in Year 2 among the Cohort 2 States were about $18,000 in New York State and $9,000 in Massachusetts, within the range observed for child nutrition agency costs in Year 1 for Cohort 1 States (nearly $22,000 in Pennsylvania and less than $8,000 in the other three States) (Appendix Table F.3). Child nutrition agency costs in Year 2 among the Cohort 1 States were fairly minimal ($8,000 or less).

D. Categories of costs

State administrative costs for Year 2 were almost entirely labor costs (Appendix Table F.4), involving either managers or information technology staff (not shown in tables). The main exceptions were the Massachusetts contractor costs discussed previously. Labor hours for the two Cohort 2 States varied substantially across agencies (they were higher for the Medicaid agency in Massachusetts and higher for the child nutrition agency in New York State) but total hours in those States were fairly similar (Appendix Table F.5).

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VIII. CHALLENGES

In addition to estimating impacts of DC-M, the evaluation qualitatively examines the experiences of demonstration States and districts, including the challenges encountered during implementation, factors that influenced success in matching program data and student enrollment files, and the amount of time between enrollment in Medicaid and certification through DC-M. The Year 2 analysis relies on information drawn from two rounds of interviews with staff of State child nutrition agencies, Medicaid agencies, and school districts across the seven demonstration States.[65]

The qualitative analyses are subject to several limitations. First, although the 35 districts in the interview sample were purposively selected to represent diversity of the treatment districts along several dimensions, including enrollment and percentage of students directly certified, the sample is relatively small—interviews included staff in less than five percent of demonstration districts across the States—and not representative of the treatment districts as a whole. The interview findings reflect the experiences of the respondents and cannot be generalized to all of the demonstration districts. Second, we did not interview districts from the control group. Some of the issues that staff raised during the interviews applied generally to direct certification with any program rather than to DC-M specifically. Although the respondents did not describe these issues as more common under DC-M, the data do not allow an independent analysis of differences. Finally, at both State and district levels, although we attempted to interview the staff with the most complete knowledge about DC-M processes in each location, staff could not always provide information on every topic included in the interview protocols. For example, the staff interviewed were not necessarily familiar with the specifics of how Medicaid income was defined and were largely unable to provide information on their matching success rates. Many staff were also uncertain how the ACA would impact the demonstration.

This chapter first describes the DC-M process and then the implementation challenges encountered at the State and district levels during Year 2 of the demonstration. It then summarizes the factors reported to affect matching success and lastly discusses the time between enrollment in Medicaid and direct certification. Challenges and factors that are relevant to all direct certification and not specific to DC-M are noted briefly in this chapter and discussed in greater detail in Appendix G.

A. State and district DC-M operations

States and districts had substantial experience conducting direct certification with other programs before the demonstration began and incorporated DC-M into their existing direct certification systems. Much of the variation in DC-M processes across States and districts reflects variation in direct certification overall. These differences include whether matching of

[65] Most State agency and district staff were interviewed twice during SY 2013-2014, but staff of some districts in Cohort 2 States were only interviewed once; see Appendix A for details. State-level staff in Cohort 1 States were also interviewed during Year 1.

files for direct certification is conducted centrally by the States or locally by their school districts, technological capabilities, and the frequency of matching.[66]

However, DC-M differs from direct certification with other programs in important ways. First, because the Medicaid data required for DC-M are not always housed by the same State agency or department that oversees the data for SNAP and other programs, an additional entity may be involved in DC-M. For instance, in Illinois and New York State, child nutrition staff had to introduce staff of the Medicaid agency to DC-M and incorporate them into the direct certification process. Second, as noted earlier, students receiving Medicaid are not categorically eligible, so staff must assess whether the child's household income meets the guidelines for DC-M. In each demonstration State, the agency responsible for the Medicaid data makes this assessment and creates a DC-M eligibility file, which contains the list of children receiving Medicaid who meet the income requirements.[67] The data elements in the DC-M eligibility file are often identical to those in the direct certification eligibility file(s) for SNAP and TANF—in many of the demonstration States, the eligibility data for Medicaid and SNAP are stored in the same system. Direct certification eligibility files for SNAP, TANF and Medicaid are combined in most States, except for Florida and New York State, where the DC-M eligibility file is sent separately from the SNAP and TANF file.

After creating the DC-M eligibility file, the Medicaid agency then securely transmits it to the same child nutrition agency that is involved in direct certification with SNAP and other programs (typically the State Department of Education), which does one of the following: (1) matches the file to a student information system that contains a list of enrolled students for the State, (2) matches the file to student enrollment files that districts upload, or (3) makes the file available to districts for local matching. State and district staff interviewed for this study reported using the same matching process for DC-M that they used for other direct certification efforts.[68] Most State and some district computer systems provide a list of both exact and partial matches, whereas others only provide exact and nonmatches. Districts may conduct further investigation of partial or nonmatches, and in most States districts can search State systems for individual students to identify additional matches.[69]

Besides matching in some States, the role of a district in DC-M includes several activities. First, districts are responsible for extending direct certification to other students in the household. Some States and districts have processes or systems that facilitate the extension of benefits to

[66] The National School Lunch Program Direct Certification Improvement Study provided additional information on direct certification processes in general (Moore et al. 2014).

[67] These eligibility files do not include the income data the agency used to assess eligibility.

[68] Children enrolled in multiple programs used for direct certification are directly certified by SNAP before they are certified through Medicaid. Form FNS-742 was redesigned in SY 2013-2014 and now requires districts to distinguish DC-SNAP from other forms of direct certification. If a child appears on multiple direct certification lists during the same month, the State either will remove the duplicate according to the direct certification matching hierarchy (SNAP, then TANF, and finally Medicaid) or instruct each district to conduct its match according to this hierarchy. If a child already has been directly certified and appears on a subsequent direct certification list, States either will remove the child from the list or instruct districts not to overwrite the child's direct certification status.

[69] All States, except Kentucky, provided districts with the option of conducting individual student queries.

other children in the household; however, districts also send direct certification letters to matched student households instructing them to inform the district of other children not identified. Second, following the match, districts must update their computer system to reflect that students have been directly certified to receive free school meals because of the match or benefit extension. Lastly, most districts are responsible for tracking whether a child is directly certified by SNAP versus some other program.

Each demonstration State's direct certification process is described in brief in Appendix G, and Appendix Table G.1 provides a summary of the roles of each State agency involved in DC-M.

B. State-level implementation challenges

Across the seven demonstration States, two major challenges were encountered that had notable effects on the implementation of DC-M in Year 2. First, three States used an incorrect measure of income in conducting DC-M during at least part of the school year.[70] Second, the two States implementing DC-M for the first time in Year 2 faced competing priorities that delayed implementation in those States. In addition to these two issues, States reported challenges with matching, the need to devote time to communicate with districts about DC-M, and some concerns about the demonstration's fairness due to differences in how households are defined across programs. Although States made progress in addressing most of these problems, not all of the issues could be resolved, as evidenced by the continuation of challenges reported in Year 1 (Hulsey et al. 2015a). The next section and Appendix Table G.2 discuss these challenges.

Three States used an incorrect measure of income for DC-M during at least some months of Year 2. Unlike direct certification with SNAP and TANF, students receiving Medicaid are not categorically eligible for free meals. In addition to enrollment in Medicaid, a child must be a member of a family with a gross income—as measured by the Medicaid program before the application of any expense, block, or other income disregard—that does not exceed 133 percent of the Federal poverty level for its household size. However, the Medicaid agency involved in DC-M in Illinois reported that this gross measure of income was not available in its database. Due to limited communication between the two State agencies involved, the education agency was not aware of this issue, resulting in the State using net income in conducting DC-M throughout Years 1 and 2 of the demonstration. Two other States, Florida and Kentucky, used the correct measure of income initially but did not correctly revise their DC-M eligibility assessment process in January 2014 when changes to Medicaid eligibility occurred under ACA.[71] In transitioning their information systems to include eligibility changes required by the ACA, the Florida Medicaid agency incorrectly began identifying children eligible for direct certification based on family income after the application of disregards, rather than before disregards. In Kentucky, the Medicaid program transitioned to a new income standard

[70] Difficulty in identifying the correct measure of income for use in assessing students' eligibility for DC-M was also the reason that Alaska, which was selected to be included in the demonstration in Year 1, ultimately withdrew from the demonstration without conducting DC-M.

[71] Under ACA, States assess Medicaid eligibility for most children using modified adjusted gross income (MAGI) as defined in the Internal Revenue Code (which eliminates the various State-specific income exclusions or disregards formerly used by States) but may disregard income up to 5 percent of the FPL for each family.

applicable to school age children—142 percent of the poverty level. This new income standard, rather than 133 percent, was carried forward incorrectly in their system programming to identify children eligible for direct certification. In both Florida and Kentucky, the NSLP State agencies were unaware of the system issues. Because the measure of income used in conducting DC-M directly affects which students are certified (and thus influences the outcomes examined in Chapters III-V of this report) and potentially affects the costs incurred by State and district staff in conducting DC-M (discussed in Chapters VI-VII), the time periods during which an incorrect measure of income was used were not included in the analyses presented earlier in this report.[72] Specifically, Illinois has been excluded from all quantitative analyses, and the outcome measures for Florida and Kentucky are based on data for the fall semester only.

In Cohort 2 States, implementation was delayed. Both Cohort 2 States experienced substantial delays in implementing the demonstration and did not begin certifying students through DC-M until the second half of the school year. Specifically, districts in New York State began DC-M matching in January 2014, and Massachusetts first conducted DC-M in March 2014. These delays can be largely attributed to competing priorities. Medicaid agency staff needed to prioritize tasks associated with the ACA for DC-M, which delayed the approval of memoranda of understanding (MOUs) and data system changes necessary for DC-M.

Even though MOUs between agencies were based on preexisting agreements for direct certification with other programs, they required substantial calendar time for approval, particularly when a new agency was involved. Although New York State modeled its MOU for DC-M on the one it had for SNAP, the State had to complete a new MOU because a different agency was responsible for the Medicaid data. This process took about five months because it required multiple rounds of review at a time when many staff were focused on establishing the State's Health Benefit Exchange.

Massachusetts, on the other hand, amended an existing MOU between the agencies and departments that would be involved in DC-M. This MOU involved four separate entities and required eight weeks for all parties to approve the revised language. Despite this relatively short timeline, changes to the State's universal health care system were required to remain compliant with the ACA and took precedence over DC-M. As a result, the programming changes necessary for DC-M were delayed by approximately eight months. In addition to these delays,

[72] The direction of the effects of the States' errors depends on the details of the income measure used. For example, using net income rather than gross income would result in students who were not actually eligible for DC-M being certified for free meals, leading to overestimates of certification outcomes. Using a measure of income that is more readily available in a State agency's database would require a lower level of effort at the State level to implement DC-M, leading to underestimates of administrative costs.

The data available for Year 2 do not provide any way to assess the magnitude of the effect of using a different income measure. However, using data from other demonstration States, an earlier report of the evaluation estimated that using net rather than gross income (as Illinois did) would increase the estimated impact of DC-M on certification outcomes by less than one percentage point (Hulsey et al. 2015b). Still, the estimated effects in the States on which this assessment was based were considerably smaller than the effects estimated for Illinois, and the differences between gross and net income measures vary by State, so the effect of the different measure in Illinois could differ from the effect in other States.

both States reported that their award notifications came late in the prior school year (May 3, 2013), making it difficult to implement DC-M before the start of the fall semester.

Matching difficulties encountered in conducting DC-M were similar to those for direct certification with other programs. As in the first year of the demonstration, States responsible for matching—using either a statewide student information system or uploaded enrollment files from districts—reported several challenges.[73] However, none of the staff interviewed reported matching difficulties specific to DC-M. The challenges in matching Medicaid data to student enrollment data were the same as those encountered when conducting other types of direct certification matching. Appendix G provides additional details on these challenges.[74]

Communication with districts about DC-M required time. States in which districts are largely responsible for conducting direct certification matching—Florida, Kentucky, New York State, and Pennsylvania—had to address a number of questions and concerns from districts, and occasionally parents, regarding DC-M.[75] Child nutrition agency staff in New York State, which began DC-M in Year 2, reported receiving "hundreds" of emails and calls from districts after launching DC-M, and staff struggled to field them while attending to their other responsibilities. Across States, staff reported that most of the questions they received were related to the eligibility requirements for DC-M, and why some children enrolled in Medicaid qualified for DC-M and others did not. Some parents who declined free meals questioned why their children were certified, as they did not consider their children to be in need of assistance despite these children meeting the income requirements of DC-M. Questions regarding the extension of benefits to other children in the household were also common.

States provided materials on DC-M, offered trainings, and responded to questions to address these communication challenges. For instance, New York State identified a need to train more State staff on DC-M so they will be better prepared to field questions from districts when DC-M is implemented statewide. Florida also reached out individually to new food service directors to ensure they have a good understanding of the demonstration and drafted a letter for districts to give to parents explaining DC-M and why their child now qualifies for free meals.

The need for explanation of DC-M has decreased over time, as districts become familiar with the new method. The volume of questions reportedly declined after the initial DC-M match in both Year 1 and Year 2, and State staff in Florida, Kentucky, and Pennsylvania noted that they received fewer questions from districts and parents in the second year of the demonstration.

[73] Although Kentucky did not conduct matching for districts, it did attempt to match students between its statewide student information system and the Medicaid file in order to assign a State student identifier to the Medicaid cases before sending the file to districts. This process facilitated matching at the district level.

[74] The National School Lunch Program Direct Certification Improvement Study explored challenges to direct certification in greater detail (Moore et al. 2014).

[75] Districts asked fewer questions in States where matching is conducted centrally using State systems. For example, because Massachusetts did not include the type of assistance program under which a child was certified in the information provided to districts, a few district staff interviewed were unaware that they were even receiving Medicaid matches at all.

Differing definitions of household across programs resulted in a perception problem in some places. Under the NSLP, a household is considered "a group of related or unrelated individuals…who are living as one economic unit, and who share housing and/or significant income and expenses of its members" (USDA FNS 2014). Under DC-M, however, eligibility is determined using the Medicaid definition of a household, which varies by State but can differ considerably from the usual NSLP guidelines. For instance, staff in most States reported that a child with a disability or special needs could qualify for Medicaid as a household of one, in which case the income of parents and others within that child's NSLP household would *not* be considered part of the Medicaid household. Respondents in some States also observed that an individual residing within an NSLP household could be excluded from a Medicaid household, along with his or her income, if he or she did not have financial responsibility for the child.[76] These differences in how households are defined did not pose challenges to creating the DC-M eligibility files, but they led to concerns in Pennsylvania, where State staff reported that some districts did not think the demonstration was entirely fair, because some students could be certified for free meals through DC-M when they would not be by application.

C. District-level implementation challenges

District staff interviewed during Year 2 of the demonstration described a number of challenges encountered during implementation; however, none of the reported challenges were specific to DC-M. Due to similarities between the data elements, data quality, and matching procedures of various direct certification efforts, these challenges applied equally to direct certification with SNAP, TANF, Medicaid, and other programs. Challenges included matching difficulties (and extension of benefits), tracking the program under which a student was directly certified, and technological limitations. These challenges are detailed in Appendix G and summarized in Table G.3.

Only one district respondent reported that DC-M imposed a large burden. The child nutrition agency in New York State sends districts separate direct certification eligibility files for different programs, each including all eligible children residing in the ZIP codes from which a district draws its student population. One district in the interview sample received a large DC-M eligibility file including eligible children from several ZIP codes. Because its matching software had difficulty identifying siblings and recognizing inconsistencies within the data (for all programs), staff had to manually match thousands of cases in the DC-M eligibility file. The district's highly transitory population and differences in how the district and State recorded Hispanic surnames also complicated the matching process.

D. Reported factors impacting matching success

The evaluation did not collect quantitative information on DC-M matching success rates or how the success of matching varied by district- and student-level characteristics, and respondents generally reported that such data were not available. Although interviewed State and district

[76] In one example a State respondent offered, two sisters could be living together and sharing resources to support their respective children. The household would be considered a single unit under NSLP but would be considered two separate units under Medicaid. In some States, stepparents and other guardians might not have financial responsibility for all children in the household and thus can be excluded from the Medicaid household.

staff discussed qualitatively the factors that can affect matching success, they were not able to estimate the magnitude of the influence of these factors.

States and districts reported that matching success was affected by a variety of factors, including recipient characteristics such as, name, grade level, and residence changes, and district characteristics or procedures such as size, frequency of updates to data files, matching methods and the geographic scope of files, and technology. Due to similarities in the type and quality of data elements used for matching, these factors are common to all direct certification, not specific to DC-M. Appendix G, including Table G.4, discusses each of these factors.

E. Timing of DC-M

To explore the approximate time gap between a student's enrollment in Medicaid and certification through DC-M, we asked State and district staff about the amount of time elapsed during and between key steps of the process. This data collection approach is much less rigorous than independently monitoring the actual timing of each activity throughout the school year or comparing individual-level Medicaid enrollment data to student-level certification data to measure the number of days between a child's first appearance in each file. However, it provides a general sense of the typical time lag in a State or district, when the process operates as planned, and which aspects have the largest effect on the total amount of time. Because Cohort 2 States implemented DC-M late in the school year, we collected information on the timing of direct certification with other programs, because they plan to follow that same schedule for DC-M in the future. We combined this information with information on their DC-M processes at the end of the year to describe what their timing is expected to be during a full year of DC-M.[77]

The total time gap between Medicaid enrollment and direct certification depends on the timing of several key activities at the State and district levels. These activities are depicted in Figure VIII.1.

State-level DC-M activities. As shown in Appendix Table G.5, the amount of time between enrolling in Medicaid and appearance in a DC-M eligibility file or file of match results can range from one day to four months and can have a large impact on the timeliness of certification for free meals.[78] For instance, Florida and Massachusetts update their Medicaid eligibility files nightly, so the gap between Medicaid enrollment and appearance in a file might be as little as one day.[79] New York State, on the other hand, creates its DC-M eligibility file four times per year and makes it available about a month later, resulting in a one- to four-month gap between Medicaid enrollment and file creation. Most States, however, update and make their file available on a monthly basis. For States that create monthly eligibility files, the time between Medicaid enrollment and appearance in a DC-M eligibility file is typically two to six

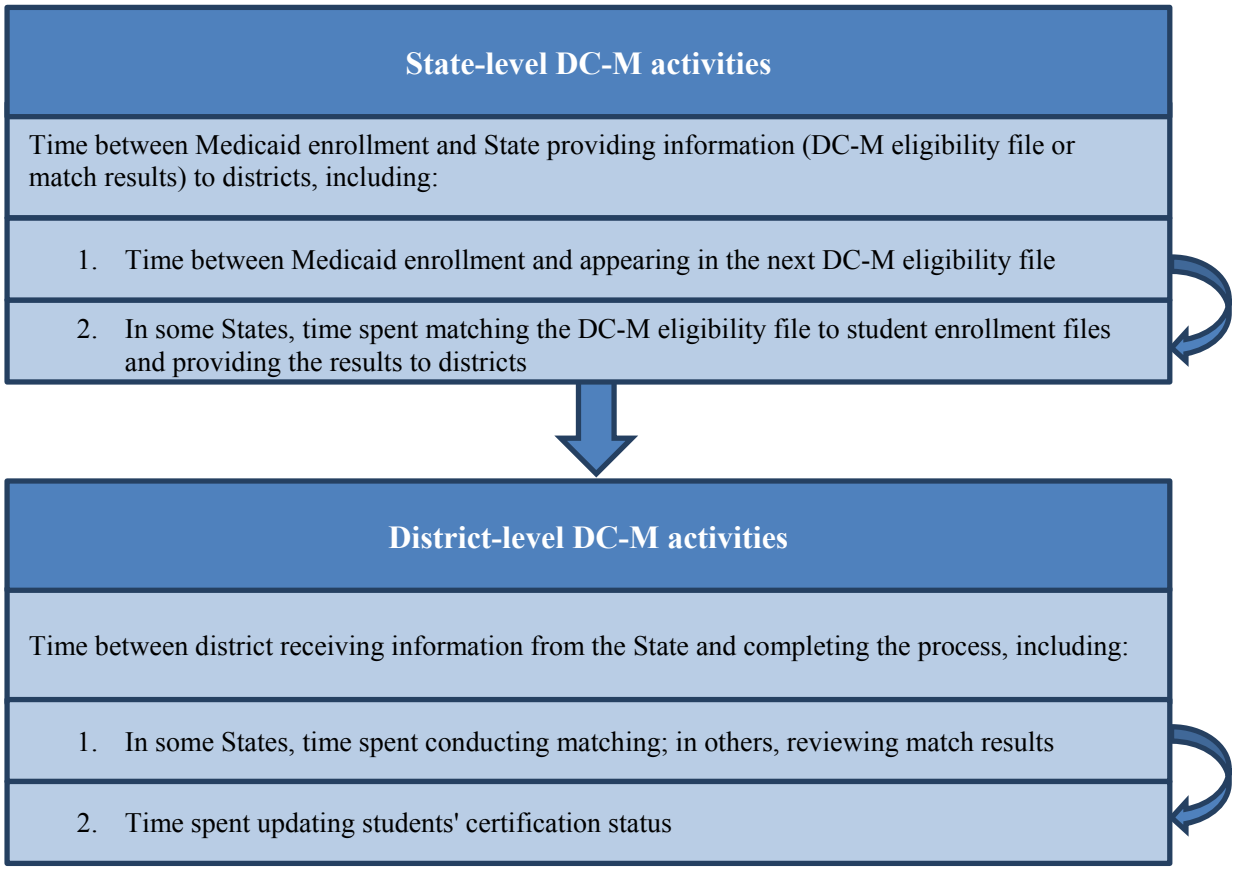
[77] Cohort 1 States reported similar timelines for DC-M and direct certification with other programs.

[78] This estimate assumes that children enrolled in Medicaid appear in the State's Medicaid database that same day.

[79] In Florida, the files were not updated this frequently until February 2014, when the State's new direct certification system was launched.

weeks.[80] States that conduct matching centrally typically do so within a day of receiving the eligibility file (or a district's enrollment file) due to the rapid turnaround time of States' automated matching processes. After States complete their role in the DC-M process, they provide districts access to the information—either a DC-M eligibility file or match results.

Figure VIII.1. Timing of key direct certification activities



District-level DC-M activities. After a district downloads its DC-M eligibility file or match results, it must complete the matching process and/or update students' certification status. There were noticeable differences in the schedules of Cohort 1 and Cohort 2 States.[81] In Cohort 1 States, district staff were encouraged to match on a monthly basis, which those that were interviewed did. Direct certification was conducted less frequently among interviewed district staff in Cohort 2 States. For example, Massachusetts' districts were encouraged to upload their enrollment files to the State systems for matching monthly, but nearly all of the district staff interviewed did so only the required minimum of three times per year. New York State creates four files each school year, and interviewed district staff matched three to four times per year. In

[80] The exception is Kentucky, where the monthly file contains children who enrolled in Medicaid one day to one month before file creation.

[81] For Massachusetts and New York State, this paragraph relies on descriptions of direct certification processes for other programs, because DC-M did not begin until late in the school year in Cohort 2 States.

some States, a few of the interviewed district staff reported matching more frequently at the start of the school year or conducting additional matches or individual searches when new students moved into their district.[82] Nearly all district staff interviewed completed their matching or file review within several business days of accessing their DC-M eligibility file or match results. Interviewed staff often updated students' certification status on the same day that matching was completed, regardless of whether they updated their computer systems automatically or manually. Only one district interviewed required a significant amount of time—approximately one month—to conduct the matching process due to the size of its DC-M eligibility file and the limitations of its matching software.

Total time gaps. Although the combination of a large DC-M eligibility file and manual matching at the local level can potentially delay certification, most district respondents reported only a few hours spent each month on DC-M activities at the local level (excluding the first match of the school year). Thus, the overall time gaps between enrolling in Medicaid and appearing in a DC-M eligibility file largely resulted from how often information was updated and provided to districts. More frequent updates to the DC-M eligibility files, and the means to match to that data on an ad hoc basis, can result in shorter gaps between enrollment in Medicaid and DC-M.

[82] Because the vast majority of students are directly certified before the start of the school year, matching during this time took longer but did not delay receipt of free meals.

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IX. CONCLUSIONS AND LIMITATIONS

The DC-M evaluation tested whether allowing direct certification based on income eligibility identified through Medicaid data has the potential to expand the number of eligible students who are certified to receive free school meals without needing to submit applications, increase the numbers of reimbursable meals served, and affect the administrative costs State and district staff incur during the certification process. This chapter summarizes key findings from the second year of the demonstration and notes important limitations of the DC-M evaluation.

A. Summary of findings

Certification. The evaluation estimated impacts of DC-M on the percentage of students directly certified for free meals and the total percentage of students certified for free meals. The pattern of findings indicates that DC-M had mixed results across States on these certification outcomes. We found statistically significant impacts on both key certification outcomes for one of the two States included in the analysis (New York City) (Table IX.1). DC-M increased the percentage of students directly certified to receive free meals by 6.9 percentage points in New York City. The impact on the total percentage of students certified for free meals is smaller (5.9 percentage points in New York City) because some of the students directly certified under DC-M would have been certified for free meals by application in the absence of DC-M. The impact estimates were not statistically significant in Florida.

In addition to improving student access to free school meals, the finding that DC-M increased the percentage of students directly certified in some places may have implications for improper payments in the school meal programs. A recent study of improper payments found substantially higher improper payment rates among students certified by application compared to students who were certified directly (Moore et al. 2015).

Participation. The evaluation estimated impacts of DC-M on the percentages of lunches and breakfasts served for free and the overall number of NSLP and SBP meals served per enrolled student per day. The broad pattern of impacts indicates that DC-M increased the percentage of meals—particularly breakfasts—served for free but did not increase the overall number of meals served. DC-M had a positive, statistically significant impact on the percentage of lunches served for free in two of the four random assignment States (both Cohort 2 States), and on the percentage of breakfasts served for free in three of the States (all except Massachusetts). The study found impacts of 1.1 and 1.5 percentage points, respectively, on the percentages of lunches served for free in Massachusetts and New York State. The impacts on the percentages of breakfasts served for free were 1.9, 3.7, and 1.6 percentage points, respectively, in Florida, New York City, and New York State. No statistically significant impact was found on the percentage of lunches served for free in either Cohort 1 State or on the percentage of breakfasts served for free in Massachusetts.

However, these impacts on meals served for free did not translate into changes in the overall participation rates in most States. The only statistically significant impacts of DC-M on the average number of meals served per student per day were a positive 0.05 impact—that is, an increase of 5 lunches per school day for every 100 students enrolled—on lunches in New York City and a negative 0.01 impact on breakfasts in New York State.

Table IX.1. Impacts of DC-M on key outcomes in SY 2013-2014 (regression adjusted; CI in parentheses)

	Cohort 1 random assignment States		Cohort 2 random assignment States	
	Florida	New York City	Massachusetts	New York State
Certification outcomes				
Percentage of students directly certified for free meals[a]	2.5 (± 3.8)	6.9* (± 1.5)	n.a.	n.a.
Percentage of students certified for free meals[b]	2.0 (± 3.7)	5.9* (± 1.8)	n.a.	n.a.
Participation outcomes				
Lunches served per student per day	0.02 (± 0.02)	0.05* (± 0.03)	0.00 (± 0.01)	0.00 (± 0.01)
Percentage of lunches served for free	-0.8 (± 1.2)	1.7 (± 1.7)	1.1* (± 0.6)	1.5* (± 0.6)
Breakfasts served per student per day	0.01 (± 0.01)	-0.01 (±0.02)	0.00 (± 0.01)	-0.01* (± 0.01)
Percentage of breakfasts served for free	1.9* (± 1.1)	3.7* (± 2.2)	0.2 (± 1.3)	1.6* (± 1.1)
Federal reimbursement outcomes				
Federal NSLP reimbursement costs per student per day ($)	0.02 (± 0.06)	0.13* (± 0.08)	0.01 (± 0.02)	0.01 (± 0.01)
Blended NSLP reimbursement rate ($)[c]	-0.02 (± 0.03)	0.03 (± 0.04)	0.02* (± 0.02)	0.03* (± 0.01)
Federal SBP reimbursement costs per student per day ($)	0.03* (±0.03)	-0.01 (±0.03)	0.00 (±0.02)	-0.01* (±0.01)
Blended SBP reimbursement rate ($)[c]	0.04* (±0.03)	0.06* (±0.04)	0.00 (±0.02)	0.02* (±0.02)
District administrative certification costs per student ($)[d]	0.84 (±2.03)	n.a.	0.00 (±1.17)	-0.40 (±0.73)

Source: October certification data and monthly administrative claims data provided by the States and District Cost Survey.

Notes: Because districts in the Cohort 2 States did not implement DC-M until late in the school year, the certification outcomes in this table include districts in Cohort 1 random assignment States: Florida and New York City. The results for other outcomes reported in this table are obtained by (1) aggregating across the months after each demonstration State implemented DC-M in SY 2013-2014 (the beginning of the school year for each Cohort 1 State, January for New York State, and March for Massachusetts) and (2) excluding months during which the State used an incorrect measure of income for conducting DC-M (January 2014 through May 2014 for Florida). Appendix A lists the variables included in the regression adjustments.

[a]Includes all students certified to receive free meals but not subject to verification, including those directly certified based on information from the SNAP, FDPIR, TANF, or Medicaid agency; children on the homeless liaison list; income-eligible Head Start -participants; residential students in RCCIs; and nonapplicants approved by local officials.

[b]Including by application, direct certification, or other categorical eligibility.

[c]The blended reimbursement rate is the per-meal reimbursement rate.

[d]Costs per student was calculated as the sum of district certification costs across all districts in the sample divided by the sum of enrolled students across all districts in the sample.

*Estimate for treatment districts is significantly different from the estimate for control districts at the 0.05 level.

CI = 95 percent confidence interval half-width; DC-M = Direct Certification-Medicaid; FDPIR = Food Distribution Program on Indian Reservations; NSLP = National School Lunch Program; RCCI = residential child care institution; SBP = School Breakfast Program; SNAP = Supplemental Nutrition Assistance Program; SY = school year; TANF = Temporary Assistance for Needy Families.

Federal reimbursement costs. The evaluation examined impacts on average Federal reimbursements per meal served and reimbursements per student. The pattern of findings across study States provides evidence of a positive impact on reimbursements per meal—particularly for breakfast—but not for reimbursements per student. DC-M had a positive and significant

impact on average per-lunch reimbursements in both Cohort 2 States but neither Cohort 1 State. It significantly increased average per-breakfast reimbursements in three of the four States (all but Massachusetts). The impact was 2 cents on the average per-lunch reimbursement rate in Massachusetts and 3 cents on the rate in New York State. For the per-breakfast reimbursement rate, DC-M had impacts of 4 cents in Florida, 6 cents in New York City, and 2 cents in New York State. The per-meal reimbursement impacts did not translate to increased reimbursements per student per day in most States. These findings are generally consistent with findings about participation, which show that DC-M significantly shifted meals served from lower reimbursement reduced-price and paid statuses to the higher reimbursement free status.

District administrative costs. Implementation of DC-M did not reduce district costs, but neither did it impose a financial burden on participating districts. There were no statistically significant impacts in any State on total district certification costs, or on the costs of any of the types of certification activities examined: direct certification, application, and other activities.

State administrative costs. The total State-level cost of DC-M, over and above other direct certification costs in Year 2, ranged from less than $8,000 to almost $78,000. Even in the State with the highest costs, the cost per directly certified student in treatment districts was less than the reimbursement cost of one free school lunch. For all States, start-up costs (which occurred during Year 1 for Cohort 1 States) were substantially higher than ongoing costs. Start-up costs were highest when major data system revisions were required to incorporate DC-M.

Challenges. Competing priorities and the time required to secure approval for interagency agreements resulted in lengthy delays in implementation in the Cohort 2 States; similar delays were experienced by some Cohort 1 States in their first year of DC-M implementation (Hulsey et al. 2015a). One State, Illinois, used a different measure of income than that specified in the legislative guidelines for assessing eligibility for DC-M, and two other States used incorrect measures for part of Year 2. [83] In addition to these two major challenges, across States, child nutrition agency staff noted that it took time to communicate with districts about DC-M guidelines, but the number of questions decreased as districts became familiar with DC-M. State and district respondents reported the same types of challenges in conducting direct certification with SNAP and other programs, such as matching difficulties and technological limitations, but district staff raised no issues specific to DC-M.

B. Limitations of the demonstration

The random assignment design used in Florida, New York City, Massachusetts, and New York State allows for the derivation of internally valid causal estimates of the impacts of DC-M, as implemented, on a broad set of outcome measures in the Year 2 evaluation sample districts. However, limitations of the demonstration implementation, the sample, and the data available necessitate caution in interpreting the findings.

Some States experienced difficulty in implementing DC-M that limited the data available for analysis:

[83] Florida and Kentucky began using incorrect income measures for DC-M in January 2013 when changes to Medicaid eligibility occurred under the ACA.

- Three of the demonstration States used incorrect measures of income for DC-M in at least some months of Year 2. This implementation problem resulted in the exclusion of Illinois and data for the spring semester months for Florida and Kentucky from the quantitative analyses.
- Cohort 2 States struggled to begin DC-M at the start of the school year, which limited the data available for those States. Both Massachusetts and New York State conducted DC-M after the reference point for certification data, so the measures of certification used in the study could not reflect DC-M outcomes in those States, and other outcomes are based only on months at the end of the school year.

The quantitative analyses presented in this report include only data for months during which DC-M was implemented using the correct measure of income in each State.[84]

Due to these restrictions and other restrictions relevant to the analysis samples and the set of months included in earlier reports of the DC-M evaluation, direct comparisons between findings presented across reports could be misleading. In addition, although Illinois was included in the analyses presented in earlier reports, because it was not known at that point that the State was using an incorrect measure of income, those findings reported for Illinois do not represent the impacts of accurate implementation of DC-M.

The DC-M evaluation is based on a nonrepresentative sample of States and districts. The demonstration States were not selected randomly and differ systematically from other States in the nation. Within these States, the selection of districts was subject to several constraints outside the control of the evaluation that limit the ability to define a meaningful universe of districts to which the demonstration and evaluation findings might generalize. The within-State findings presented in this report cannot be considered representative of any State as a whole, and the samples across the States are not representative of the combined sets of States or the nation.

There are also limitations related to the data available for the evaluation. Chapter II and Appendix A provide a more detailed discussion of limitations.

C. Summary

In summary, the evaluation found that, in some demonstration States, DC-M positively affected certification outcomes and the percentage of meals served for free, but not the overall participation rate. In other words, for some States in the study sample, DC-M successfully reduced reliance on school meal applications and increased the proportion of students receiving free meals, although it did not affect the number of meals served overall. These increases resulted in additional Federal reimbursements in some States. However, there was no impact on district costs for certifying students. State DC-M administrative costs varied widely, but the per-student costs were low even in the highest cost States, and a large majority of the costs were start-up costs rather than ongoing costs. The impact findings for this study represent internally

[84] Illinois is excluded entirely from the quantitative analyses. The analyses for Florida and Kentucky include data for only September-December (the months during which the correct income measure was used in Year 2), and the analyses for Massachusetts and New York State include data for only March-May and January-May, respectively (the months during which DC-M was conducted in Year 2).

valid estimates of the impact of DC-M for the participating evaluation districts in the participating States. However, this study was not intended to be nationally representative; study States and districts differ in important ways from States and districts nationally. Therefore, the findings cannot be generalized more broadly and interpreted as the effects that would be anticipated from an expansion of DC-M to a broader (or otherwise different) set of States and districts.

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APPENDIX A

METHODS

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This appendix describes the samples and the data collection and analysis methods used for the DC-M Year 2 (SY 2013-2014) report

A. Sample

Demonstration States. FNS solicited applications from States to participate in the DC-M demonstration and selected five—Florida, Illinois, Kentucky, New York, and Pennsylvania—to begin implementing DC-M in SY 2012-2013.[85] FNS selected one other State, Massachusetts, and additional districts in three of the original States (Florida, Illinois, and New York) for inclusion in the demonstration in SY 2013-2014. However, Illinois is excluded from the quantitative analyses in this report due to implementation issues.

Based on each State's application to participate in the demonstration and subsequent discussions with the State, FNS designated two demonstration States—Kentucky and Pennsylvania—to implement DC-M in all districts statewide (referred to as universal implementation). In the remaining States, we matched districts into pairs based on district characteristics and randomly assigned one district in each pair to a treatment group that implemented DC-M and the other to a control group that did not.

In New York, only New York City (a single SFA with about one million students) participated in the first year of the demonstration. In SY 2012-2013, the 32 community school districts in the city were randomly assigned either to conduct DC-M or to a control group that did not; these community districts are treated as districts in the data collection and analysis.[86] The New York City child nutrition and Medicaid agencies play much the same roles in the DC-M process as State agencies do in other demonstration States, and the analysis treated them as such.[87] Because of this unique aspect of the study design in this location, New York City continues to be treated as a separate "State" in the Year 2 analysis, and is not combined with the additional 300 New York State districts that joined the demonstration in SY 2013-2014.

In contrast, the relatively small numbers of Florida districts that were added to the demonstration in Year 2 are pooled with other districts in that State.[88] Although the six additional districts in Florida differ systematically from the Cohort 1 districts in that State along some characteristics, as we discuss below, they are working with the same State-level agencies in conducting DC-M, using the same processes as other districts in their State.

District selection and random assignment. The demonstration sample frame for each State was based on the list of districts in the State's DC-M application submitted to FNS. To

[85] A sixth State, Alaska, was initially selected but withdrew before implementing DC-M; it is not included in any analyses.

[86] Community school districts are administrative units within the New York City Department of Education that do not play any role in the NSLP/SBP certification process.

[87] For example, the Medicaid data used for DC-M in New York City comes from the New York City Human Resources Administration and is passed directly to the New York City Department of Education for matching.

[88] A small number of Illinois districts (26) were also added in Year 2, but that State is excluded from quantitative analyses due to implementation issues.

refine the sample frame based on the objectives of the evaluation, certain types of entities were excluded from the States' lists, including private schools; residential programs; those that did not appear in the Verification Summary Report (VSR, Form FNS-742) data; and districts implementing Provision 2 or 3 in more than 20 percent of their schools.[89] Each of the following additional exclusions affected only some of the States:

- Districts implementing the CEP in any schools were excluded from the evaluation.[90] At the time the SY 2012-2013 sample was selected, Illinois, Kentucky, and New York were the only States in the DC-M demonstration where the CEP was authorized. In Year 2, Florida and Massachusetts were authorized to begin the CEP. We excluded districts with CEP schools from the sample frames before conducting random assignment in most States. In Florida, however, random assignment for DC-M had been completed the year prior to the State beginning the CEP, so we excluded from the Year 2 analysis sample both the CEP districts and the districts to which they were matched for random assignment; 12 of the 27 Florida pairs (24 of 54 districts) were excluded due to CEP participation of at least one member of a matched pair.[91] Five sample districts in Kentucky that began implementing the CEP in Year 2 were excluded from the Year 2 analysis sample, as well (Kentucky is not a random assignment State, so districts are not paired).[92] Because CEP eligibility depends on the percentage of students identified as eligible for free meals without completing an application, these exclusions resulted in a sample with a lower percentage eligible for free meals than in the original sample.[93]
- The 32 community districts in New York City were randomly assigned to conduct DC-M or not in Year 1 of the demonstration and are considered as districts in the data collection and analysis. Although none of the community districts was excluded from the sample frame, the State's application limited the schools that could be included in the demonstration and evaluation to those that (1) were not participating in Provision 2 and (2) had electronic

[89] In addition to excluding districts with large percentages of Provision 2 or Provision 3 schools from the sample, we excluded Provision 2 and Provision 3 schools in other districts from the data and analyses, to the extent possible.

[90] We were required to exclude districts with CEP schools in Year 1 to avoid overlap with a study of CEP, and we maintained that approach in Year 2.

[91] In addition to the importance of consistency across States in the sample definition, there are other reasons for excluding the district pairs (in Florida and other States) with schools that adopted the CEP after random assignment to the DC-M treatment or control group. Including districts that adopt the CEP in the analysis sample could lead to less credible impact estimates because DC-M could affect schools' eligibility for the CEP. Because DC-M outcomes cannot be measured in CEP schools, this could result in imbalances between the treatment and control groups. If the number or types of schools that become CEP are different in the treatment group than in the control group, impact estimates will be biased.

[92] In addition, six selected districts in New York State were found to be implementing the CEP during Year 2 after sampling and were dropped from the analysis at that point, along with their matched pairs.

[93] For example, at baseline 57 percent of students in district pairs in which schools adopted CEP in Year 2 were certified to receive free meals and 39 percent were directly certified, compared with 49 percent and 30 percent, respectively, of students in pairs with no CEP schools.

point-of-sale systems.[94] Together, these exclusions resulted in a sample containing approximately one-third of the public school students in the city, with a higher proportion of high schools than the city as a whole.

These exclusions make the resulting samples less representative of each State as a whole and, for some States, not representative of any well-defined and policy-relevant subset of districts in the entire State. Additionally, the differential effects of exclusions across States make cross-State comparisons less meaningful.

Although most sample exclusions were made prior to random assignment, some sample members' decisions to adopt the CEP were made later, requiring their exclusion after random assignment. There is no effect on the internal validity of evaluation results when districts are excluded prior to random assignment, although it reduces the ability to identify the set of districts to which the findings generalize. Excluding after random assignment can present problems to internal validity, but the DC-M evaluation was able to circumvent the threat of bias by excluding pairs, when necessary.

In expanding the sample in Year 2, we were able to include some districts that had to be excluded from the Year 1 sample frame.

- HHFKA specified that districts selected for the demonstration in random assignment States in SY 2012-2013 collectively could include no more than 2.5 percent of all students certified for free and reduced-price meals in the nation, or approximately 688,000 certified students. This requirement resulted in the exclusion of very large districts, including the five largest in Florida, from the sample frame of districts that began DC-M in SY 2012-2013.[95] The limit in Year 2 was less restrictive—5.0 percent of all students certified—which allowed us to add several of the largest districts in Florida to the Year 2 sample.
- In the aftermath of Hurricane Sandy in 2012, community districts in New York City were authorized to serve school meals for free to all students for a period of time that varied by district. All community districts served all meals for free during November and December, and participation and reimbursement data from those months were excluded from the analysis in Year 1. Some districts continued serving all meals for free beyond December and were excluded (along with the districts to which they were matched for random assignment) from our Year 1 analyses. These five pairs of community districts were not excluded from the Year 2 analysis.[96]

The expansion discussed in the first bullet above improves the diversity of the sample in Florida (although the sample is still not representative of all districts in the State due to other

[94] These school-level exclusions were not a requirement of the demonstration but were made by the State in its application, possibly for reasons related to data availability.

[95] Chicago Public Schools in Illinois was also excluded for this reason.

[96] Three districts in New York State were also authorized to serve all meals for free after of Hurricane Sandy. Because Year 1 is the baseline year for New York State, the district pairs that included these districts did have to be excluded from the Year 2 analysis.

exclusions that remain). However, it results in systematic differences between the Cohort 1 and Cohort 2 districts in that State. The Cohort 2 districts in Florida are much larger than the Cohort 1 districts.[97]

In addition to the expansion of the demonstration, the Year 2 analysis sample differs from the Year 1 sample in other ways. Some districts in the Year 1 sample became ineligible in Year 2, because they closed, stopped participating in the school meal programs, adopted Provision 2 or Provision 3 in more than 20 percent of schools, or began implementing the CEP (the most common reason).[98]

For each of the random assignment States, districts from the final sampling frame were matched into pairs based on district characteristics.[99] For each pair, one of the districts was randomly assigned to the treatment condition (DC-M) and the other to the control condition (no DC-M). All treatment and control districts in these States are included in the DC-M evaluation, with the exception of those that became ineligible—by implementing the CEP, for example—after random assignment; in such cases, both districts in the pair are excluded from the analysis. The two universal implementation States include treatment districts only (and no control districts) because DC-M was implemented statewide.

For each of the random assignment States, we compared the values of the outcome variables measured for the year before DC-M began in that State (SY 2011-2012 for Cohort 1 States and SY 2012-2013 for Cohort 2 States) for districts in the treatment group with those of the control group and found no statistically significant differences at baseline (Table A.1).

Year 2 analysis samples. Table II.1 shows the sample for Year 2 of the demonstration. The sample includes all treatment and control districts in the random assignment States and a sample of 30 districts in each of the two universal implementation States (Kentucky and Pennsylvania).

[97] In Year 2, more than 892,000 students were enrolled in schools in the four Cohort 2 districts in the analysis sample for Florida, compared with fewer than 590,000 students in the 26 Cohort 1 districts.

[98] As noted earlier, the 12 district pairs with schools that adopted the CEP in Florida represent a large proportion of the State's demonstration districts, and they differed from the other districts in the Florida sample along relevant characteristics.

[99] The matching process was designed to minimize the pairwise differences between treatment and control group districts along six variables: (1) the percentage of students eligible for free meals; (2) the percentage of students eligible for free or reduced-price meals; (3) the percentage of students eligible for free meals that were certified based on an application; (4) the overall participation rate, that is, the average number of meals served daily divided by enrollment; (5) the blended reimbursement rate, a weighted average of the percentages of free, reduced-price, and full-price meals served, where the weights are the per-meal reimbursement rates for lunches; and (6) the number of students eligible for free or reduced-price meals (on a logarithmic scale).

Table A.1. Baseline characteristics of treatment and control districts, weighted

State		Treatment districts	Control districts	Difference
Florida	Percentage of students directly certified for free meals[a]	28.7	31.2	-2.5
	Total percentage of students certified for free meals	46.2	52.1	-5.9
	Average number of lunches served per student per day	0.59	0.58	0.00
	Percentage of lunches served for free	66.7	71.5	-4.9
	Average number of breakfasts served per student per day	0.25	0.20	0.05
	Percentage of breakfasts served for free	74.9	77.2	-2.3
	Federal NSLP reimbursement costs per student per day (dollars)	1.27	1.32	-0.05
	Blended NSLP reimbursement rate (dollars)[b]	2.16	2.26	-0.10
	Federal SBP reimbursement costs per student per day (dollars)	0.37	0.31	0.07
	Blended SBP reimbursement rate (dollars)[b]	1.51	1.54	-0.03
New York City	Percentage of students directly certified for free meals[a]	34.5	33.7	0.7
	Total percentage of students certified for free meals	38.7	39.8	-1.1
	Average number of lunches served per student per day	0.41	0.44	-0.03
	Percentage of lunches served for free	75.6	74.2	1.4
	Average number of breakfasts served per student per day	0.16	0.14	0.01
	Percentage of breakfasts served for free	71.0	69.1	1.9
	Federal NSLP reimbursement costs per student per day (dollars)	0.96	1.03	-0.07
	Blended NSLP reimbursement rate (dollars)[b]	2.34	2.31	0.03
	Federal SBP reimbursement costs per student per day (dollars)	0.22	0.20	0.02
	Blended SBP reimbursement rate (dollars)[b]	1.42	1.40	0.02
Massachusetts	Percentage of students directly certified for free meals[a]	13.3	16.9	-3.6
	Total percentage of students certified for free meals	21.1	25.1	-4.0
	Average number of lunches served per student per day	0.45	0.47	-0.02
	Percentage of lunches served for free	37.1	42.4	-5.3
	Average number of breakfasts served per student per day	0.10	0.12	-0.02
	Percentage of breakfasts served for free	71.3	72.4	-1.1
	Federal NSLP reimbursement costs per student per day (dollars)	0.63	0.72	-0.09
	Blended NSLP reimbursement rate (dollars)[b]	1.42	1.55	-0.13
	Federal SBP reimbursement costs per student per day (dollars)	0.14	0.18	-0.03
	Blended SBP reimbursement rate (dollars)[b]	1.46	1.48	-0.02

Table A.1 *(continued)*

State		Treatment districts	Control districts	Difference
New York State	Percentage of students directly certified for free meals[a]	11.2	10.7	0.5
	Total percentage of students certified for free meals	22.1	21.8	0.3
	Average number of lunches served per student per day	0.47	0.47	0.00
	Percentage of lunches served for free	39.0	39.2	-0.2
	Average number of breakfasts served per student per day	0.14	0.14	0.01
	Percentage of breakfasts served for free	64.8	62.8	2.0
	Federal NSLP reimbursement costs per student per day (dollars)	0.74	0.75	-0.01
	Blended NSLP reimbursement rate (dollars)[b]	1.56	1.59	-0.03
	Federal SBP reimbursement costs per student per day (dollars)	0.20	0.19	0.01
	Blended SBP reimbursement rate (dollars)[b]	1.39	1.38	0.02

Sources: October certification data and monthly administrative claims data provided by the States.

Notes: The baseline school year is 2011-2012 for Cohort 1 States/districts and 2012-2013 for Cohort 2 States/districts. Differences shown in the table may differ slightly from calculated differences due to rounding.

[a]Includes all students certified to receive free meals but not subject to verification, including those directly certified based on information from the SNAP, FDPIR, TANF, or Medicaid agency; children on the homeless liaison list; income-eligible Head Start -participants; residential students in RCCIs; and nonapplicants approved by local officials.

[b]The blended reimbursement rate is the average per-meal reimbursement rate.

[c]The results reported in this table are aggregated across the same set of months used in the analyses reported in Chapters IV-VI: those months (1) after each demonstration State implemented DC-M in SY 2013-2014 (the beginning of the school year for all Cohort 1 States, January for New York State, and March for Massachusetts) and (2) excluding months during which the State used an incorrect measure of income for conducting DC-M (January 2014 through May 2014 for Florida).

*Estimate for treatment districts is significantly different from estimate for control group districts at the 0.05 level. There are no statistically significant differences in this table.

FDPIR = Food Distribution Program on Indian Reservations; NSLP = National School Lunch Program; RCCI = Residential Child Care Institution; SBP = School Breakfast Program; SNAP = Supplemental Nutrition Assistance Program; SY = school year; TANF = Temporary Assistance for Needy Families.

The analysis sample is smaller than the number of districts initially assigned to the demonstration for three reasons. First, Illinois has been excluded from the quantitative analyses, due to implementation issues discussed elsewhere in this report. Second, some districts were found after assignment to be ineligible for inclusion in the study. Across the remaining States, 52 of the 748 districts originally selected were excluded because they or their matched pairs were no longer eligible by Year 2. These districts are not included in the "Eligible sample" column of Table II.1. Third, any districts for which either certification or participation data were unavailable—or clearly problematic—for either the baseline year or Year 2 were excluded from the analysis. The districts in this category are included in the "Eligible sample" column but not in the "Complete data available" column of this table. Nonrespondents to the district cost survey could not be included in the analyses of district costs but are included in other analyses.

Specific analyses focused on subsets of the overall sample.[100] Illinois has been excluded from all quantitative analyses. Impact analyses are based on the remaining four States in which

[100] In addition, the sample for the district cost survey excluded three charter schools in New York State that were deemed ineligible for the survey (but were included in other analyses) because direct certification was conducted centrally by charter management organization staff located in another State.

districts were randomly assigned, and impacts on certification outcomes are based only on Cohort 1 random assignment States (due to delays in DC-M implementation in Cohort 2 States). From the main analysis sample, we drew a subsample of districts for challenges interviews. Specifically, we selected six districts in each State where local staff have primary responsibility for direct certification matching, and three districts in each State where matching is conducted at the State level. Districts were purposively chosen within each State to ensure variation along characteristics such as enrollment, percentage of students certified to receive free or reduced-price meals, and percentage of students directly certified.

In addition to the samples for the main analyses presented in this report, we conducted sensitivity analyses using an alternative sample in Florida, to explore the sensitivity of study findings to the inclusion of the Cohort 2 districts. Appendix K describes this sample and discusses the results of these analyses.

B. Data collection

For the Year 2 analysis, we collected four key types of data: (1) district-level administrative data on certification and NSLP and SBP participation; (2) survey data on district certification costs; (3) State agency administrative cost data pertaining to start-up and ongoing DC-M activities; and (4) State and district views on DC-M implementation challenges.

1. Certification and participation data

Administrative data on certification and meal participation were collected for each district in the treatment and control groups in random assignment States and for each sampled district in universal implementation States. For the Year 2 analysis, these data were collected from each State in the study for the second school year of the demonstration, SY 2013-2014. The same data were collected for the year prior to the demonstration (SY 2011-2012 in Cohort 1 States and SY 2012-2013 in Cohort 2 States) to help improve the precision of our estimates of the impacts of DC-M on certification and participation and to enable pre-post comparisons.

District-level data collected for each period fall into two broad categories: (1) information on enrolled students by certification status and basis for certification and (2) monthly participation (that is, meals served) information for the NSLP and SBP.[101] The data elements collected align with the district-level data that States typically collect from districts for administrative reporting.

Certification data. The reference date for the certification data collected is the last operating day in October because districts are required to report certification statistics to FNS on Form FNS-742 as of that date and thus have these data available.[102] The data elements collected include the following:

[101] Data on participation in the NSLP Afterschool Snack Program (ASP) and Special Milk Program (SMP) were collected at the same time but will be analyzed in a separate report.

[102] As discussed in the limitations section, the Cohort 2 States had not implemented DC-M by the end of October, so the effects of DC-M in those locations are not captured by certification outcome measures based on these data.

- Total number of students certified for free meals
- Total number of students certified for reduced-price meals
- Number of students certified by each method of certification, such as application (by whether based on categorical eligibility or income) and direct certification[103]
- Total number of students enrolled in the district

When the data provided by a State included students in schools operating under Provision 2 or Provision 3 for the NSLP and SBP, we excluded those students in processing the data.

In Year 2, FNS redesigned Form FNS-742. Although the key data elements used for the DC-M analysis were included in both the new and previous versions of the form, there were differences in the format and phrasing of some items. Some State staff noted that the changes in the form might have resulted in confusion on the part of districts providing the information and errors in the data.

NSLP/SBP participation data. Data were collected from States on each district's total numbers of reimbursable lunches and breakfasts served, by reimbursement category (free, reduced-price, paid) in each month during SY 2013-2014 and the year prior to the demonstration. To facilitate analyses of Federal reimbursement costs, we also requested data on not only the numbers of free, reduced-price, and paid meals, but also the numbers of meals reimbursed at the slightly higher "needs-based" NSLP rates or "severe-needs" SBP rates for which some districts or schools qualify. In addition, starting in October 2012, districts that are certified as meeting new school meal pattern and nutrition regulations receive an extra six cents per lunch served. All rates for SY 2011-2012, SY 2012-2013 and SY 2013-2014 are detailed in Table A.2 below.

[103] Most States provided the number of students certified to receive free meals but not subject to verification as a more readily available proxy for the number directly certified. In addition, although we also requested the number of students directly certified by source of direct certification (Medicaid, SNAP, etc.), that information was not available from any demonstration State for the year prior to DC-M, and the only breakdown available from most States in Year 2 was SNAP versus all other programs.

Table A.2. NSLP and SBP Federal reimbursement rates, SY 2011-2012, SY 2012-2013, and SY 2013-2014

	NSLP Federal reimbursement rates (dollars)			SBP Federal reimbursement rates (dollars)		
	Free	Reduced-price	Paid	Free	Reduced-price	Paid
SY 2011-2012						
Standard rate	2.77	2.37	0.26	1.51	1.21	0.27
Needs-based or severe-needs rate	2.79	2.39	0.28	1.80	1.50	0.27
SY 2012-2013						
Without six-cent performance-based increase						
Standard rate	2.86	2.46	0.27	1.55	1.25	0.27
Needs-based or severe-needs rate	2.88	2.48	0.29	1.85	1.55	0.27
With six-cent performance-based increase						
Standard rate	2.92	2.52	0.33	n.a.	n.a.	n.a.
Needs-based or severe-needs rate	2.94	2.54	0.35	n.a.	n.a.	n.a.
SY 2013-2014						
Without six-cent performance-based increase						
Standard rate	2.93	2.53	0.28	1.58	1.28	0.28
Needs-based or severe-needs rate	2.95	2.55	0.30	1.89	1.59	0.28
With six-cent performance-based increase						
Standard rate	2.99	2.59	0.34	n.a.	n.a.	n.a.
Needs-based or severe-needs rate	3.01	2.61	0.36	n.a.	n.a.	n.a.

Sources: SY 2013-2014 Rates: http://www.fns.usda.gov/sites/default/files/NAPs13-14.pdf
SY 2012-2013 Rates: http://www.fns.usda.gov/sites/default/files/NAPs12-13.pdf
SY 2011-2012 Rates: http://www.fns.usda.gov/sites/default/files/NAPs11-12.pdf

Note: These rates exclude additional commodity payments for school lunches.

n.a. = not applicable; NSLP = National School Lunch Program; SBP = School Breakfast Program; SY = school year.

Schools operating under Provision 2 or 3 for the NSLP or SBP were excluded from data collected for those programs. Any schools that do not participate in the SBP, or that operate under Provision 2 or 3 for breakfast only, were excluded from the data collected on breakfast participation.

After the initial certification and participation files were received from each State, the study team examined the data in each file and compiled lists of questions, including general clarification on the format of the data received, questions on how to use or interpret specific data elements, and descriptions of unusual patterns identified for individual districts. For some data files, these questions revealed major data problems that required the State to provide a corrected file. In others, the questions could be addressed individually. Some questions about specific districts' data could not be resolved by the States; in these cases, depending on the severity of the issue, the district was either dropped from the analysis, included with an imputed or missing value for the problematic variables, or kept unchanged.

2. District cost data

Data about district-level administrative costs of certifying students for free or reduced-price meals were collected in a web-based survey administered in four rounds, covering the school year from July through April. Each round requested information for a two- or three-month period. Respondents were asked to enter values for each month of the reporting period. Round 1 collected data for July, August, and September; Round 2 collected data for October and November; Round 3 collected data for December, January, and February; and Round 4 collected data for March and April. Districts in Massachusetts first conducted DC-M in March, and they were not asked to complete Round 3 of the survey, to reduce burden. In each state and for each treatment group within each random assignment state, the survey achieved response rates of 80 percent or more for all rounds.

The survey instrument is included as Appendix L.[104] The survey was designed so that it could be completed on the web at the respondents' convenience. The main contact at each district was also encouraged to share the login information with other staff, if they were better suited to respond to particular sets of questions. The web site for entering the survey also included answers to frequently asked questions and information on how to get help with the survey, by telephone or e-mail.

The survey was structured to ask about all possible activities involved in the certification process, who carried out these activities (by broad job categories), and how many hours they spent on these activities each month. The survey asked in detail about each possible step in the certification process, first for direct certification and then for certification by application, as well as some steps that applied to all certified students. For each step relevant to the school district, respondents were asked about the type of staff who worked on the task and the number of hours worked. The first section focused on direct certification activities at the district level, the second section focused on steps in processing household applications, and the third section on certification activities that applied to all certified students. The last section of the survey collected information on salary and benefits associated with each job category. Data were also collected on relevant nonlabor costs, such as mailing costs. These data were combined with enrollment data (from the administrative records on certification described in the previous section) to calculate the total certification cost per student enrolled in the district, and to break down these costs into direct certification costs, application processing costs, and other certification costs.

3. State cost data

Data on the administrative costs of setting up and running DC-M at the State level were collected from State agency staff both for the agency providing the Medicaid data and for the child nutrition agency. We asked about time spent on DC-M over and above that spent on other

[104] The survey instrument in Appendix L looks somewhat different than the version administered on the web, but the content was the same. Skip instructions in the paper version were implemented automatically in the web version, so that respondents saw only the screens relevant to them. The instrument was the same in each round, with the exception of the survey item reference months.

direct certification activities.[105] Based on the study team's work with the States during the early phases of the demonstration, the team became familiar with the main activities in which State agency staff were involved (such as negotiating data-sharing agreements, developing specifications for Medicaid extracts to be used in matching, developing and testing the programs that created the extracts, developing specifications, and programming for matching Medicaid and student data).

An Excel workbook (a set of spreadsheets) was created for the Medicaid and child nutrition agencies and was distributed quarterly; this workbook is included as Appendix M. The workbooks recorded hours per month spent on each activity, with separate activity lists for the Medicaid and child nutrition agencies. Hours could be recorded for each staff member. Staff were listed by job title, and a separate page in the workbook collected salary and fringe benefit information. If a site considered the salary of specific individuals to be sensitive information, the average salary for each position was accepted. Additional pages in the workbook were provided for other direct and indirect costs, but these items tended not to be relevant to the incremental costs of the program. Workbooks were sent to each agency in the first month of each quarter with the request that staff complete them each month and return them to us by the end of the month following the quarter for which data were being collected. Because the State agencies were not required to track in their accounting systems their time spent on the demonstration, data provided were approximate, particularly when the forms were filled out substantially later than the relevant quarter (this situation occurred for some quarters in at least two States). Most of the relevant agencies in the demonstration States provided workbooks for all months during which activity occurred in Year 2. For State agencies that spent minimal or zero time on DC-M in Year 2, particularly in States where the same costs were repeated for multiple quarters, the agencies provided all necessary information in an email or verbal response.

Although New York City is treated as a State for most data collection activities, the administrative cost data is an exception. Unlike in other States, where responsibilities for direct certification are shared between State- and district-level staff, direct certification in New York City is conducted entirely by central office staff, with no involvement of the community districts. For these reasons, and to minimize burden on the respondents, we took a hybrid approach to collecting cost data from New York City. In Year 2, staff of the Medicaid agency completed State-level cost logs, like Medicaid agencies in other States, but staff of the child nutrition agency did not. Instead, child nutrition agency staff completed the web survey, which district-level staff completed in other States.

For Cohort 2 States, we conducted follow-up interviews with State agency staff who completed the cost workbooks to clarify the roles of the various staff and the way they understood the activities on the list.[106] One or two informal interviews were completed with each agency. The initial interviews asked for feedback on the workbook, how the data were compiled, the roles of the various individuals participating in the implementation of DC-M, and the activities in which they were engaged. For some agencies, a second interview was conducted

[105] Because States were not randomly assigned to DC-M, we could not compute the State-level administrative costs of DC-M as the difference between costs in treatment and control groups, as we did for district-level costs.

[106] Follow-up interviews conducted during Year 1 made additional explanations for Cohort 1 States unnecessary.

after the second quarterly workbook was received; for others, emails were exchanged. Some additional questions were emailed to respondents during the analysis period when the information was compiled for each State. Data were also compared to the findings from the challenge interviews.

4. Implementation challenges and other qualitative data

In Year 2, Insight Policy Research (Mathematica's subcontractor for the DC-M evaluation) conducted two rounds of semi-structured telephone interviews with State and district staff. The interview protocols (see Appendix L) were developed to elicit information on respondents' experiences with DC-M in their State or district on topics such as (1) start-up and implementation challenges, (2) progress in resolving challenges, (3) time between enrollment in Medicaid and direct certification, and (4) factors that could impact matching success.

The interview team was composed of one senior researcher and two research assistants, all of whom had training and experience in conducting qualitative research. At the start of each interview, the interviewer asked for the respondent's permission to record the interview for transcription purposes. Interviewers followed the semi-structured protocols but changed the order and wording of questions and probes as needed, to facilitate conversation. Following the interviews, descriptions of DC-M processes in each State were sent to State staff to verify their accuracy. A description of both the State and district interviews conducted in Year 2 follows.[107]

State interviews. A total of 31 interviews were completed with State agency staff in Year 2 to gather information about their progress implementing DC-M, State-level matching processes, time requirements for creating the DC-M eligibility file, and challenges. For Cohort 1 States, one interview was conducted in the fall and one in the spring. For Cohort 2 States, the first interview was conducted shortly after DC-M implementation (January for New York State and March for Massachusetts), and the second interview was conducted later in the spring semester. A total of 15 agencies participated, including at least two agencies from each State, typically the child nutrition and Medicaid agencies.[108] Table A.3 provides the total number of interviews that were conducted in each State (see Appendix G, Table G.1 for specific agencies interviewed).

[107] This report focuses on data collected in Year 2 of the study. As noted in Table A.4, interviews with State agencies were also conducted in Year 1; additional information about the Year 1 interviews is available in Hulsey et al. 2015a.

[108] Three interviews were conducted with Kentucky's Cabinet for Health & Family Services, one of which was with staff in the agency's Health Benefit Exchange.

Table A.3. Number of challenge interviews conducted

State	Year 1 (SY 2012-2013)		Year 2 (SY 2013-2014)			
	State agencies	Total agency interviews	State agencies	Total agency interviews	Districts	Total district interviews
Cohort 1						
Florida	2	3	3	6	6	12
Illinois	2	3	2	4	3	6
Kentucky	2	4	2	5	6	12
New York City	1	2	2	4	0	0
Pennsylvania	2	4	2	4	6	12
Cohort 2						
Massachusetts	0	0	2	4	6	6[a]
New York State	0	0	2	4	8	12[a]
Total	**9**	**16**	**15**	**31**	**35**	**60**

Note: No district interviews were conducted during Year 1.

[a] Because of start-up delays in Cohort 2 States, only one round of interviews was conducted with districts in Massachusetts and four districts in New York State.

SY = school year.

District interviews. Telephone interviews were conducted with staff in a purposively selected sample of districts in each State involved in direct certification matching—except for New York City—to gather information about local matching methods, time requirements, challenges with direct certification, and student and district characteristics that can impact matching success.[109] As noted earlier, six districts were chosen in each State where districts had primary responsibility for conducting direct certification matching, and three districts were chosen in areas where States conducted matching. Most of these districts were interviewed twice throughout the school year—once in the fall semester and once in the spring semester. However, in Cohort 2 States, since some districts had completed only one round of matching since implementing DC-M, only one round of interviews was conducted in several of the districts. For example, three districts in Massachusetts were interviewed during the first round of interviews and three different districts were interviewed during the second round. In New York State, six districts were interviewed in the first round and then during the second round two of these districts were replaced with other districts (for a total of eight districts interviewed). One vocational district and one charter district were included in the sample. In total, 60 interviews were conducted in 35 districts.

C. Key outcome measures

1. Certification outcomes

DC-M offers students and their families two potential benefits: (1) certification for free meals when they might otherwise pay the full or a reduced price and (2) certification without

[109] Interviews were not conducted with community districts within New York City because the community districts play no role in the direct certification process. Interviews conducted with New York City child nutrition and Medicaid agency staff are considered State-level interviews.

having to complete an application. Aligned with these benefits, our two primary certification measures are:

- Total percentage of students certified for free meals, defined as the total number of students in the district who are certified for free meals divided by the total number of students enrolled (both as of the last operating day in October)
- Percentage of students directly certified for free meals, defined as the number of students in the district who are certified without needing to submit an application divided by the total number of students enrolled (both as of the last operating day in October)[110]

Appendix B, Table B.3 shows the reduced-price and paid certification rates, defined similarly as percentages of the number of students enrolled.

2. Participation outcomes

Because the number of school meals served depends on the size of the district, as well as the certification statuses and participation behavior of students, the focus is on outcome measures that account for size, rather than comparing raw numbers of meals. One primary participation measure, computed separately for the lunch and breakfast programs, is the average number of meals served per student per day, defined as the total number of reimbursable meals served divided by the product of the total number of students enrolled in schools participating in either the NSLP or the SBP in the district (as of the end of October) and the number of operating days during the relevant time period.[111] The number of meals served per student per day can be conceptualized as the proportion of students who received a school meal on a typical school day. A second key participation outcome is the percentage of meals that were served for free. Appendix C also shows the number of meals served per student per day separately for each reimbursement category (free, reduced-price, paid).

Each of these participation measures is computed based only on months during which DC-M was conducted using the correct measure of income in Year 2, and for the same set of months the year prior to DC-M. Thus, the set of months included in these participation measures varies by State, depending on (1) whether an incorrect measure of income was used for DC-M in some months and (2) when DC-M began in the State:

- Two Cohort 1 States (Florida and Kentucky) used an incorrect measure of income for DC-M during the second semester of Year 2. For these two States, each of the participation

[110] As noted earlier, most states provided the number of students not subject to verification (as required for Form FNS-742) as a proxy for the number directly certified. This group includes students directly certified based on information from the SNAP, FDPIR, TANF, or Medicaid agency; children on the homeless liaison list; income eligible Head Start -participants; residential students in RCCIs; and non-applicants approved by local officials.

[111] Although the numerator and the number of operating days vary by meal program, the same district enrollment is used for both the NSLP and the SBP participation rates. Thus, in deriving the participation rate for the SBP, for example, the total enrollment of schools participating in the SBP is not used as the denominator even though sometimes fewer schools in a district participate in the SBP than in the NSLP.

measures is computed based only on the months during the first semester: September through December.

- Neither Cohort 2 State implemented DC-M in districts until the second semester of the school year. Data are aggregated across months after DC-M began: specifically, beginning with January for New York State and March for Massachusetts.[112]

The two other demonstration States, New York City and Pennsylvania, conducted DC-M at the beginning of the school year in SY 2013-2014 and used the correct measure of income during all months, so the results for those States are for the entire school year (September through May).

The level of detail varied in the data States provided for the participation analysis. For example, some States provided school-level participation data that we used to exclude special provision schools from the analysis, while others excluded such schools from the district-level data they provided.

3. Federal reimbursement cost outcomes

Because the reimbursement to a district varies with the number of meals served in the district, which, in turn, varies with the number of students in the district, it is useful to examine outcome measures that standardize by district size. Accordingly, our primary measures of the impact of DC-M on Federal reimbursement costs are reimbursements per student per day and the blended reimbursement rate (BRR). (Tables in Appendix D show the total reimbursement costs used in computing these measures.)

Reimbursements per student per day is defined as total reimbursements divided by the product of the total number of students enrolled in the district (as of the end of October) and the number of operating days during the time period. The denominator is the same as that used for calculating the number of meals served per student per day. BRR is defined as total reimbursements divided by the number of meals served. In other words, it measures the average reimbursement per meal served.[113] Similar to the participation outcomes, both reimbursement outcomes are calculated in the baseline year (SY 2011-2012 for Cohort 1 States and SY 2012-2013 for Cohort 2 States) and SY 2013-2014 over the months (1) in which the correct measure of income was used and (2) after districts began conducting DC-M in Year 2 in each State.

In some States, the data provided for the reimbursement cost analysis was limited or incomplete, and required assumptions.[114] For example, Pennsylvania did not provide data on which districts received the extra two-cent needs-based NSLP payments during the baseline year,

[112] Because the data on certification status is as of October, before districts in the Cohort 2 States began conducting DC-M, New York State and Massachusetts are excluded from the breakdown of participation rates by certification status presented in Appendix Tables C.6a-b.

[113] Reimbursements per student per day is equal to the BRR multiplied by the participation rate.

[114] These are in addition to the districts excluded from the analysis sample due to more extensive missing data, discussed elsewhere in this appendix.

so we logically imputed this information based on the percentage of free or reduced-price lunches reported.

4. District administrative cost outcomes

The main outcome for the State administrative cost analysis is total certification cost per student enrolled in the district. An additional set of outcomes is the breakdown of these costs by type of certification activity: (1) direct certification; (2) certification by application; and (3) other certification costs. Examining this breakdown is of interest because the potential impacts of DC-M are in opposite directions on different components of total certification cost: districts implementing DC-M might incur higher costs for direct certification activities when Medicaid is added to the list of programs, but could incur lower costs for application processing, if DC-M reduces the number of households that submit applications. As with the participation and Federal reimbursement outcomes, district cost outcomes are calculated based on the set of months during which the correct measure of income was used and after districts began conducting DC-M in Year 2.

Imputations were necessary for two elements of district costs. First, in the section that collected salaries by job category, about 13 percent of salaries were missing. Missing salaries were imputed using the mean of values for the same job category across all responding districts. Second, respondents could report benefits either as a dollar amount or as a percentage of salary, but when they reported a dollar amount, the survey did not ask for the time period that corresponded to that amount. The period was missing for about 42 percent of the responding districts; in these cases, we imputed data on benefits, using the means for similar job categories from districts that reported benefits as percentages of salary. For salary and fringe rate outliers, we contacted respondents to confirm what was reported and revised the salary and fringe information when necessary.

5. State administrative cost outcomes

The key outcome for the State administrative cost analysis is the total additional cost of implementing DC-M in each State during Year 2, above and beyond the existing cost of NSLP certification. We also explore the breakdowns by agency (child nutrition or Medicaid), by quarter, by source of the cost (labor or nonlabor costs), and by start-up versus ongoing costs.

The analysis of start-up and ongoing costs also includes Year 1 outcomes, because start-up costs are incurred during the first year of implementation, which was Year 1 for Cohort 1 States. Start-up costs were defined as costs up to and including the month when DC-M was first conducted, except where some start-up costs (such as executing data sharing agreements or programming for computer matching) extended a short time after initial implementation (because the program code was refined and documented after the first match occurred, for example). Ongoing costs were defined as all costs incurred after the first month of DC-M, except as noted. Tables in Appendix F summarize the State administrative cost data.

As discussed in the data collection section above, although New York City is treated as a State for most analyses, the analysis of administrative costs is an exception. All direct certification activities are conducted centrally in New York City, with no involvement of staff of the community districts, so the cost data collection process there differed in some ways from

those in other States. New York City child nutrition staff responding to the district cost survey provided information on their total certification costs, but it is not possible to allocate those costs across the community districts without strong assumptions. In addition, the certification cost data they provided cover the entire student population, not just those in the schools included in the DC-M demonstration.[115] Also, because the New York City child nutrition agency was responsible for aspects of DC-M that were conducted by districts in other States as well as those aspects conducted by State child nutrition agencies, the administrative costs incurred by the New York City child nutrition agency cannot be entirely considered either State-level or district-level costs. For these reasons, New York City does not fit in either the district-level or the State-level administrative cost analysis.

Instead, we explore Year 2 certification costs in New York City separately, and present the results in a table in Appendix F. First, we computed total direct certification costs per student directly certified in the city as a whole, using cost data from the survey and enrollment information from Form FNS-742 data for SY 2013-2014. Then, we provide a rough estimate of the effect of DC-M on direct certification costs in New York City by assuming that differences in costs—among the community districts and between the demonstration sample and the rest of the city—are proportionate to differences in direct certification rates, as measured in the administrative data (Appendix F, Table F.5). That is, we assumed that direct certification cost per student directly certified is constant throughout the city, which seems plausible given that direct certification activities are conducted centrally.

D. Analysis methods

1. Quantitative analyses

Comparing treatment and control districts. In Florida, New York City, Massachusetts, and New York State, randomly assigning one district from each matched pair to a treatment group and the other to a control group allows us to obtain unbiased estimates of the impacts of DC-M on certification, participation, and costs. For these random assignment States, we use regression models, described below, to estimate impacts while controlling for random differences in baseline outcomes between treatment and control districts. Districts in which no schools participate in the SBP are excluded from SBP analyses.

State cost analyses. Because States were not randomly assigned to the demonstration, the estimates of costs State agencies incurred in conducting DC-M are not impact estimates. Instead, they rely on the reports of staff at State child nutrition and Medicaid agencies in all demonstration States of the time spent and other costs incurred for DC-M over and above those that would be necessary for direct certification with SNAP and other programs.

Pooled estimates. Within each State, district-level results are aggregated to present an estimate for demonstration districts across the State. To summarize the results obtained across the demonstration States, the analysis sometimes presents "pooled estimates," which are derived

[115] As noted earlier, the demonstration sample contains approximately one-third of the public school students in the city.

by aggregating across the districts in each State. Because DC-M was implemented late in the year in Cohort 2 States, we present pooled estimates separately by cohort.

Pooled estimates pertain only to the particular collection of districts included in the evaluation sample; they are not intended to have any broader generalizability. In particular, the aggregated estimate for demonstration districts within a State does not estimate the likely effects of DC-M if it were implemented throughout the State, and the pooled estimate across States does not estimate the likely effects of DC-M if it were implemented across the country.

Regression adjustment. To improve the precision of the estimates and control for random differences in baseline characteristics, regression-adjusted impact estimates and the corresponding adjusted treatment and control group means were computed using Stata analytic software. To generate State-specific estimates and pooled estimates for each outcome, a linear district-level regression model was fitted that included the following covariates:

- Indicator for treatment status (1 if a treatment district; 0 if a control district)
- State indicator variables
- Baseline values for the following:
  - Percentage of students directly certified
  - Percentage of students certified for free meals
  - Percentage of students certified for free or reduced-price meals
  - Percentage of meals served for free[116]
  - Average number of meals served per student per day
  - Reimbursement per student, per day
  - Blended reimbursement rate
  - Log of enrollment

These baseline characteristics are measured as of SY 2011-2012 for Cohort 1 States and as of SY 2012-2013 for Cohort 2 States.[117]

- Interactions between the State indicator variables and the treatment status indicator
- Interactions between the State indicator variables and the baseline certification, participation, reimbursement, and enrollment variables

[116] In regressions with dependent variables related to the SBP, the covariates measuring percentage of meals served for free, meals and reimbursements per student day, and BRR were also based on breakfasts. In the other regressions, these covariates were based on lunches.

[117] Baseline characteristics for all districts in Cohort 1 States are measured as of SY 2011-2012, even for those districts that began DC-M a year later than the other districts in the State. Appendix K includes a sensitivity analysis that uses SY 2012-2013 as the baseline year for Florida districts that began DC-M in Year 2.

- In the Cohort 1 States only, interactions between the State indicator variables, the treatment status indicator, and the year in which the district began DC-M[118]

All regressions were weighted using the denominator of the outcome ("dependent") variable as a weight. For example, for the percentage of students directly certified (and several other outcomes), the weighting variable was enrollment. This method was used to obtain aggregated estimates, which weighted districts according to their size. When deriving pooled estimates, States were designated as strata for obtaining confidence interval half-widths.

Extrapolations to other jurisdictions. To satisfy the requirement of estimating potential effects on Federal reimbursement costs if DC-M were adopted across a broader set of jurisdictions, we derived extrapolations under each of two assumptions: (1) that all States adopt DC-M and (2) that only a subset of States most likely to be able to conduct DC-M adopt it.[119] Both sets of extrapolations also assume that DC-M was implemented for the full school year. To generate national extrapolations, the regression models include an additional weighting factor intended to adjust the model such that it extrapolates (for the treatment districts and, separately, the control districts), to all districts in the country, at least in terms of the characteristics taken into consideration in the weighting. The weights used for extrapolations are developed using procedures described in Stuart et al. (2011) and Hulsey et al. (2015b). We fit four separate logistic propensity models to produce weights for the treatment and control districts under each of the two assumptions described above.[120] For the models for treatment districts, we regressed an indicator variable that was 1 if the district was a treatment district and 0 otherwise on a set of predictors that were available for all districts nationwide from the Form FNS-742 data: percentage of students certified for free meals, percentage of students certified for free or reduced-price meals, percentage of certified students certified via application, and district enrollment. We used stepwise regression in model fitting to determine which of the predictors were significant. To ensure that the model predictors were consistent across all models, we included a predictor in all of the final models if it was significant in at least one model. We used the inverse of the estimated model prediction (or propensity) for each treatment district as a weighting factor in the extrapolations.[121] We conducted similar procedures for the models for

[118] The regression models for Cohort 2 States do not include this interaction term because all districts in those States began DC-M in Year 2.

[119] In addition to the 50 States, the District of Columbia, Guam, Puerto Rico, and the Virgin Islands would implement DC-M under the first assumption.

[120] Districts from all States are included in the logistic regression under the assumption that all States adopt DC-M. Under our other assumption, the regression includes only districts from the States that are most likely to be able to conduct DC-M. In both instances, we exclude districts comprised entirely of private schools, districts in which more than 20 percent of schools operate under Provision 2 or 3, districts participating in the CEP, residential programs or other special types of institutions serving as independent SFAs, and districts with inconsistencies across data elements. The Form FNS-742 data for SY 2013-2014 included 19,743 districts, with enrollments of almost 49 million students. The extrapolations pertain to the 12,388 districts that remain after exclusions, which include 89 percent of students in all of the districts reporting Form FNS-742 data.

[121] In a regression for estimating a regression-adjusted impact, the weight for a particular treatment district is the product of this extrapolation factor and the weight that the district would have received were we not doing extrapolations. The latter factor is the denominator of the outcome under consideration; for reimbursements per student day, the denominator is the number of students enrolled. To derive confidence interval half widths for the

weighting control districts, except the indicator variable was 1 if the district was a control district (and 0 otherwise). This approach to generating national extrapolations is rough and has severe limitations for this application, as we discuss later in this appendix. National extrapolations of reimbursements per student per day from the regressions are multiplied by national data on student enrollments and annual NSLP serving days to yield estimates of the total dollar amount of Federal reimbursements with and without DC-M for the entire school year. The calculated difference between costs with DC-M (based on treatment districts) and without DC-M (based on control districts) is the extrapolated impact of DC-M.

Measuring the precision of estimates. In addition to the regression-adjusted impact estimates, the analysis also provides 95-percent confidence interval (CI) "half-widths." These measures indicate the margin of error around the estimates due to having samples of districts—rather than all districts—in each State and due to model adjustments. If, for example, an estimated impact of 5 percentage points on the direct certification rate has a margin of error of plus or minus 2 percentage points, it is likely that estimates of the direct certification rate from different samples would fall in the range of 3 to 7 percentage points. Stata analytic software's survey (svy) procedure was used to generate the CI half-widths, treating States as strata when deriving pooled estimates and clusters when deriving national extrapolations.

As noted elsewhere, the impact estimates and confidence intervals should be interpreted with caution because of several important limitations. One important limitation is that the samples are not random, although they are treated as such for the derivation of the confidence intervals. Furthermore, for the national extrapolations, the confidence intervals do not account for the effects of sampling error in estimating the propensity models used to derive weights and, in particular, the extent to which the models are estimated on a sample that is not representative of the population to which we are attempting to generalize. If this sample differs in important ways from the national population of districts, as is likely the case, the true impact of DC-M if implemented more broadly may fall well outside of the confidence intervals reported here.

Comparing Year 2 with the baseline year. The random assignment design used in Florida, New York City, Massachusetts, and New York State allows for the derivation of internally valid causal estimates of impacts. Internally valid causal estimates cannot be obtained, however, for the two universal implementation States—Kentucky and Pennsylvania. For these States, changes between outcomes for the school year before DC-M was conducted and outcomes for the second year of DC-M implementation can be compared. However, this pre-post analysis cannot provide unbiased estimates of an impact of DC-M, because factors other than DC-M, including unobservable factors, may contribute to the observed change (see discussion of limitations later in this appendix). For example, the first year of DC-M implementation coincided with new NSLP nutritional requirements. These changes, unrelated to DC-M, likely affect the outcome measures examined in this evaluation of DC-M. Thus, differences observed between years before and after this change cannot be attributed to DC-M.

national extrapolations, we designate States as clusters, instead of strata, to account for the fact that we are making inferences beyond the States in the demonstration.

As an example, Appendix B, Table B.2 shows key certification outcomes for October 2011 in the school year before DC-M began, and October 2013 in the second year of implementation.[122] Focusing first on the Cohort 1 random assignment States, for both Florida and New York City, the differences between outcomes in the baseline year and the second year of DC-M for treatment districts are somewhat larger than the differences between treatment and control districts in the second DC-M year. This finding suggests that factors other than DC-M contributed to the pre-post differences.[123] For example, in Florida, the difference between the percentage of students directly certified in treatment districts in SY 2011-2012 and SY 2013-2014 is 9.2 percentage points (Appendix B, Table B.2), compared with an unadjusted difference of 0.3 percentage points (not shown) between the percentage of students directly certified in treatment and control districts. The difference between the unadjusted impact of 0.3 and the year-to-year change of 9.2 is not attributable to DC-M. It is likely that the differences between outcomes across years in universal implementation States are also influenced by the same factors (and potentially other factors specific to those States) and cannot be considered impacts of DC-M.

Comparisons of findings across reports. Findings presented in earlier reports of the DC-M evaluation are summarized after discussions of the Year 2 results in each outcome domain. However, direct comparisons between findings across reports could be misleading due to differing restrictions on the analysis samples and the set of months included in each. Specific differences are noted in the chapters.

In addition, Illinois was included in the earlier reports because although that State used an incorrect measure of income for DC-M from the beginning, this issue was not discovered until Year 2. We do not discuss the Illinois results here because those findings reported for Illinois do not represent the impacts of accurate implementation of DC-M.

2. Qualitative analyses

Interviews with State agency and district staff were recorded, transcribed, and imported into NVivo 10, a software program used for coding qualitative data. During Year 1, a draft coding scheme was developed based on the research questions, interview protocols, and a small sample of transcripts. The senior researcher who conducted the interviews trained two additional staff on the coding scheme, and a sample of four transcripts was used to conduct the first-cycle of coding. The results of this coding exercise were used to refine the scheme to improve accuracy among coders and to include additional identified themes. Staff reviewed and coded each transcript using the revised scheme and discussed potential coding issues as they arose. Three transcripts were also double-coded to check inter-coder reliability. The scheme was modified slightly during Year 2 to include district characteristics for attribute coding (see Appendix M).

[122] Appendix Tables B.1a and B.1b contain the aggregated numbers of students used to compute the percentages in Appendix Table B.2. Appendices C, D, and E include similar tables for participation and Federal reimbursement and district certification cost outcomes.

[123] In Cohort 2 States, differences between certification outcomes in October 2012 and October 2013 are entirely due to other factors because (as noted earlier) DC-M had not yet begun in October 2013 in those States.

Staff responsible for conducting the interviews also analyzed the data. Each coded theme relating to the research questions was analyzed systematically across and within States. Themes also were analyzed by district size, percentage certified for free and reduced-price meals, and matching method.[124] Staff examined data to identify trends relating to the challenges and impact of the demonstration on States, districts, and their staff. This process also was used to explore the underlying reasons behind any differences between States and how these differences may relate to the context in which the demonstration was conducted. Key themes were translated into research findings.

E. Limitations

Several limitations of the DC-M demonstration, the evaluation sample, and the available data should be noted. The findings in this report should be interpreted cautiously in light of these limitations.

1. Sample limitations

The DC-M evaluation is based on samples of States that are not representative of all States nationally and samples of districts that are not representative of all districts in their respective States. The States that applied to participate are not a random probability sample and differ systematically from other States in the nation. Among other characteristics, their interest in participating in the demonstration suggests that their State-level data systems and interagency relationships are conducive to a greater willingness and, likely, a greater ability than exists in other States to implement DC-M. The demonstration also includes a larger proportion of local matching States than the nation as a whole.

Within the demonstration States, the selection of districts was subject to several constraints, as detailed earlier in this appendix. Although the sample was expanded in some ways in Year 2, Florida's authorization to implement the CEP required the exclusion of a large proportion of the State's demonstration districts from the Year 2 analysis sample. This and other limitations on the samples within each demonstration State severely limit the ability to define a meaningful universe of districts to which the demonstration sample and evaluation findings might generalize. The estimated impacts presented in this report for the States should not be interpreted as indicative of the likely effects of statewide adoption of DC-M in a particular State. Moreover, the impact for States participating in the DC-M evaluation should not be interpreted as indicative of the likely effects of DC-M in a broader set of States.

Finally, although the national extrapolations are an attempt to estimate the potential effects of DC-M if its implementation were expanded nationwide, the evaluation includes only four random assignment States.[125] Because the extrapolations are weighted by district size, measured by number of students enrolled, approximately 41 percent of the total weight given to districts for obtaining the national extrapolations is assigned to the districts from just one State, Florida, and 23 percent of the total weight is assigned to just four districts in that State. In any case, with

[124] District enrollment and the percentage of free and reduced-price meals were obtained using measures from Form FNS-742 data.

[125] The sample from New York City consists of 32 community districts with nonrepresentative samples of schools. As noted earlier, these community districts are treated as separate districts in the demonstration and analysis.

so few States, the national extrapolations are highly imprecise. That is, they have very large margins of error, even when the States and districts are assumed to be random samples, which is an invalid assumption that leads to understatement of the error in the estimates. Furthermore, given the limitations on how the evaluation sample was selected, there is no basis in statistical sampling theory for generalizing beyond those districts to a broader collection of districts, such as all districts in the nation.

2. Demonstration limitations

Two of the implementation challenges discussed in Chapter VIII have notable implications for the analysis. First, three States did not use the correct measure of income for DC-M for at least part of Year 2. This resulted in the exclusion of one State from the quantitative analyses entirely—exacerbating the sample limitations discussed in the previous section—and the exclusion of data from the second semester of the school year in two other States. The State that had to be excluded entirely, Illinois, had a larger sample of districts in the demonstration than any other State; its removal reduced the overall sample size for the Year 2 district-level quantitative analyses by approximately 50 percent.

Second, this report focuses on data from the second year of DC-M implementation (SY 2013-2014). Although the Cohort 1 States had begun conducting DC-M during the prior school year, the two States that joined the demonstration in Year 2 did not begin until the second semester. This timing was after the reference point for certification data, so the measures of certification used in the study do not reflect the effects of DC-M in those States. Although we do present impacts on other outcomes, the start-up challenges may have affected these measures as well. For example, because most applications are submitted at the beginning of the school year, a reduction in costs related to processing applications is unlikely in those States. Participation effects might also be limited if students do not adjust quickly to changes in certification status.

The substantial differences in the sets of months used for the analyses in different States (September-December for Florida and Kentucky, January-May for New York State, March-May for Massachusetts, and the full school year for New York City and Pennsylvania) make cross-State comparisons potentially misleading and limit the ability to pool findings across States. This limitation is particularly relevant for analyses of certification costs. Because certification activities are largely concentrated at the beginning of the school year, certification costs measured using data for the fall semester are quite different than measurements based on spring semester data.[126]

3. Data limitations

There are several additional limitations related to the data available for the evaluation:

- **Incomplete or erroneous administrative data for some districts.** Administrative data provided by the States omitted some sample districts. In addition, there were some inconsistencies across files. Districts with clear data errors were excluded from the analysis, but unidentified errors could remain. Although we requested administrative records data on

[126]The measures of participation and Federal reimbursement cost outcomes could also be affected to some extent, due to seasonality in participation.

certification and participation for all evaluation sample districts, adequate data were not provided for 21 of the 294 districts in Massachusetts, and 5 of the 280 in New York State. The districts for which data were available might differ systematically from nonresponding districts.

- **Imputations for some variables.** As described in greater detail above, some States were unable to provide certain data elements for any districts. For example, in Pennsylvania, it was necessary to impute which districts received needs-based Federal reimbursement rates in the baseline year (but not for Year 2). For about 42 percent of cases in the district cost analysis, imputation was needed for data on benefits, as the district cost survey did not collect unit of time for which those benefits were measured.

- **Possible reporting errors in cost data.** District certification cost estimates have no real benchmarks in existing data, as they have not previously been collected through a large survey. The approach of asking about a series of specific tasks may overstate estimates of time spent. On the other hand, some respondents may not be aware of all the work undertaken by other staff on certification activities, which may understate the estimates of staff hours. However, if these potential reporting errors are similar for treatment and control districts, impact estimates for district costs of DC-M will be unbiased.

  State cost amounts are based on staff reports of the incremental costs of DC-M, beyond costs associated with existing State work on direct certification through other programs such as SNAP. Because the State agencies did not receive additional funding for DC-M implementation, State staff were not required to account for the time spent directly on this activity. Therefore, they were asked to estimate time spent on a set of standardized DC-M implementation activities in each month of the quarter, excluding activities related to the evaluation. These estimates of time spent should be considered approximate due to the potential for recall error, and differences between States should be interpreted with caution due to possible differences in interpretation of what constitutes an additional DC-M cost.

- **Qualitative analyses reflect the perspectives of respondents.** Although the 35 districts in the interview sample were purposively selected to represent diversity of the treatment districts along several dimensions, the sample is relatively small and not representative of the treatment districts as a whole. In addition, although we attempted to interview the staff with the most complete knowledge about DC-M processes in each location at both State and district levels, staff could not always provide information on every topic included in the interview protocols. Findings reflect the perspectives of the respondents, and qualitative assessments of timing and matching success are not rigorous as quantitative analyses could be if data were available.

APPENDIX B

SUPPLEMENTAL TABLES RELATED TO CERTIFICATION OUTCOMES

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Table B.1a. Distribution of students, by NSLP certification category in baseline year

State	Number of students				
	Directly certified for free meals [a]	Total certified for free meals[b]	Certified for reduced-price meals	Not certified for free or reduced-price meals	Enrolled in schools[c]
Treatment districts in random assignment States					
Cohort 1 States					
Florida	206,347	332,932	54,049	333,125	720,106
New York City	59,230	66,566	10,227	95,068	171,861
Cohort 2 States					
Massachusetts	41,025	64,983	12,888	229,719	307,590
New York State	35,517	70,078	19,192	228,424	317,694
Control districts in random assignment States					
Cohort 1 States					
Florida	239,440	400,585	56,039	311,608	768,232
New York City	56,388	66,545	10,450	90,094	167,089
Cohort 2 States					
Massachusetts	56,747	84,028	14,122	236,854	335,004
New York State	31,428	64,370	19,306	211,555	295,231
Universal implementation States					
Kentucky	78,278	126,535	19,668	143,700	289,903
Pennsylvania	31,722	45,621	6,243	95,219	147,083

Source: October certification data provided by the States.

Note: The baseline is SY 2011-2012 for Cohort 1 States and 2012-2013 for Cohort 2 States. This table is based on the Year 2 analysis sample, so the estimates presented here may differ from those in similar tables in the Year 1 report.

[a]Includes all students certified to receive free meals but not subject to verification, including those directly certified based on information from the SNAP, FDPIR, or TANF agency, children on the homeless liaison list, income-eligible Head Start -participants, residential students in RCCIs, and nonapplicants approved by local officials.

[b]Including by application, direct certification, or other categorical eligibility.

FDPIR = Food Distribution Program on Indian Reservations; NSLP = National School Lunch Program; RCCI = residential child care institution; SNAP = Supplemental Nutrition Assistance Program; SY = school year; TANF = Temporary Assistance for Needy Families.

Table B.1b. Distribution of students, by NSLP certification category in SY 2013-2014

State	Number of students				
	Directly certified for free meals [a]	Total certified for free meals[b]	Certified for reduced-price meals	Not certified for free or reduced-price meals	Enrolled in schools[c]
Treatment districts in random assignment States					
Cohort 1 States					
Florida	271,531	369,373	48,814	298,777	716,964
New York City	69,726	96,994	10,344	57,746	165,084
Cohort 2 States					
Massachusetts[d]	51,003	77,383	13,442	220,031	310,856
New York State[d]	40,424	73,816	17,989	220,777	312,582
Control districts in random assignment States					
Cohort 1 States					
Florida	287,735	435,756	53,534	276,062	765,352
New York City	54,715	86,767	10,973	62,398	160,138
Cohort 2 States					
Massachusetts[d]	64,682	98,232	13,657	224,308	337,993
New York State[d]	36,217	68,547	18,933	202,353	289,833
Universal implementation States					
Kentucky	109,283	142,697	18,397	137,820	298,914
Pennsylvania	39,978	53,093	6,329	87,235	146,657

Source: October certification data provided by the States.

Note: SY 2013-2014 was the second year of the DC-M demonstration for Cohort 1 States and the first year of DC-M for Cohort 2 States.

[a]Includes all students certified to receive free meals but not subject to verification, including those directly certified based on information from the SNAP, FDPIR, or TANF agency; children on the homeless liaison list; income-eligible Head Start -participants; residential students in RCCIs; and nonapplicants approved by local officials.

[b]Including by application, direct certification, or other categorical eligibility.

[c]The sum of the number of students certified for free meals, certified for reduced-price meals, and not certified might not equal the number enrolled in schools in this table due to missing data on reduced-price certification for a few districts.

[d]Certification outcomes are measured as of the end of October 2013, at which time Massachusetts and New York State had not yet conducted DC-M.

FDPIR = Food Distribution Program on Indian Reservations; NSLP = National School Lunch Program; RCCI = residential child care institution; SNAP = Supplemental Nutrition Assistance Program; SY = school year; TANF = Temporary Assistance for Needy Families.

Table B.2. Key certification outcomes in the baseline year and SY 2013-2014 (unadjusted)

State	Percentage of students					
	Directly certified for free meals[a]			Total certified for free meals[b]		
	Baseline SY[c]	SY 2013-2014	Change	Baseline SY[c]	SY 2013-2014	Change
Treatment districts in random assignment States						
Cohort 1 States						
Florida	28.7	37.9	9.2	46.2	51.5	5.3
New York City	34.5	42.2	7.8	38.7	58.8	20.0
Pooled treatment districts in Cohort 1 random assignment States	**29.8**	**38.7**	**8.9**	**44.8**	**52.9**	**8.1**
Cohort 2 States						
Massachusetts[d]	13.3	16.4	3.1	21.1	24.9	3.8
New York State[d]	11.2	12.9	1.8	22.1	23.6	1.6
Pooled treatment districts in Cohort 2 random assignment States	**12.2**	**14.7**	**2.4**	**21.6**	**24.3**	**2.7**
Control districts in random assignment States						
Cohort 1 States						
Florida	31.2	37.6	6.4	52.1	56.9	4.8
New York City	33.7	34.2	0.4	39.8	54.2	14.4
Pooled control districts in Cohort 1 random assignment States	**31.6**	**37.0**	**5.4**	**49.9**	**56.5**	**6.5**
Cohort 2 States						
Massachusetts[d]	16.9	19.1	2.2	25.1	29.1	4.0
New York State[d]	10.6	12.5	1.9	21.8	23.7	1.8
Pooled control districts in Cohort 2 random assignment States	**14.0**	**16.1**	**2.1**	**23.5**	**26.6**	**3.0**
Universal implementation States						
Kentucky	27.0	36.6	9.6	43.6	47.7	4.1
Pennsylvania	21.6	27.3	5.7	31.0	36.2	5.2
Pooled districts in universal implementation States	**25.2**	**33.5**	**8.3**	**39.4**	**43.9**	**4.5**

Table B.2 (continued)

Source: October certification data provided by the States.

Notes: This table is based on the Year 2 analysis sample. Therefore, the numbers presented here for the baseline year may differ from those in similar tables in the Year 1 report. Differences shown in the table may differ slightly from calculated differences due to rounding.

[a]Includes all students certified to receive free meals but not subject to verification, including those directly certified based on information from the SNAP, FDPIR, or TANF agency, children on the homeless liaison list, income-eligible Head Start -participants, residential students in RCCIs, and nonapplicants approved by local officials.

[b]Including by application, direct certification, or other categorical eligibility.

[c]The baseline SY is 2011-2012 for Cohort 1 States and 2012-13 for Cohort 2 States.

[d]Certification outcomes are measured as of the end of October, at which time Massachusetts and New York State had not yet conducted DC-M in 2013.

FDPIR = Food Distribution Program on Indian Reservations; RCCI = residential child care institution; SNAP = Supplemental Nutrition Assistance Program; SY = school year; TANF = Temporary Assistance for Needy Families.

Table B.3. Impacts of DC-M on other certification outcomes in SY 2013-2014 (regression adjusted)

State	Percentage of students[a]					
	Certified for reduced-price meals			Not certified for free or reduced-price meals		
	Treatment districts	Control districts	Impact (CI)	Treatment districts	Control districts	Impact (CI)
Florida	6.8	7.0	-0.3 (±0.7)	37.9	39.6	-1.7 (±3.8)
New York City	6.4	6.7	-0.3 (±0.5)	34.2	39.8	-5.6* (±2.0)
Pooled sample	**6.7**	**7.0**	**-0.3 (±0.5)**	**37.2**	**39.6**	**-2.4 (±3.1)**

Source: October certification data provided by the States.

Notes: Values in this table are regression adjusted. Appendix A lists the variables that are included in the regression adjustments. Certification outcomes are measured as of the end of October, at which time the Cohort 2 States—Massachusetts and New York State—had not yet implemented DC-M. Impacts shown in the table may differ slightly from calculated differences due to rounding.

[a]Table III.1 shows impacts on the percentage of students certified for free meals.

*Percentage for treatment districts is significantly different from the percentage for control districts at the 0.05 level.

CI = 95 percent confidence interval half-width; SY = school year.

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APPENDIX C

SUPPLEMENTAL TABLES RELATED TO PARTICIPATION OUTCOMES

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Table C.1a. Total reimbursable lunches served, by certification category in the baseline year

State	Total number of reimbursable lunches served			
	Free	Reduced-price	Paid	Total
Treatment districts in random assignment States				
Cohort 1 States				
Florida	19,868,522	2,919,283	7,059,929	29,847,734
New York City	8,659,292	851,148	1,942,370	11,452,810
Cohort 2 States				
Massachusetts	2,898,617	519,192	4,354,765	7,772,574
New York State	5,445,215	1,400,400	7,167,370	14,012,985
Control districts in random assignment States				
Cohort 1 States				
Florida	23,057,260	2,780,496	6,387,145	32,224,901
New York City	8,905,093	944,499	2,153,072	12,002,664
Cohort 2 States				
Massachusetts	3,818,557	567,989	4,541,975	8,928,521
New York State	5,081,730	1,421,647	6,512,993	13,016,370
Universal implementation States				
Kentucky	7,334,050	1,044,949	4,698,097	13,077,096
Pennsylvania	7,206,101	1,019,541	6,589,573	14,815,215

Source: Monthly administrative claims data provided by the States.

Notes: The baseline is SY 2011-2012 for Cohort 1 States and 2012-2013 for Cohort 2 States. This table is based on the Year 2 analysis sample, so the estimates presented here may differ from those in similar tables in the Year 1 report (Hulsey et al. 2015a). Furthermore, the estimates for some States in this table are based on a different set of months than the estimates in the Year 1 report. To facilitate comparisons across years for the Year 2 analysis, the results reported in this table are aggregated across the same set of months used in the SY 2013-2014 table: September-December for Florida and Kentucky, September-May for New York City and Pennsylvania, March-May for Massachusetts, and January-May for New York State.

SY = school year.

Table C.1b. Total reimbursable lunches served, by certification category in SY 2013-2014

State	Total number of reimbursable lunches served			
	Free	Reduced-price	Paid	Total
Treatment districts in random assignment States				
Cohort 1 States				
Florida	21,391,537	2,557,486	6,349,450	30,298,473
New York City	7,962,089	776,241	1,574,722	10,313,052
Cohort 2 States[a]				
Massachusetts	3,102,768	486,953	4,180,578	7,770,299
New York State	5,332,496	1,166,006	6,143,313	12,641,815
Control districts in random assignment States				
Cohort 1 States				
Florida	24,158,771	2,507,979	5,442,471	32,109,221
New York City	7,802,711	902,881	1,714,716	10,420,308
Cohort 2 States[a]				
Massachusetts	3,930,560	562,560	4,369,093	8,862,213
New York State	4,828,692	1,267,917	5,727,333	11,823,942
Universal implementation States				
Kentucky	7,850,309	920,615	3,939,708	12,710,632
Pennsylvania	7,074,116	820,282	5,299,661	13,194,059

Source: Monthly administrative claims data provided by the States.

Notes: SY 2013-2014 was the second year of the DC-M demonstration for Cohort 1 States and the first year of DC-M for Cohort 2 States. The results reported in this table are aggregated across September-December for Florida and Kentucky, September-May for New York City and Pennsylvania, March-May for Massachusetts, and January-May for New York State.

SY = school year.

Table C.2a. Average daily reimbursable lunches served, by certification category in the baseline year

State	Average daily number of reimbursable lunches served			
	Free	Reduced-price	Paid	Total
Treatment districts in random assignment States				
Cohort 1 States				
Florida	282,017	41,440	99,506	422,963
New York City	53,381	5,240	11,953	70,574
Cohort 2 States				
Massachusetts	50,850	9,122	77,099	137,071
New York State	58,480	15,077	76,432	149,989
Control districts in random assignment States				
Cohort 1 States				
Florida	321,222	38,796	88,986	449,004
New York City	55,088	5,834	13,299	74,221
Cohort 2 States				
Massachusetts	66,369	9,938	80,085	156,391
New York State	54,363	15,183	69,052	138,598
Universal implementation States				
Kentucky	106,669	15,179	67,895	189,743
Pennsylvania	41,831	5,914	38,192	85,937

Source: Monthly administrative claims data provided by the States.

Note: The baseline is SY 2011-2012 for Cohort 1 States and 2012-2013 for Cohort 2 States. This table is based on the Year 2 analysis sample, so the estimates presented here may differ from those in similar tables in the Year 1 report (Hulsey et al. 2015a). Furthermore, the estimates for some States in this table are based on a different set of months than the estimates in the Year 1 report. To facilitate comparisons across years for the Year 2 analysis, the results reported in this table are aggregated across the same set of months used in the SY 2013-2014 table: September-December for Florida and Kentucky, September-May for New York City and Pennsylvania, March-May for Massachusetts, and January-May for New York State.

SY = school year.

Table C.2b. Average daily reimbursable lunches served, by certification category in SY 2013-2014

State	Average daily number of reimbursable lunches served			
	Free	Reduced-price	Paid	Total
Treatment districts in random assignment States				
Cohort 1 States				
Florida	292,262	34,982	86,338	413,582
New York City	49,978	4,869	9,871	64,718
Cohort 2 States				
Massachusetts	54,211	8,534	73,635	136,379
New York State	61,254	13,418	70,575	145,247
Control districts in random assignment States				
Cohort 1 States				
Florida	330,973	34,402	74,724	440,099
New York City	48,860	5,643	10,726	65,229
Cohort 2 States				
Massachusetts	68,082	9,780	76,579	154,441
New York State	55,334	14,510	65,308	135,151
Universal implementation States				
Kentucky	112,652	13,255	56,726	182,633
Pennsylvania	45,667	5,273	33,826	84,765

Source: Monthly administrative claims data provided by the States.

Notes: SY 2013-2014 is the second year of the DC-M demonstration for Cohort 1 States and the first year of the DC-M demonstration for Cohort 2 States. The results reported in this table are aggregated across September-December for Florida and Kentucky, September-May for New York City and Pennsylvania, March-May for Massachusetts, and January-May for New York State.

SY = school year.

Table C.3a. Total reimbursable breakfasts served, by certification category in the baseline year

State	Total number of reimbursable breakfasts served			
	Free	Reduced-price	Paid	Total
Treatment districts in random assignment States				
Cohort 1 States				
Florida	9,199,970	997,664	2,086,320	12,283,954
New York City	3,069,658	325,587	924,181	4,319,426
Cohort 2 States				
Massachusetts	1,043,027	114,059	303,659	1,460,745
New York State	2,656,063	452,961	990,395	4,099,419
Control districts in random assignment States				
Cohort 1 States				
Florida	8,494,169	865,194	1,646,575	11,005,938
New York City	2,654,838	284,481	911,845	3,851,164
Cohort 2 States				
Massachusetts	1,457,414	158,301	393,267	2,008,982
New York State	2,224,989	436,346	884,125	3,545,460
Universal implementation States				
Kentucky	4,272,727	409,958	906,291	5,588,976
Pennsylvania	2,609,222	212,938	559,957	3,382,117

Source: Monthly administrative claims data provided by the States.

Note: The baseline is SY 2011-2012 for Cohort 1 States and 2012-2013 for Cohort 2 States. This table is based on the Year 2 analysis sample, so the estimates presented here may differ from those in similar tables in the Year 1 report (Hulsey et al. 2015a). Furthermore, the estimates for some States in this table are based on a different set of months than the estimates in the Year 1 report. To facilitate comparisons across years for the Year 2 analysis, the results reported in this table are aggregated across the same set of months used in the SY 2013-2014 table: September-December for Florida and Kentucky, September-May for New York City and Pennsylvania, March-May for Massachusetts, and January-May for New York State..

SY = school year.

Table C.3b. Total reimbursable breakfasts served, by certification category in SY 2013-2014

State	Total number of reimbursable breakfasts served			
	Free	Reduced-price	Paid	Total
Treatment districts in random assignment States				
Cohort 1 States				
Florida	10,346,567	936,237	2,025,932	13,308,736
New York City	2,640,522	265,752	750,822	3,657,096
Cohort 2 States				
Massachusetts	1,132,620	116,679	328,549	1,577,848
New York State	2,516,087	368,400	867,402	3,751,889
Control districts in random assignment States				
Cohort 1 States				
Florida	8,812,522	834,124	1,883,566	11,530,212
New York City	2,295,995	255,591	779,677	3,331,263
Cohort 2 States				
Massachusetts	1,567,921	155,429	404,039	2,127,389
New York State	2,226,363	401,547	825,294	3,453,204
Universal implementation States				
Kentucky	4,807,324	391,878	889,102	6,088,304
Pennsylvania	2,509,750	176,582	562,872	3,249,204

Source: Monthly administrative claims data provided by the States.

Notes: SY 2013-2014 is the second year of the DC-M demonstration for Cohort 1 States and the first year of the DC-M demonstration for Cohort 2 States. The results reported in this table are aggregated across September-December for Florida and Kentucky, September-May for New York City and Pennsylvania, March-May for Massachusetts, and January-May for New York State.

SY = school year.

Table C.4a. Average daily reimbursable breakfasts served, by certification category in the baseline year

State	Average daily number of reimbursable breakfasts served			
	Free	Reduced-price	Paid	Total
Treatment districts in random assignment States				
Cohort 1 States				
Florida	131,318	14,224	29,768	175,310
New York City	19,123	2,032	5,766	26,921
Cohort 2 States				
Massachusetts	18,183	1,992	5,327	25,501
New York State	28,537	4,907	10,628	44,073
Control districts in random assignment States				
Cohort 1 States				
Florida	118,516	12,087	22,950	153,553
New York City	16,680	1,771	5,676	24,127
Cohort 2 States				
Massachusetts	25,178	2,747	6,873	34,798
New York State	23,845	4,686	9,468	37,999
Universal implementation States				
Kentucky	62,255	5,971	13,170	81,395
Pennsylvania	15,188	1,237	3,253	19,678

Source: Monthly administrative claims data provided by the States.

Note: The baseline is SY 2011-2012 for Cohort 1 States and 2012-2013 for Cohort 2 States. This table is based on the Year 2 analysis sample, so the estimates presented here may differ from those in similar tables in the Year 1 report (Hulsey et al. 2015a). Furthermore, the estimates for some States in this table are based on a different set of months than the estimates in the Year 1 report. To facilitate comparisons across years for the Year 2 analysis, the results reported in this table are aggregated across the same set of months used in the SY 2013-2014 table: September-December for Florida and Kentucky, September-May for New York City and Pennsylvania, March-May for Massachusetts, and January-May for New York State.

SY = school year.

Table C.4b. Average daily reimbursable breakfasts served, by certification category in SY 2013-2014

State	Average daily number of reimbursable breakfasts served			
	Free	Reduced-price	Paid	Total
Treatment districts in random assignment States				
Cohort 1 States				
Florida	141,917	12,856	27,799	182,572
New York City	16,798	1,688	4,774	23,260
Cohort 2 States				
Massachusetts	19,647	2,028	5,769	27,444
New York State	28,935	4,262	10,037	43,234
Control districts in random assignment States				
Cohort 1 States				
Florida	120,925	11,452	25,840	158,217
New York City	14,612	1,620	4,949	21,180
Cohort 2 States				
Massachusetts	26,995	2,682	7,021	36,698
New York State	25,550	4,616	9,487	39,653
Universal implementation States				
Kentucky	68,992	5,650	12,821	87,464
Pennsylvania	15,177	1,068	3,369	19,614

Source: Monthly administrative claims data provided by the States.

Notes: SY 2013-2014 is the second year of the DC-M demonstration for Cohort 1 States and the first year of the DC-M demonstration for Cohort 2 States. The results reported in this table are aggregated across September-December for Florida and Kentucky, September-May for New York City and Pennsylvania, March-May for Massachusetts, and January-May for New York State.

SY = school year.

Table C.5a. Key NSLP participation outcomes in the baseline year and SY 2013-2014 (unadjusted)

State	Lunches served per student per day			Percentage of lunches served for free		
	Baseline SY[a]	SY 2013-2014	Change	Baseline SY[a]	SY 2013-2014	Change
Treatment districts in random assignment States						
Cohort 1 States						
Florida	0.59	0.58	-0.01	66.7	70.7	4.0
New York City	0.41	0.39	-0.02	75.6	77.2	1.6
Pooled sample of treatment districts in Cohort 1 random assignment States	0.55	0.54	-0.01	68.0	71.6	3.6
Cohort 2 States						
Massachusetts	0.45	0.44	-0.01	37.1	39.7	2.7
New York State	0.47	0.46	-0.01	39.0	42.2	3.2
Pooled sample of treatment districts in Cohort 2 random assignment States	0.46	0.45	-0.01	38.1	41.0	2.9
Control districts in random assignment States						
Cohort 1 States						
Florida	0.58	0.58	-0.01	71.5	75.2	3.7
New York City	0.44	0.41	-0.04	74.2	74.9	0.7
Pooled sample of control districts in Cohort 1 random assignment States	0.56	0.55	-0.01	71.9	75.2	3.2
Cohort 2 States						
Massachusetts	0.47	0.46	-0.01	42.4	44.1	1.6
New York State	0.47	0.47	0.00	39.2	40.9	1.7
Pooled sample of control districts in Cohort 2 random assignment States	0.47	0.46	-0.01	40.9	42.6	1.7
Universal implementation States						
Kentucky	0.65	0.61	-0.04	56.2	61.7	5.5
Pennsylvania	0.58	0.58	-0.01	48.7	53.9	5.2
Pooled sample of districts in universal implementation States	0.63	0.60	-0.03	53.9	59.2	5.3

Table C.5a. ***(continued)***

Source: Monthly administrative claims data provided by the States.

Note: This table is based on the Year 2 analysis sample, so the estimates presented here for the baseline year may differ from those in similar tables in the Year 1 report (Hulsey et al. 2015a). Furthermore, the estimates for some States in this table are based on a different set of months than the estimates in the Year 1 report. The results reported in this table are aggregated across September-December for Florida and Kentucky, September-May for New York City and Pennsylvania, March-May for Massachusetts, and January-May for New York State. Differences shown in the table may differ slightly from calculated differences due to rounding.

[a]The baseline is SY 2011-2012 for Cohort 1 States and 2012-2013 for Cohort 2 States.

NSLP = National School Lunch Program; SY = school year.

Table C.5b. Key SBP participation outcomes in the baseline year and SY 2013-2014 (unadjusted)

State	Breakfasts served per student per day			Percentage of breakfasts served for free		
	Baseline SY[a]	SY 2013-2014	Change	Baseline SY[a]	SY 2013-2014	Change
Treatment districts in random assignment States						
Cohort 1 States						
Florida	0.24	0.25	0.01	74.9	77.7	2.8
New York City	0.16	0.14	-0.02	71.0	72.2	1.2
Pooled sample of treatment districts in Cohort 1 random assignment States	0.23	0.23	0.01	74.4	77.1	2.7
Cohort 2 States						
Massachusetts	0.08	0.09	0.01	71.3	71.6	0.3
New York State	0.14	0.14	0.00	64.8	66.9	2.2
Pooled sample of treatment districts in Cohort 2 random assignment States	**0.11**	**0.11**	**0.00**	**67.2**	**68.7**	**1.6**
Control districts in random assignment States						
Cohort 1 States						
Florida	0.20	0.21	0.01	77.2	76.4	-0.8
New York City l	0.14	0.13	-0.01	69.1	69.0	-0.1
Pooled sample of control districts in Cohort 1 random assignment States	0.19	0.19	**0.00**	76.1	75.6	-0.5
Cohort 2 States						
Massachusetts	0.10	0.11	0.00	72.4	73.6	1.2
New York State	0.13	0.14	0.01	62.8	64.4	1.7
Pooled sample of control districts in Cohort 2 random assignment States	**0.12**	**0.12**	**0.01**	**67.3**	**68.8**	**1.5**
Universal implementation States						
Kentucky	0.28	0.29	0.01	76.5	78.9	2.4
Pennsylvania	0.13	0.13	0.00	77.2	77.4	0.2
Total for universal implementation States	**0.23**	**0.24**	**0.01**	76.6	78.6	2.0

Table C.5b. ***(continued)***

Source: Monthly administrative claims data provided by the States.

Notes: This table is based on the Year 2 analysis sample, so the estimates presented here for the baseline year may differ from those in similar tables in the Year 1 report (Hulsey et al. 2015a). Furthermore, the estimates for some States in this table are based on a different set of months than the estimates in the Year 1 report. The results reported in this table are aggregated across September-December for Florida and Kentucky, September-May for New York City and Pennsylvania, March-May for Massachusetts, and January-May for New York State.

[a] The baseline is SY 2011-2012 for Cohort 1 States and 2012-2013 for Cohort 2 States.

SBP = School Breakfast Program; SY = school year.

Table C.6a. Impacts on average number of lunches served per student per day in SY 2013-2014, by certification category (regression-adjusted)

State[a]	Lunches served per student per day by certification category								
	Free			Reduced-price			Paid		
	Treatment districts	Control districts	Impact (CI)	Treatment districts	Control districts	Impact (CI)	Treatment districts	Control districts	Impact (CI)
Cohort 1 States									
Florida	0.76	0.79	-0.03 (±0.06)	0.70	0.65	0.05 (±0.06)	0.30	0.26	0.04* (±0.04)
New York City	0.54	0.53	0.01 (±0.04)	0.51	0.47	0.04* (±0.04)	0.20	0.15	0.05* (±0.03)
Pooled sample (all districts in Cohort 1 random assignment States)	**0.72**	**0.74**	**-0.02 (±0.05)**	**0.67**	**0.62**	**0.05 (±0.05)**	**0.28**	**0.24**	**0.04* (±0.03)**

Source: Monthly administrative claims data provided by the States.

Notes: The results reported in this table are obtained by aggregating across months, excluding months during which the State used an incorrect measure of income for conducting DC-M (January 2014 through May 2014 for Florida). Values in this table are regression adjusted. Appendix A lists the variables included in the regression adjustments. Impacts shown in the table may differ slightly from calculated differences due to rounding.

[a] Because certification outcomes are measured as of the end of October, before districts in the Cohort 2 States began conducting DC-M, those two States are excluded from this table.

* Estimate for treatment districts is significantly different from the estimate for control districts at the 0.05 level.

CI = 95 percent confidence interval half-width; NSLP = National School Lunch Program; SBP = School Breakfast Program; SY = school year.

Table C.6b. Impacts on average number of breakfasts served per student per day in SY 2013-2014, by certification category (regression-adjusted)

State[a]	Breakfasts served per student per day by certification category								
	Free			Reduced-price			Paid		
	Treatment districts	Control districts	Impact (CI)	Treatment districts	Control districts	Impact (CI)	Treatment districts	Control districts	Impact (CI)
Cohort 1 States									
Florida	0.36	0.31	0.05* (±0.03)	0.24	0.23	0.01 (±0.02)	0.09	0.10	-0.01* (±0.01)
New York City	0.17	0.18	-0.01 (±0.02)	0.15	0.16	-0.01 (±0.03)	0.08	0.08	0.00 (±0.01)
Pooled sample (all districts in Cohort 1 random assignment States)	**0.32**	**0.28**	**0.04* (±0.02)**	**0.23**	**0.22**	**0.01 (±0.01)**	**0.09**	**0.10**	**-0.01* (±0.01)**

Source: Monthly administrative claims data provided by the States.

Notes: The results reported in this table are obtained by aggregating across the months, excluding months during which the State used an incorrect measure of income for conducting DC-M (January 2014 through May 2014 for Florida). Values in this table are regression adjusted. Appendix A lists the variables included in the regression adjustments. Impacts shown in the table may differ slightly from calculated differences due to rounding.

[a] Because certification outcomes are measured as of the end of October, before districts in the Cohort 2 States began conducting DC-M, those two States are excluded from this table.

* Estimate for treatment districts is significantly different from the estimate for control districts at the 0.05 level.

CI = 95 percent confidence interval half-width; NSLP = National School Lunch Program; SBP = School Breakfast Program; SY = school year.

APPENDIX D

SUPPLEMENTAL TABLES RELATED TO FEDERAL REIMBURSEMENT COSTS

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Table D.1. NSLP and SBP Federal reimbursement costs in the baseline year and SY 2013-2014

State	Federal reimbursement costs ($000s)					
	NSLP			SBP		
	Baseline SY[a]	SY 2013-2014	Change	Baseline SY[a]	SY 2013-2014	Change
Treatment districts in random assignment States						
Cohort 1 States						
Florida	64,308	73,340	9,032	18,541	21,560	3,019
New York City	26,738	26,559	-179	6,136	5,621	-515
Cohort 2 States						
Massachusetts	11,075	11,951	876	2,137	2,356	219
New York State	21,832	21,106	-726	5,707	5,465	-242
Control districts in random assignment States						
Cohort 1 States						
Florida	72,695	81,198	8,503	16,966	18,466	1,500
New York City	27,705	26,460	-1,245	5,378	4,964	-414
Cohort 2 States						
Massachusetts	13,902	14,672	771	2,984	3,255	271
New York State	20,608	19,705	-904	4,879	4,946	67
Universal implementation States						
Kentucky	24,162	27,368	3,207	8,433	9,929	1,496
Pennsylvania	24,225	25,164	939	5,052	4,987	-64

Notes: This table is based on the Year 2 analysis sample, so the estimates presented here for the baseline year may differ from those in similar tables in the Year 1 report (Hulsey et al. 2015a). Furthermore, the estimates for some States in this table are based on a different set of months than the estimates in the Year 1 report. The results reported in this table are aggregated across September-December for Florida and Kentucky, September-May for New York City and Pennsylvania, March-May for Massachusetts, and January-May for New York State. Because per-meal reimbursement rates increased between years, total Federal reimbursement costs in some States and categories could increase in SY 2013-2014 even if the number of meals served declines. Differences shown in the table may differ slightly from calculated differences due to rounding.

[a]The baseline SY is 2011-2012 for Cohort 1 States and 2012-2013 for Cohort 2 States.

NSLP = National School Lunch Program; SBP = School Breakfast Program; SY = school year; $000s = thousands of dollars.

Table D.2. Average daily NSLP and SBP Federal reimbursement costs in the baseline year and SY 2013-2014

State	Average daily Federal reimbursement costs ($000s)					
	NSLP			SBP		
	Baseline SY	SY 2013-2014	Change	Baseline SY[a]	SY 2013-2014	Change
Treatment districts in random assignment States						
Cohort 1 States						
Florida	913	1,002	89	265	296	31
New York City	165	167	2	38	36	-2
Cohort 2 States						
Massachusetts	195	209	15	37	41	4
New York State	234	243	8	61	63	2
Control districts in random assignment States						
Cohort 1 States						
Florida	1,013	1,113	100	237	253	17
New York City	171	166	-6	34	32	-2
Cohort 2 States						
Massachusetts	242	255	12	52	56	4
New York State	220	226	5	52	57	4
Universal implementation States						
Kentucky	351	393	42	123	143	20
Pennsylvania	141	162	22	29	30	1

Source: Monthly administrative claims data provided by the States.

Note: This table is based on the Year 2 analysis sample, so the estimates presented here for the baseline year may differ from those in similar tables in the Year 1 report. Furthermore, the estimates for some States in this table are based on a different set of months than the estimates in the Year 1 report. The results reported in this table are aggregated across September-December for Florida and Kentucky, September-May for New York City and Pennsylvania, March-May for Massachusetts, and January-May for New York State. Because per-meal reimbursement rates increased between years, total reimbursement costs in some States and categories could increase in SY 2013-2014 even if the number of meals served declines. Differences shown in the table may differ slightly from calculated differences due to rounding.

[a]The baseline SY is 2011-2012 for Cohort 1 States and 2012-2013 for Cohort 2 States.

NSLP = National School Lunch Program; SBP = School Breakfast Program; SY = school year; $000s = thousands of dollars.

Table D.3. NSLP and SBP Federal reimbursement costs per student per day in the baseline year and SY 2013-2014 (unadjusted)

State	Federal reimbursement costs per student per day ($)					
	NSLP			SBP		
	Baseline SY[a]	SY 2013-2014	Change	Baseline SY[a]	SY 2013-2014	Change
Treatment districts in random assignment States						
Cohort 1 States						
Florida	1.27	1.40	0.13	0.37	0.41	0.05
New York City	0.96	1.01	0.05	0.22	0.22	-0.01
Pooled sample (all treatment districts in Cohort 1 random assignment States)	**1.21**	**1.32**	**0.12**	**0.34**	**0.38**	**0.04**
Cohort 2 States						
Massachusetts	0.63	0.67	0.04	0.12	0.13	0.01
New York State	0.74	0.78	0.04	0.19	0.20	0.01
Pooled sample (all treatment districts in Cohort 2 random assignment States)	**0.69**	**0.72**	**0.04**	**0.16**	**0.17**	**0.01**
Control districts in random assignment States						
Cohort 1 States						
Florida	1.32	1.45	0.14	0.31	0.33	0.02
New York City	1.03	1.03	0.01	0.20	0.20	0.00
Pooled sample (all control districts in Cohort 1 random assignment States)	**1.27**	**1.38**	**0.12**	**0.29**	**0.31**	**0.02**
Cohort 2 States						
Massachusetts	0.72	0.75	0.03	0.15	0.17	0.01
New York State	0.75	0.78	0.03	0.18	0.20	0.02
Pooled sample (all control districts in Cohort 2 random assignment States)	**0.73**	**0.76**	**0.03**	**0.16**	**0.18**	**0.01**
Universal implementation States						
Kentucky	1.21	1.31	0.10	0.42	0.48	0.05
Pennsylvania	0.96	1.11	0.15	0.20	0.21	0.01
Pooled sample (all districts in universal implementation States)	**1.13**	**1.25**	**0.12**	**0.35**	**0.39**	**0.04**

Table D.3. ***(continued)***

Source: Monthly administrative claims data provided by the States.

Notes: This table is based on the Year 2 analysis sample, so the estimates presented here for the baseline year may differ from those in similar tables in the Year 1 report. Furthermore, the estimates for some States in this table are based on a different set of months than the estimates in the Year 1 report. The results reported in this table are aggregated across September-December for Florida and Kentucky, September-May for New York City and Pennsylvania, March-May for Massachusetts, and January-May for New York State. Because per-meal reimbursement rates increased between years, total Federal reimbursement costs in some States and categories could increase in SY 2013-2014 even if the number of meals served declines. Differences shown in the table may differ slightly from calculated differences due to rounding.

[a]The baseline SY is 2011-2012 for Cohort 1 States and 2012-2013 for Cohort 2 States.

NSLP = National School Lunch Program; SBP = School Breakfast Program; SY = school year.

Table D.4. NSLP and SBP blended reimbursement rates in the baseline year and SY 2013-2014 (unadjusted)

State	Blended reimbursement rates per student ($)					
	NSLP			SBP		
	Baseline SY[a]	SY 2013-2014	Change	Baseline SY[a]	SY 2013-2014	Change
Treatment districts in random assignment States						
Cohort 1 States						
Florida	2.16	2.42	0.26	1.51	1.62	0.11
New York City	2.34	2.58	0.24	1.42	1.54	0.12
Pooled sample (all treatment districts in Cohort 1 random assignment States)	**2.18**	**2.44**	**0.26**	**1.50**	**1.61**	**0.11**
Cohort 2 States						
Massachusetts	1.42	1.53	0.11	1.46	1.49	0.03
New York State	1.56	1.67	0.11	1.39	1.45	0.06
Pooled sample (all treatment districts in Cohort 2 random assignment States)	**1.49**	**1.60**	**0.11**	**1.42**	**1.47**	**0.05**
Control districts in random assignment States						
Cohort 1 States						
Florida	2.26	2.53	0.27	1.54	1.60	0.06
New York City	2.31	2.54	0.23	1.40	1.49	0.09
Pooled sample (all control districts in Cohort 1 random assignment States)	**2.26**	**2.53**	**0.27**	**1.52**	**1.59**	**0.07**
Cohort 2 States						
Massachusetts	1.55	1.65	0.10	1.48	1.53	0.05
New York State	1.59	1.67	0.08	1.38	1.43	0.06
Pooled sample (all control districts in Cohort 2 random assignment States)	**1.57**	**1.66**	**0.09**	**1.43**	**1.48**	**0.05**
Universal implementation States						
Kentucky	1.85	2.15	0.30	1.51	1.63	0.12
Pennsylvania	1.64	1.91	0.28	1.49	1.54	0.04
Pooled sample (all districts in universal implementation States)	**1.78**	**2.08**	**0.29**	**1.51**	**1.61**	**0.11**

Table D.4. ***(continued)***

Source: Monthly administrative claims data provided by the States.

Notes: This table is based on the Year 2 analysis sample, so the estimates presented here for the baseline year may differ from those in similar tables in the Year 1 report. Furthermore, the estimates for some States in this table are based on a different set of months than the estimates in the Year 1 report. The results reported in this table are aggregated across September-December for Florida and Kentucky, September-May for New York City and Pennsylvania, March-May for Massachusetts, and January-May for New York State. Because per-meal reimbursement rates increased between years, total Federal reimbursement costs in some States and categories could increase in SY 2013-2014 even if the number of meals served declines. The blended reimbursement rate is the per-meal reimbursement rate. Differences shown in the table may differ slightly from calculated differences due to rounding.

[a]The baseline SY is 2011-2012 for Cohort 1 States and 2012-2013 for Cohort 2 States.

NSLP = National School Lunch Program; SBP = School Breakfast Program; SY = school year.

APPENDIX E

SUPPLEMENTAL TABLES RELATED TO DISTRICT ADMINISTRATIVE COSTS

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Table E.1. Total district certification costs, by certification procedure

State	Months included in analysis[a]	Direct certification costs ($000s)	Application processing costs ($000s)	Other certification costs ($000s)	Total costs ($000s)
Treatment districts in random assignment States					
Cohort 1 State					
Florida	July-December	116	959	473	1,547
Cohort 2 States					
Massachusetts	March-April	166	174	74	414
New York State	January-April	119	386	152	657
Control districts in random assignment States					
Cohort 1 State					
Florida	July-December	204	1,150	704	2,057
Cohort 2 States					
Massachusetts	March-April	196	111	82	390
New York State	January-April	114	460	172	746
Universal implementation States					
Kentucky	July-December	246	828	445	1,519
Pennsylvania	July-December	291	650	343	1,284

Source: District Cost Survey, SY 2013-2014.

Note: Totals shown in the table may differ slightly from calculated sums due to rounding.

[a]The results reported in this table are obtained by (1) aggregating across the months after each demonstration State implemented DC-M in SY 2013-2014 (the beginning of the school year for the Cohort 1 States, January for New York State, and March for Massachusetts) and (2) excluding months during which the State used an incorrect measure of income for conducting DC-M (beginning in January for Florida and Kentucky).

$000s = thousands of dollars.

Table E.2. District staff hours for certification, by type of staff

State	Months included in analysis[a]	Administrative staff	Clerical or support staff	Food service staff	Technical support staff	Other staff	Total
Treatment districts in random assignment States							
Cohort 1 State							
Florida	July-December	133	2,229	52,365	654	382	55,763
Cohort 2 States							
Massachusetts	March-April	359	1,682	8,126	941	147	11,255
New York State	January-April	745	5,029	10,103	686	412	16,975
Control districts in random assignment States							
Cohort 1 State							
Florida	July-December	247	9,593	53,054	626	6,528	70,048
Cohort 2 States							
Massachusetts	March-April	574	1,011	7,102	722	1,528	10,937
New York State	January-April	670	3,794	12,593	404	456	17,917
Universal implementation States							
Kentucky	July-December	217	3,415	41,279	712	1,797	47,420
Pennsylvania	July-December	1,334	8,932	26,953	3,343	3,833	44,395

Source: District Cost Survey, SY 2013-2014.

Note: This table presents staff hours for all certification activities and does not differentiate among direct certification, application processing, and combined or joint costs. Totals shown in the table may differ slightly from calculated sums due to rounding.

[a]The results reported in this table are obtained by (1) aggregating across the months after each demonstration State implemented DC-M in SY 2013-2014 (the beginning of the school year for the Cohort 1 States, January for New York State, and March for Massachusetts) and (2) excluding months during which the State used an incorrect measure of income for conducting DC-M (beginning in January for Florida and Kentucky).

Table E.3. Percentage of districts with a fully automated process in place to determine applicants' eligibility status (unadjusted)

State	Percentage with fully automated process for applications
Cohort 1 State	
Florida	73.3
Cohort 2 States	
Massachusetts	37.9
New York State	52.8

Source: DC-M Demonstration District Cost Survey, SY 2013-2014.

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APPENDIX F

SUPPLEMENTAL TABLES RELATED TO STATE ADMINISTRATIVE COSTS

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Table F.1. Estimates of New York City direct certification costs in SY 2013-2014

	New York City	Treatment districts	Control districts	Difference
Number of directly certified students	436,848	69,726	54,715	15,011
Total direct certification costs	$29,120	$4,648	$3,647	$1,001

Source: New York City child nutrition agency response to DC-M Demonstration District Cost Survey, SY 2013-2014, and October certification data.

Note: Cost per student was computed for New York City based on the total direct certification costs and the total number of students directly certified. This cost per student ($0.07) was then multiplied by the number of directly certified students within the DC-M treatment and control districts. These estimates assume that the direct certification cost per student directly certified is constant across New York City.

Table F.2. SY 2013-2014 State administrative costs of DC-M per 1,000 students enrolled or directly certified in DC-M districts

State (district count)[a]	Months included in analysis[b]	Administrative costs per 1,000 students, SY 2013-2014 ($)	
		Per 1,000 students enrolled	Per 1,000 students directly certified
Random assignment States			
Cohort 1 States			
Florida (30 districts)	July-December	$1.29	$2.95
Cohort 2 States			
Massachusetts (273 districts)	July-June	$249.96	$1,523.49
New York State (280 districts)	July-June	$83.31	$644.22
Universal implementation States (Cohort 1)			
Kentucky (200 districts)	July-December	$4.65	$13.60
Pennsylvania (894 districts)	July-June	$4.56	$17.11

Sources: Cost amounts are from tracking logs completed quarterly by State administrators. Data on enrollments and students directly certified are from October certification data provided by random assignment States and from the Verification Summary Report (VSR, Form FNS-742) for universal implementation States.

Notes: Because the agencies implementing DC-M in New York City are not State agencies and the analysis conducted for New York City uses different methods from that conducted for other States, we do not include New York City in this table.

[a]Approximate numbers of districts implementing DC-M are shown in parentheses. For the random assignment States, these are the number of treatment group districts included in the analysis. For the universal implementation States, these numbers are the number of districts in the SY 2013-2014 Verification Summary Report (VSR, Form FNS-742) data for the State.

[b]In Florida and Kentucky, the months during which the State used an incorrect measure of income for conducting DC-M were excluded from the analysis.

SY = school year.

Table F.3. State start-up and ongoing administrative costs of DC-M in SY 2013-2014, by State agency type

	Administrative costs ($)										
	Quarter 1 (July-September 2013)		Quarter 2 (October-December 2013)		Quarter 3 (January-March 2014)		Quarter 4 (April-June 2014)		Total (SY 2013-2014)		
	Child nutrition agency	Medicaid agency	Child nutrition agency	Medicaid agency	Child nutrition agency	Medicaid agency	Child nutrition agency	Medicaid agency	Child nutrition agency	Medicaid agency	Total
Random assignment States											
Cohort 1 States											
Florida[a]											
Start-up costs	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Ongoing costs	536	87	597	87	n.a.	n.a.	n.a.	n.a.	1,133	174	1,307
Cohort 2 States											
Massachusetts											
Start-up costs	1,354	0	1,334	10,584	3,582	10,348	877	45,000	7,147	65,932	73,079
Ongoing costs	0	0	0	0	0	0	2,080	2,544	2,080	2,544	4,624
New York State											
Start-up costs	5,652	0	3,093	7,640	2,567	0	0	0	11,312	7,640	18,952
Ongoing costs	0	0	0	0	2,871	0	4,104	116	6,975	116	7,090
Universal implementation States (Cohort 1)											
Kentucky											
Start-up costs	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Ongoing costs	252	993	869	13	n.a.	n.a.	n.a.	n.a.	1,120	1,006	2,126
Pennsylvania											
Start-up costs	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Ongoing costs	3,510	0	2,023	0	1,005	0	1,395	0	7,933	0	7,933

Source: Cost tracking logs completed quarterly by State agency administrators.

Notes: Totals may differ slightly from the sum of components due to rounding. In the State agencies, *start-up costs* are defined as costs that occur up to and including the DC-M implementation month, and all other costs that occur throughout the months following DC-M implementation are classified as *ongoing*. However, for the Massachusetts Medicaid agency, we defined some costs as start-up even when they occurred after DC-M implementation, as they resulted from delayed invoices from contractors for a one-time start-up task. DC-M was implemented in January 2014 in New York State and March 2014 in Massachusetts. Because the agencies implementing DC-M in New York City are not State agencies and the analysis conducted for New York City uses different methods from that conducted for other States, we do not include New York City in this table.

Table F.3. ***(continued)***

[a]In most States, a single child nutrition agency—typically, the State Department of Education—coordinates DC-M. In Florida, however, both the Florida Department of Education and the Florida Department of Agriculture are involved. Reported costs include those from both agencies.

SY = school year.

n.a. = not applicable. Cohort 1 States did not incur any start-up costs in Year 2. In Florida and Kentucky, the months during which the State used an incorrect measure of income for conducting DC-M (January 2014 through June 2014) were excluded.

Table F.4. Labor and other direct State costs of DC-M in SY 2013-2014, by State agency type

	Months included in analysis[a]	Administrative costs ($) SY 2013-2014		
		Labor costs	Other direct costs	Total costs
Random assignment States				
Cohort 1				
Florida total costs	July-December	1,307	0	1,307
Child nutrition agency[b]		1,133	0	1,133
Medicaid agency		174	0	174
Cohort 2				
Massachusetts total costs	July-June	31,381	46,024	77,405
Child nutrition agency		7,905	1,322	9,227
Medicaid agency		23,476	45,000	68,476
New York State total costs	July-June	26,042	0	26,042
Child nutrition agency		18,286	0	18,286
Medicaid agency		7,755	0	7,755
Universal implementation States (Cohort 1)				
Kentucky total costs	July-June	2,100	27	2,126
Child nutrition agency		1,120	0	1,120
Medicaid agency		979	27	1,006
Pennsylvania total costs	July-December	7,933	0	7,933
Child nutrition agency		7,933	0	7,933
Medicaid agency		0	0	0

Source: Cost tracking logs completed quarterly by State agency administrators.

Note: Totals may differ slightly from the sum of components due to rounding. Because the agencies implementing DC-M in New York City are not State agencies and the analysis conducted for New York City uses different methods from that conducted for other States, we do not include New York City in this table.

[a]In Florida and Kentucky, the months during which the State used an incorrect measure of income for conducting DC-M were excluded from the analysis.

[b]In most States, a single child nutrition agency—typically, the State Department of Education—coordinates DC-M. In Florida, however, both the Florida Department of Education and the Florida Department of Agriculture are involved. Reported costs include those from both agencies.

SY = school year.

Table F.5. Cohort 2 State agency staff hours spent on DC-M in SY 2013-2014, by agency type

State	Hours		
	Child nutrition agency	Medicaid agency	Total
Massachusetts	131	411	541
New York State	326	138	464

Source: Cost tracking logs completed quarterly by State agency administrators.

APPENDIX G

SUPPLEMENTAL MATERIALS RELATED TO CHALLENGES

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This appendix contains supplemental tables and text related to the analyses discussed in Chapter VIII. It begins with a description of the DC-M process in each State, and then describes the direct certification challenges reported that were not specific to DC-M and the factors reported to affect matching success not specific to DC-M. Tables provide additional information on the topics discussed in Chapter VIII.

A. DC-M operations in demonstration States

Appendix Table G.1 provides a summary of the roles of each State agency involved in DC-M, and the following text describes each State's matching process in brief.

Table G.1. Interagency operations in DC-M demonstration States, SY 2013-2014

State/participating agency	Summary of agency roles in DC-M
Florida	
Department of Children & Families	Creates DC-M eligibility file[a] and provides it to ED.
Department of Education (ED)	Checks for duplicates, reformats file, and uploads DC-M eligibility file for each district to ED's server. (Will not be involved after May 2014, when Florida's statewide benefit system is fully implemented.)
Department of Agriculture & Consumer Services[b]	Notifies districts that files are available for download and matching.
Illinois	
Department of Human Services	Transmits Medicaid data to HFS's data warehouse.
Department of Healthcare & Family Services (HFS)	Queries its data warehouse to create the DC-M eligibility file and transmits it to ED.
State Board of Education	Conducts matching and notifies districts that matches are available.
Kentucky	
Cabinet for Health & Family Services	Creates DC-M eligibility file using gross income. The agency's Health Benefit Exchange creates a second file using MAGI.[c] Sends data to ED.
Department of Education	Maintains site for districts to download data. Provides training and guidance for districts.
Massachusetts	
Executive Office of Health & Human Services (EOHHS)	Creates DC-M eligibility file. Data are housed in the EOHHS statewide benefit system, which conducts the match with enrollment data districts upload.
Department of Elementary and Secondary Education	Responds to districts' questions.
New York State	
Department of Health	Creates DC-M eligibility file and provides it to ED.
Department of Education	Cleans, formats, and uploads the DC-M eligibility file to its online Child Nutrition Management System for districts to download.

Table G.1 *(continued)*

State/participating agency	Summary of agency roles in DC-M
New York City	
New York City Human Resources Administration	Creates DC-M eligibility file and provides it to ED.
New York City Department of Education	Conducts matching.
Pennsylvania	
Department of Public Welfare (DPW)	Creates DC-M eligibility file. Data are imported into DPW's Statewide benefit system, which conducts the match with enrollment data districts upload. Districts can also download data.
Department of Education	Responds to districts' questions.

Source: Semi-structured interviews with State officials.

Notes: The DC-M eligibility file contains a list of children receiving Medicaid who meet the income requirements specified for the demonstration (that is, the child is a member of a family with an income—as measured by the Medicaid program before the application of any expense, block, or other income disregard—that does not exceed 133 percent of the Federal poverty level).

[a]State agency or district staff match the DC-M eligibility file with school enrollment data to identify students for direct certification.

[b]The Department of Agriculture & Consumer Services oversees child nutrition programs in Florida.

[c]Kentucky's Cabinet for Health and Family Services was transitioning to using MAGI to determine Medicaid eligibility during Year 2 of the demonstration. Two DC-M eligibility files were created during this transition period.

SY = school year.

Florida. Three agencies are involved in implementing DC-M in Florida. Each month, the Medicaid agency creates the DC-M eligibility file and a SNAP/TANF eligibility file and sends them to the Department of Education for reformatting and cleaning.[127] The Department of Education then uploads the two eligibility files to its server, where each district can access its files. The child nutrition agency notifies districts when the two files are available.

Each district downloads the eligibility files for its county and conducts matching manually or using matching software.[128,129] Some districts' software is capable of identifying partial matches and other children in the household. Other districts do not have this capability and investigate nonmatches either manually or not at all.

In February of 2014, Florida launched a web-based direct certification system that enables the State to perform the matching.[130] This system contains the direct certification eligibility lists for the entire State, which are updated nightly. The system enables districts to upload enrollment files to be matched against these lists on an ad hoc basis. Following each match, a list of exact and nonmatches are made available to districts; no partial matches are provided. Florida's

[127] The Department of Education's role in DC-M was scheduled to be phased out after SY 2013-2014.

[128] Each county comprises one public school district in Florida, though private, parochial, charter, and other schools responsible for matching might include multiple counties.

[129] The matching software is often part of the districts' point-of-sale software.

[130] Starting in SY 2014-2015, all matching in Florida will be conducted using the State's web-based direct certification system.

system compares nonmatches to its direct certification lists every night, and districts receive an email notifying them when they have new matches.

Each district downloads its match results from the State system. For each match, districts also receive a list of other children living at the matched child's address to facilitate benefit extension. When matching is complete, districts update students' certification status using an automated or manual process, depending on the capabilities of their computer system. Florida provides each student's local ID number to help districts update students' certification status.

Illinois. Three agencies are involved in implementing DC-M in Illinois. The Department of Human Services (DHS) determines eligibility for SNAP, TANF, and Medicaid. Each month, DHS creates the SNAP and TANF eligibility files but sends the Medicaid enrollment information to the Medicaid agency, which administers the Medicaid program and creates a monthly DC-M eligibility file. The agencies send all three eligibility files to the child nutrition agency, which matches the files at the central level to the statewide student information system. Following each match, lists of exact and partial matches are made available to districts on the State server.

Each district downloads a single file containing match results that are specific to its district. The list also includes participant addresses to help districts verify the accuracy of the State's matches. Districts are responsible for reviewing all partial matches and determining which ones are true matches. For each match, districts are also responsible for identifying and extending benefits to other children in the matched child's household.

A district might also choose to upload its own enrollment list to the State's server for matching against the direct certification lists for the entire State, rather than using the statewide student information system. Districts might opt to use this method because Illinois' student information system is not fully updated until after the school year starts, whereas districts have a more accurate account of their enrollment.

When matching is complete, districts update student certification status using an automated or manual process, depending on the capabilities of their computer system.

Kentucky. Two agencies are involved in implementing DC-M in Kentucky. Each month, the Medicaid agency creates two DC-M eligibility files and separate SNAP and TANF eligibility files.[131] The agency sends all eligibility files to the child nutrition agency, which assigns each public school student within the eligibility files a State student identifier (SSID) from the statewide student information system. The child nutrition agency then creates a combined

[131] In Year 2, the cases in the DC-M eligibility file came from two different Medicaid systems, as the State was in the process of transitioning Medicaid enrollees to the Kentucky Health Benefit Exchange in conjunction with the ACA. The Kentucky Health Benefit Exchange includes individuals whose Medicaid eligibility was assessed using MAGI.

eligibility file and uploads it to the State server.[132] Districts receive an automated email notifying them that their files are available for download.

Each district downloads a file that is specific to the county or counties served by that district and conducts its matching manually or using matching software.[133] SSIDs, along with other data elements, are used to match students. Only one of the six Kentucky districts in the interview sample possessed matching software sophisticated enough to identify partial matches. Districts also are responsible for extending benefits to other children in the household, and do so manually or with assistance from their matching software. When matching is complete, districts update students' certification status using an automated or manual process, depending on the capabilities of their computer system.

Massachusetts. Two agencies are involved in implementing DC-M in Massachusetts. Each night, the Medicaid agency updates the SNAP, TANF, Medicaid, and foster child data in a web-based system for direct certification. The child nutrition agency provides ongoing training to districts on using the web-based system to conduct matching and fields questions from districts as they arise.

Districts are responsible for uploading their enrollment data to the State server for matching against the State's eligibility files on an ad hoc basis. State staff encouraged districts to upload weekly at the start of the school year and monthly thereafter; however, most of the district staff interviewed for this study uploaded their data for direct certification matching three times per year. Because DC-M was not implemented until March in Massachusetts, only one of the six districts in the Massachusetts interview sample conducted more than one round of direct certification including Medicaid data in Year 2.

Following each match, districts have access to a list of exact, partial, and nonmatches on the State server. Districts are responsible for reviewing partial matches. Other children in the household are also identified, using data on the head of household, and provided to districts. When matching is complete, districts update students' certification status using an automated or manual process, depending on the capabilities of their computer system.[134]

New York City. Two agencies are involved in implementing DC-M in New York City. Each month, the city's Medicaid agency creates the DC-M eligibility file and separate SNAP and TANF eligibility files, which the agency delivers to the city's child nutrition agency as a combined eligibility file. The child nutrition agency matches the file centrally using the city's student information system; monthly files are matched to this system on a daily basis until the

[132] The contents of the DC-M eligibility file changed in October of Year 2 of the demonstration; the files now contain teen parents, who were excluded in the prior year. In addition to the monthly DC-M eligibility file, districts also have access to a history file that contains a list of all eligible children from July to the current month.

[133] Although each file contains eligible children in the district's county, each child is assigned to the county that corresponds to his or her local public aid office, which might differ from the county in which the child resides. This can complicate matching if the county of the child's school district differs from the county of his or her public aid office. Kentucky planned to identify the county where the student is enrolled starting in February 2015.

[134] Districts see only the aggregate results of their matches; no individual program participation is disclosed.

next month's files replace the old ones. Following each match, school administrations have access to a list of the resulting matches to download to their systems. New York City relies on schools to regularly update student enrollment information in the city's system and uses this information to identify other children in a household and include them in its match results.[135]

New York State. Two agencies are involved in implementing DC-M in New York State. The Medicaid agency creates the DC-M eligibility file four times each year and delivers it to the child nutrition agency.[136] The child nutrition agency cleans, formats, and uploads the files to the State server about one month after receiving them. The agency separately processes the SNAP eligibility file created by the Office of Temporary and Disability Assistance.[137,138] Districts select ZIP codes on the State server that approximate the geographic area of their district and download eligibility files with only those ZIP codes. Districts then match the eligibility files to their enrollment files using either a manual process or their own matching software. Some districts' software identifies partial matches, which districts review. Districts lacking this capability may manually investigate nonmatches. None of the districts in the interview sample had software that was capable of identifying other children in the household. As a result, all benefit extension to other children in the household took place following manual review or feedback from staff and parents. When matching is complete, districts update students' certification status using an automated or manual process, depending on the capabilities of their computer system.

Pennsylvania. Two agencies are involved in implementing DC-M in Pennsylvania. Each month, the Medicaid agency creates a DC-M eligibility file and combines it with the SNAP and TANF eligibility files. It then imports the combined file into its statewide benefit system, and districts receive an automated email notifying them when a new file is available for download. The child nutrition agency provides assistance to districts, as needed.

Each case within the combined eligibility file contains a district code that is used to provide districts with a file that is specific to their district. Pennsylvania districts either can (1) download cases within their district and conduct a match (using their own matching software or a manual process) or (2) upload their enrollment lists into the statewide benefit system for matching.[139] If they are using the statewide benefit system, districts can choose up to five counties or the entire State against which to match. The statewide system also identifies other children in a household, using the Medicaid recipient's address, and includes them in the match results. Following the match, the system provides a list of exact, partial, and nonmatches; districts are responsible for

[135] New York City also uses student information to capture movement of the city's highly transitory population into and out of DC-M treatment schools.

[136] Due to start-up delays in SY 2013-2014, New York State released three DC-M eligibility files, but intends on providing the file each quarter in future years, making it consistent with its DC-SNAP schedule.

[137] New York State does not conduct direct certification with TANF.

[138] Any partial duplicates that appear in both the SNAP and Medicaid files are not removed, as some information might differ between the two cases. Instead, districts are instructed to prioritize SNAP cases over Medicaid cases.

[139] Pennsylvania plans to conduct all matches at the State level beginning in SY 2014-2015; districts will no longer have a choice on whether to use their own software to conduct their match.

reviewing all partial matches. When matching is complete, districts update students' certification status using an automated or manual process, depending on the capabilities of their computer system.

B. Implementation Challenges

Appendix Tables G.2 and G.3 summarize the challenges reported by State and district staff, respectively. Additional discussion follows of challenges that are relevant to direct certification in general, but not specific to DC-M.

Table G.2. DC-M implementation challenges and resolutions for demonstration States, SY 2013-2014

Challenge	State	Description	Resolutions
Staffing[a]	Massachusetts, New York State	Staff in Cohort 2 States had competing demands on their time, which delayed project start-up.	There was little recourse when this problem presented itself, but it should not be an issue in subsequent years.
Creating the DC-M eligibility file	Illinois	**Identifying gross income.** The income variable used for DC-M was income net of any expenses, blocks, or other income disregards. The DC-M eligibility file included all children below 133 percent of the Federal poverty level based on this measure.	This problem is unresolved, as the gross income measure is unavailable within the data.
	Florida, Kentucky	**Assessing DC-M eligibility after ACA implementation .** Beginning in the second semester of Year 2, Kentucky used an incorrect income cutoff and Florida used income after disregards, rather than before disregards.	This problem was not identified until after the evaluation concluded.
	Pennsylvania	**Creating eligibility file.** Part of the extract process from the State's mainframe was missing, resulting in children being left out of the DC-M eligibility file.	The problem with the extract process was identified and resolved quickly.
Matching[b]	Florida, Illinois, Kentucky, Massachusetts, New York City, Pennsylvania	States or State systems that provided matches encountered matching difficulties. **Data.** Special characters, suffixes, middle names, and spaces sometimes led to partial or nonmatches. Medicaid information could also differ from that in school enrollment files.	Some States used probabilistic name-matching software to identify data entry errors. Others scored matches based on the confidence of a match and provided close matches to districts.
	Kentucky, Pennsylvania	**Geographic data.** In Kentucky, a child was assigned to a county based on the location of the child's public aid office rather than his or her residence. In Pennsylvania, State staff sometimes assigned a child the incorrect district code.	Kentucky plans to assign a child to the county in which the child attends school. Pennsylvania encouraged districts to match against the entire State by uploading their enrollment data for matching, which would enable them to identify students with incorrect district codes.
	Illinois	**Updating enrollment.** Illinois's Statewide student database was not updated fully by districts until October. As a result, the State's matching at the start of the school year used the previous year's enrollment files.	Illinois allowed districts to match against the entire State's DC-M list by uploading their current enrollment files for matching.

Table G.2 *(continued)*

Challenge	State	Description	Resolutions
Communication	Florida, Kentucky, New York State, Pennsylvania	States received questions from districts and parents regarding DC-M eligibility criteria and extension of benefits.	States responded to questions, created informational materials, and trained district staff. The number of questions declined after the start of the school year.
Household definition		Households were sometimes defined differently for Medicaid than they were for NSLP/SBP, which led to concerns about the comparability between Medicaid and NSLP.	
	Illinois, Kentucky, New York State, Pennsylvania	**Disabled.** A disabled child sometimes may qualify for Medicaid as a household of one, regardless of his or her parents' income. This child can extend DC-M to other students outside the Medicaid household.	States are in compliance with DC-M eligibility criteria. Pennsylvania was the only state that removed this population from its DC-M eligibility file, to the extent possible.
	Kentucky, Pennsylvania	**Economic unit.** An individual included in an NSLP or a SNAP economic unit may be excluded from a Medicaid household. For instance, a sibling or stepparent living in the same household as a child may not be financially responsible for that child. The individual's income may be excluded when calculating eligibility for Medicaid. If the child does qualify, he or she may extend DC-M to other students outside the Medicaid unit.[c]	This may be partly resolved by the provisions of the Affordable Care Act, which requires the income of others in the household to be included when calculating a household's MAGI, as long as they claim the child as a tax dependent. However, MAGI and the definition of household used may still differ from NSLP/SBP measures.

Source: Semi-structured interviews with State and district officials.

[a]Staffing challenges encountered by Cohort 1 States during Year 1 of the demonstration are discussed in the Year 1 report but are not included here.

[b]Matching issues are also relevant for direct certification with SNAP, TANF, or other programs.

[c]Pennsylvania was the only State to note the exclusion of some stepparent income, but this situation is likely not exclusive to Pennsylvania.

NSLP = National School Lunch Program; SBP = School Breakfast Program; SNAP = Supplemental Nutrition Assistance Program; SY = school year; TANF = Temporary Assistance for Needy Families.

1. State-level challenges

Matching difficulties. As noted in Chapter VIII, the States encountered similar challenges in matching Medicaid data to student enrollment data as in conducting direct certification matching for other programs.[140] Differences between student enrollment data and data from Medicaid, SNAP, or other programs could result in a partial or nonmatch. Differences often stemmed from data entry errors, changes in student circumstances (for example, addresses), and inconsistent reporting and updating of information. Data entry errors were more likely to occur when special characters, suffixes, middle names, or spaces were present. Addresses were also unreliable due to how frequently they changed. In States where matching occurs at the district level, inaccurate geographic data could result in some eligible children being omitted from their district's list and included on another.

Although States relied on parents, schools, and State staff to provide accurate and consistent information in the files matched for direct certification, States used a variety of methods to improve their matching success. Such methods included the purchase of phonetic

[140] Although Kentucky did not conduct matching for districts, it did attempt to match students between its statewide student information system and the Medicaid file in order to assign an SSID to the Medicaid cases before sending the file to districts. This process facilitated matching at the district level.

name-matching software and identification of partial matches. States were also improving their data systems or provided districts with alternate means of matching.

Table G.3. DC-M implementation challenges and resolutions for demonstration districts, SY 2013-2014

Challenge	Description	Resolutions
Matching[a]	Most districts reported some degree of difficulty matching or extending benefits. **Names.** Special characters, suffixes, middle names, and spaces complicated matching in many districts.	Some districts had, or were pursuing, software that would detect these errors. Others reviewed partial or nonmatches to correct such errors.
	Partial matches. Most districts did not receive a partial-match list from their electronic matching software or State. Other districts chose not to investigate partial matches.	Probabilistic name-matching software was being implemented or considered in some States and districts. Some districts also conducted a manual review of nonmatches, or called parents and schools to verify the accuracy of student information.
	Extension of benefits to other students in the household. Most districts did not have software that identified other children in the household. Differences in addresses, surnames, and parent/guardian names complicated extension of benefits. It also was difficult to identify who belonged in the household of transitory students.	A few States identified other children living in the household. A small number of districts had systems with household flags that helped identify other household members. Some districts called parents and schools to verify addresses. Direct certification letters sent to parents instructed them to report other children in the household.
Tracking program type	A significant minority of districts had difficulty tracking the program (SNAP versus another program) under which a student was directly certified. Some electronic matching software also would overwrite the program type if the student was enrolled in more than one assistance program.	No resolution in districts that did not track the type of program. Matching software vendors resolved some of these issues through software updates. Other districts manually entered the program type into their point-of-sale systems. States often filtered out duplicates if a child was enrolled in more than one assistance program.
Technology	Some districts did not have electronic matching software capable of conducting an automated match. Those that did have matching software typically were missing one or more features that could facilitate direct certification.	Many districts reported that they were capable of completing a quick and accurate match manually. Other districts were exploring the purchase or development of software to facilitate matching. State systems and staff often helped the matching process at the local level.

Source: Semi-structured interviews with State and district officials.

Note: Implementation challenges are also relevant for direction certification with SNAP, TANF, or other programs.

SNAP = Supplemental Nutrition Assistance Program; SY = school year; TANF = Temporary Assistance for Needy Families.

2. District-level challenges

As noted in Chapter VIII, district staff interviewed described a number of challenges related to direct certification, but none specific to DC-M. These reported challenges applied equally to direct certification with SNAP and other programs and included matching difficulties (and extension of benefits), tracking the program under which a student was directly certified, and technological limitations. These challenges are detailed below.

Matching difficulties. Most district staff interviewed experienced the same matching challenges as States. Discrepancies between the program and school enrollment data were often the result of special characters, suffixes, middle names, spaces, or transposed numbers. As one district explained:

> "I think our issues in matching students with Medicaid are the same issues as [for] all other direct certifications. Matching children who have hyphens in their names, apostrophes, suffixes: Jr., Sr., III, IV, V. Sometimes their birthdates are incorrect. Some of the students have two last names, and in some instances the

> records might have them hyphenated, and others a space, and yet other databases they have them all crammed together as one name. In some cases, we actually see children whose last name changes. There's great inconsistency between the agencies' records and our records. That may be the way the parent reports the name to the [State] agency versus to the school, or it may just be a clerical error."

Unlike States, approximately two-thirds of interviewed district staff that conducted matching locally did not possess software capable of providing partial matches, nor did most investigate their nonmatches.

Interviewed staff in districts that were responsible for identifying other children in the household and extending benefits to them encountered a number of difficulties. Outdated addresses, lack of information (for example, apartment number), different parent and/or child surnames, or multiple families living together complicated the extension of benefits. Less than one-third of interviewed district staff had matching software that would automatically detect another child in the household. Districts without this capability would investigate students in their enrollment systems manually or rely on staff and parents to report other children in the household.

Tracking program type. Form FNS-742 was redesigned and beginning in SY 2013-2014 requires districts to distinguish DC-SNAP from other forms of direct certification. Although some States tracked this at the State level (for example, Massachusetts tracked the program under which a student was directly certified for all districts), others held their districts responsible for this task. A substantial minority of district staff interviewed reported encountering difficulties in tracking the assistance program under which a child was directly certified:

- Most of the interviewed district staff in New York State, as well as a small number in Florida and Pennsylvania, that used local computer systems for direct certification matching did not possess software capable of tracking whether a child was directly certified by SNAP versus another assistance program. Most of these districts tracked the program type manually, but a few did not track the program type at all.
- The matching software in a small number of districts in the interview sample overwrote the first assistance program under which a child was directly certified with the second assistance program under which the child was directly certified. This could be problematic in States that did not remove all duplicates from their direct certification files. Some of these districts tracked the program type manually, whereas others allowed their software to overwrite one match with another.

Although many districts resolved these difficulties by updating the program type manually, some were also discussing with their software vendors about updating their software to maintain compliance with the new direct certification reporting requirements. New York State also planned to inform software vendors of the need to track the program type in subsequent years

and anticipated fewer problems in SY 2014-2015.[141] Lastly, States that attempt to remove duplicates from their direct certification files reduce the likelihood of districts overwriting one program type with another.

Technology. District staff interviewed already had established processes to complete their roles in the direct certification process, and few found that the addition of DC-M required more time. However, the capabilities of a district's matching software could impact its ability to implement DC-M and other forms of direct certification properly and efficiently. Ideally, districts' software would have the capability to conduct a match, prioritize DC-SNAP over DC-M, track the type of direct certification, provide a list of partial matches, extend eligibility to other children, and update students' certification status in the district's computer system. It was uncommon for districts' software programs to have all of these capabilities, though States often assisted with one or more of these tasks.

The one district respondent who reported that DC-M imposed a large burden had to conduct matching manually for thousands of cases because its matching software had difficulty identifying siblings and recognizing inconsistencies within the data. Districts with more reliable software and data stressed the importance of automated matching: "The more you can automate the better off you are…. If we didn't have the food service software that could manage this information…then this could be a pretty long and tedious process."

Despite the importance of automated matching in many districts, some district staff interviewed in New York State and Pennsylvania chose to conduct their matches manually because they did not have or elected not to use matching software. For most, this was easy due to the small size of their districts and/or direct certification eligibility files.

C. Reported factors impacting matching success

Table G.4 and the text below elaborate on the factors mentioned in Chapter VIII as reported by respondents to affect matching success.

Name. The complexity of a child's name can potentially increase the likelihood of a partial or nonmatch for both States and districts. Matching children who have hyphens, apostrophes, spaces, suffixes, and other special characters in their names can cause problems, particularly if they exist in one file but not the other. Additionally, benefit extension can be difficult if the child's surname differs from that of their parent/guardian or other children in the household. As one district described, "When you have three kids…and two adults in the household, and everybody has a different last name, it's very difficult to match them up at some point because the [district's matching] program doesn't have that capability."

[141] New York State had already submitted its verification summary reports for SY 2013-2014 before conducting DC-M.

Table G.4. Reported factors affecting matching success in DC-M demonstration States and districts, SY 2013-2014

Reported factors	Description
Student characteristics	
Name	The presence of suffixes and middle names complicated matching as a result of inconsistencies in how the data were entered. Names with special characters—hyphens, apostrophes, and spaces—also were more likely to lead to a partial match or nonmatch. Differences between surnames of students in the same household complicated the extension of benefits.
Race and ethnicity	Certain races and ethnicities were more likely to have names that created matching difficulties. For instance, Hispanic surnames can be a hyphenated combination of the mother's and father's surnames. The Medicaid or school enrollment file occasionally transposed these surnames or omitted the hyphen, which led to nonmatches.
Grade level	Kindergarten students in a DC-M eligibility file were less likely than students in higher grades to be matched at the start of the school year. These students may not appear on a district's enrollment list if their parents completed an enrollment form shortly before or after school started.
Mobility	Students were highly transitory in some districts, which made it difficult to match or extend benefits to other students in the household. Students moving to a new district did not always appear in the district's next DC-M eligibility file.
State and district characteristics	
District size and resources	Large districts were reported to have dedicated IT staff and technology for matching. Although small rural districts often had fewer resources and expertise, their DC-M eligibility files were often short and easy to match manually, depending on the geographic scope of the file.
Frequency of updates and matches	States that regularly updated or provided access to DC-M eligibility files reported shorter time gaps between Medicaid enrollment and direct certification. Districts that conducted frequent matches or investigated transfer students reported that such activities can shorten gaps in coverage.
Matching method and geographic scope of files	States or districts that performed their matches against the State's entire DC-M population were more likely to yield a match. However, this also could result in a large number of partial matches that would require manual review. A district that downloaded a list of children eligible for DC-M in its district, county, surrounding counties, or ZIP code(s) may exclude students who moved to the district from elsewhere in the State or had incorrect address information in the file.
Technology	States and districts had a variety of technological capabilities that facilitated matching, such as probabilistic name-matching software, household flags, or information systems that permitted single child searches. State and district software did not always identify partial matches, and a manual review of nonmatches was not always completed. Investigation of partial matches potentially can increase direct certification numbers and extensions.

Source: Semi-structured interviews with State and district officials.

Note: Reported factors that affect DC-M matching success also affect the matching success of direct certification with SNAP, TANF, or other programs.

SNAP = Supplemental Nutrition Assistance Program; SY = school year; TANF = Temporary Assistance for Needy Families.

Race/ethnicity. Populations who are more likely to have two or more surnames and/or special characters in their names might increase the chance of a partial or nonmatch. For instance, one State and a few districts reported that Hispanic surnames can be difficult to match because they are more likely to contain hyphens. As State staff described, "With Hispanic names, sometimes the mother's name is first, and then followed by the father's name. Sometimes that's reversed. Sometimes they use [only] one of the names…."

Grade level. Kindergarten students were less likely to be matched at the start of the school year than were students in higher grades. Although kindergarten students appear in the DC-M eligibility file, they might not be in a district's enrollment file when matching first takes

place—just before the beginning of the school year—if their parents submit their enrollment forms shortly before or after school starts. Similarly, vocational districts or other districts with only high schools might have similar problems when matching their incoming freshmen. However, these students should appear in the next DC-M eligibility file.

Residence changes. Some States and districts reported that the extension of benefits to other children in the household could be problematic in areas with high student mobility. This movement could also complicate matching in the few districts that relied on addresses to match students. As one district respondent explained, "[A student] may live with their grandmother, and then they go live with dad, and they end up with mom. They may start out at one school; that doesn't work out for them, [so] they transfer to another school." Changes in residence or the child's parent/guardian were not always reported to States and districts, leading to discrepancies between the Medicaid and student enrollment files and decreasing the likelihood of a match or extension of benefits. Districts used a number of methods to ensure that they were identifying the correct children and household, including household flags, manual searches of student addresses or parent or guardian names, information from previous NSLP/SBP applications, and feedback from school staff and parents.

District size and resources. Larger districts (those with at least 5,000 students) in the interview sample were more likely to have dedicated IT staff and technology for matching. Although staff in some States and large districts thought small districts might have more difficultly matching and extending benefits, a number of these districts reported that their DC-M eligibility files were short and/or that they could readily identify the students in their files without the need for matching software: "When we look at those names on that [DC-M] list…80 percent of them we know who they are."

Frequency of updates and matches. Compared with other States, States that frequently update and provide access to their DC-M eligibility files reported shorter times a child might have to wait to become directly certified. Additionally, districts that conduct more matches or that investigate the direct certification status of transfer students individually as they enroll in school—as opposed to waiting for the next DC-M file—reported that they can potentially reduce gaps in coverage.[142]

Matching method and geographic scope of files. States that create a DC-M eligibility file limited to a specific region—district, county, or set of ZIP codes—might inadvertently assign some children to the wrong district, preventing matching at the district level.[143] Use of a statewide student information system or uploaded enrollment files to match the district's enrollment against the State's entire DC-M eligibility file is more likely to yield a match, as this method identifies students who have moved between districts within the state or who have

[142] Districts investigated the direct certification status of transfer students by conducting an ad hoc match against new Medicaid data, conducting an individual search using their State's systems, contacting the student's previous school district, and/or asking the student for a copy of his or her direct certification letter.

[143] The regional vocational and charter school staff interviewed in this study enrolled students from a number of surrounding areas, which could increase the size of their DC-M files. Although they did not report difficulty matching, other vocational and charter schools matching manually might find it time-consuming.

incorrect location information. However, it can lead to a large number of partial matches that require manual review.

Technology. The matching technology districts use varied greatly among those interviewed, with some districts using high-end software to improve matching success and investigate questionable matches, and some doing these tasks manually. For example, districts in nearly all States had access to State systems enabling them to conduct individual student queries, potentially identifying more matches. Some also had sophisticated matching software at their disposal that was capable of prioritizing SNAP and TANF matches over Medicaid matches, providing partial matches, automatically updating students' certification status in their computer system, tracking the type of direct certification, and identifying other children living in the household. Other districts had software that was less robust and lacking in one or more features. Some of these districts were waiting for vendors to update their software, and others handled part of the overall direct certification process manually. Still, other districts did nearly everything manually and did not see a need for advanced software to conduct their matches. Among the districts interviewed, those with at least 5,000 students were more likely to use matching software than were smaller districts.

Table G.5. Timing of direct certification matching in demonstration States, SY 2013-2014

State	Frequency of matching	Approximate gap between enrollment in Medicaid and appearance in DC-M file	Description of schedule
Florida	Monthly (district download) *or* Ad hoc (district upload)	2-6 weeks At least 1 day	The DC-M eligibility file: • Is created the first weekend of each month (and nightly on the new direct certification system) • Includes enrollees through end of previous month, or previous day if using upload method • Is provided to districts by second or third week of month or on ad hoc basis. Students are matched, and certification status is updated in 0-2 days
Illinois	Monthly (State matches) *or* Ad hoc (district upload)	2-6 weeks At least 2 weeks	The DC-M match results: • Include enrollees through 15th of previous month • Are provided to districts at start of each month or on ad hoc basis. Certification status is updated in 0-2 days
Kentucky	Monthly (district download)	1 day-1 month	The DC-M eligibility file: • Is created on first business day of each month • Includes enrollees through end of previous month • Is provided to districts during first week of each month. Students are matched, and certification status is updated in 0-3 days
Massachusetts	Ad hoc (district upload)	At least 1 day	The DC-M eligibility file: • Includes enrollees through previous day • Is matched on ad hoc basis, and certification status is updated in 0-2 days
New York City	Daily (city matches)	2-6 weeks	The DC-M match results: • Include enrollees through middle of previous month • Are made daily using monthly Medicaid file, and are available for districts to download
New York State	Will be four times per school year[a] (district download)	1-4 months	The DC-M eligibility file: • Is created four times per year • Includes enrollees through the following dates: May 31, Aug. 31, Nov. 30, and Feb. 28 • Is provided to districts about 1 month after creation. Students are matched, and certification status is updated in 0-28 days
Pennsylvania	Monthly (district download) *or* Ad hoc (district upload)	2-6 weeks At least 2 weeks	The DC-M eligibility file: • Includes Medicaid enrollees through end of month • Is provided to districts around middle of each month or on ad hoc basis. Students are matched, and certification status is updated in 0-5 days

Source: Semi-structured interviews with State and district officials.

Notes: The gap between enrollment in Medicaid and distribution of the DC-M eligibility file or match results assumes that children enrolled in Medicaid appear in the State's Medicaid database that same day. The time required to conduct matching and update students' certification status are estimates based on district interviews and refer to direct certification in general, not specific to DC-M. Most matches occur before the school year starts, and the schedule for direct certification activities during this time may vary.

[a]DC-M began in January 2014 in New York, and the file was distributed three times during SY 2013-2014.
SY = school year.

APPENDIX H

ESTIMATED COSTS OF A SOCIOECONOMIC SURVEY (SES) CERTIFICATION ALTERNATIVE

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In addition to authorizing the DC-M demonstration, the HHFKA also requires an assessment of the costs of a socioeconomic survey (SES) alternative for setting claiming percentages for school meals relative to the costs of current application procedures. This appendix describes the SES certification alternative, discusses assumptions needed to estimate costs, and compares the estimated cost per student of an SES certification alternative to estimates of costs of existing procedures based on DC-M district cost survey data.

The HHFKA seeks to encourage districts to use alternatives to the traditional certification process that reduce burden on parents and school staff by eliminating household applications. An SES is one such alternative approach put forth in Section 104(b) of the HHFKA. Schools, groups of schools, or entire districts would use an SES to collect information to estimate student eligibility rates for free and reduced-price meals and determine claiming percentages for participating schools, which would then serve all meals for free. Under this approach, a random sample of students who are not directly certified, along with their families, would be selected to complete the SES. Combined with the results of direct certification, the survey data would be used to estimate the percentages of students in a district, school, or group of schools eligible for free, reduced-price, and full-price meals, and meals would be reimbursed accordingly. This approach was implemented in a pilot study in the School District of Philadelphia, which conducted an SES to set claiming percentages under a waiver from FNS starting around 1991 (The Reinvestment Fund 2007). The major problem with implementation of the SES in Philadelphia was a low response rate to the telephone survey (35 percent in the 2007 study), largely due to bad telephone numbers or no one answering. The contractor went back to the school district to see if the district could update the contact information, but otherwise did not follow up with families. The high rate of nonresponse might have substantially biased the estimated eligibility rates. Other pilots of an SES certification alternative took place in Puerto Rico (Estudios Tecnicos Inc. 2010) and the Virgin Islands.

The national implementation of the Community Eligibility Provision (CEP), which was also authorized in the HHFKA, substantially changed the context for considering the SES alternative. Philadelphia continued to use an SES certification alternative until SY 2014-2015, when, as soon as the CEP became available nationally, the district switched to determining claiming percentages using the CEP. The CEP does not require parents to provide information to districts, and it is being widely adopted in districts serving substantial numbers of low-income students (Blad 2015).

Within the limits of available data, this investigation attempts to shed light on whether an SES certification alternative merits further study, based on the following questions: What are the estimated costs of an SES certification alternative, in which claiming percentages are derived from household interviews? How do these costs compare to the costs of standard certification methods, DC-M, and special provisions?

We used several data sources in developing the estimates of the costs of these alternatives. First, the SES cost estimate was based on the expertise and experience of Mathematica survey researchers and assumptions detailed in Section A, including that the survey design meets Federal statistical standards, as required under the HHFKA. Second, we used data from the DC-M district cost survey sample of control group districts to estimate certification costs per student under the standard procedures (no special provisions) and under the special provisions.

We included control group districts from all sampled States and months, even States and months that were excluded from the main DC-M impact analysis because of DC-M implementation issues in treatment group districts; this provided the largest possible sample for the SES cost comparisons. The DC-M survey sample is not representative of any group of States or the nation, but it provides detailed data on the costs of school meal certifications for a relatively large sample of districts (about 450 control group districts).[144]

Table H.1 summarizes data sources and methods for estimating district costs for each certification or alternative option. Section A describes methods for estimating SES costs and resulting estimates, and Section B compares those estimates to estimates of the annual per-student costs of other certification methods and special provisions. The final section notes limitations of these estimates and other considerations.

A. Costs of SES certification alternative

An SES of a representative sample of school-age children who have not been directly certified can be used to estimate the percentage of students that are income-eligible for free or reduced-price meals. In estimating the costs to conduct an SES in a single school district, we assume a brief survey that focuses on household income and size, conducted by mail, with telephone follow-up. Survey costs include labor time for an independent contractor (the estimates assume a small local contractor) to (1) work with the district to finalize a study plan (including data items to be collected and sampling procedures), (2) identify and randomly select a representative sample of students enrolled in district schools (but not directly certified), (3) gather and process survey data from their parents or guardians, and (4) develop estimates for the number and percentage of students eligible for free and reduced-price meals. We also assume the sampling frame that the district will provide will include the information needed to exclude directly certified students. The HHFKA specifies that the standards for the SES should be consistent with Federal statistical standards, which call for an 80 percent response rate or a nonresponse analysis. A respondent payment of $25 is included to help increase response rates in an effort to meet the 80 percent response rate goal. These assumptions are based on the proposed standards for an SES alternative described by Beyler and Czajka (2012).[145]

Estimates assume the contractor will deliver an analysis file with survey data and relevant classification variables, frequencies, summary tables, and a brief description of findings. Time is also included for district personnel to oversee the contract, assemble the files needed for sampling, and prepare additional analyses to meet reporting requirements for FNS. Other possible arrangements (such as district staff doing all or most of the design and analysis

[144] These estimates do not include State-level costs, nor do we explicitly consider the likely differences in district-level costs for direct certification in States that conduct direct certification matching at the State level versus these costs in States where districts conduct the matching. However, one of the four States in the DC-M control group sample conducted State-level matching in the year of the district cost survey, and another began doing so in the second semester of that school year.

[2] This memorandum was prepared for FNS under a quick-response task under the Child Nutrition Analysis and Modeling task order contract.

Table H.1. Approach to estimating a district's average annual certification costs per student for each alternative

Socioeconomic survey	Total administrative costs associated with a survey of a sample of students not directly certified are estimated based on assumptions described in Section A. For each DC-M control group district, this estimate is added to the administrative cost of direct certification, which is estimated as the direct certification and other (nonapplication) certification costs reported by the district in the DC-M cost survey. This sum is then divided by four (based on the assumption that an SES would be conducted every four years and that direct certification would also be conducted on the same schedule, so that results from the two approaches align).[146] That result is converted to costs per enrolled student by dividing by the district's enrollment.
Standard procedures (no special provisions)	Annual district certification costs per student equal the administrative costs for certification-related activities reported by each control district in the district cost survey, divided by the number of students enrolled in the district.
Provision 2 or Provision 3	Annual district certification costs per student equal the annual per student costs of standard certification procedures divided by four (based on the assumption that a district takes applications and conducts direct certification every four years).
Community Eligibility Provision	Annual district certification costs per student equal the direct certification costs and other (nonapplication) certification costs reported by the district, divided by the number of students enrolled in the district. Two estimates are provided: (1) costs per student assuming that districts conduct direct certification to calculate reimbursement rates every four years, the minimum frequency required, and (2) costs per student assuming that districts conduct direct certification annually, as they are encouraged to do. The first measure equals the second measure divided by four.

internally, or districts contracting with a local university) could lead to higher or lower costs. Poor contact information, in particular, could lead to higher data collection costs or a lower response rate, which would require additional follow-up and the additional cost of a nonresponse analysis.[147]

The tasks in the hypothetical budget are based on experience with similar types of data collection and represent a typical chronology of a survey data collection. We developed the level of effort estimates based on experience working with small contractors and school districts.

[146] If a district using an SES conducted direct certification more often, there is a risk of overcounting students eligible for free meals, if some income-eligible students previously in the SES universe become directly certified, or undercounting, if some directly certified students lose that path to eligibility.

[147] The contact information available is often poor, so the costs of conducting an SES might be substantially higher than the estimates provided.

Labor rates used are average wage rates from the Bureau of Labor Statistics' *Occupational Outlook Handbook* (Bureau of Labor Statistics 2014).

We estimate SES costs for two scenarios. The scenarios are based on goals of 300 and 600 completed surveys, which are within the range of sample sizes suggested by Beyler and Czajka as providing adequate precision, and include a level of effort consistent with a target response rate of 80 percent.[148] For each sample size, we calculate costs for a 16-week field period. The cost estimates assume that contact information from school districts would be fairly up-to-date and accurate, and that the district would allow the contractor to contact schools to seek updated information when needed. If this is not the case, survey costs could be much higher.

Based on the assumption that an SES would exclude directly certified students (as recommended by Beyler and Czajka), we need to add the estimated costs of direct certification to the cost of the survey to yield an estimate of total costs of determining claiming percentages in SES districts. We assume that the direct certification costs reported by control group districts in the DC-M district cost survey give an approximate estimate of direct certification costs in SES districts. Finally, based on the language in the HHFKA, we assume an SES would be used to set rates every four years, as with the current special provisions. Thus we divide the total cost estimate by four to yield an estimate of average annual costs of an SES certification alternative.

Figure H.1 provides estimates of average costs per district of conducting an SES with two sample sizes—300 and 600 completed interviews—broken out by contractor and district staff costs.[149] Table H.2 provides details on activities covered by these cost estimates.

To estimate the total cost of this alternative to determining claiming percentages, we also add the costs of direct certification and other certification activities, because direct certification activities would continue under an SES alternative.[150] Because the sample size of 300 corresponds to districts with higher percentages of directly certified students, we use the $152,000 estimate of SES costs along with the survey data for control group districts in which at least 41.7 percent of enrolled students were directly certified.[151] For districts with lower

[148] The appendix to Attachment I of the Beyler and Czajka (2012) memorandum indicates that, in districts with a large proportion of eligible students directly certified, the sample size needed for an SES that meets precision standards would be smaller, and districts with fewer students directly certified would need a larger SES sample. The sample sizes selected here broadly cover the range of initial sample sizes in the Beyler and Czajka table needed to estimate claiming percentages at a 90 percent confidence interval of +/-2.5 percentage points, given an 80 percent response rate.

[149] The estimates presented for the costs of the SES alternative are likely to be lower bounds, given the lack of up-to-date contact information that is common in school district enrollment lists.

[150] Directly certified students are not part of the SES sample frame, but would be included in establishing claiming percentages.

[151] The cutoff of 41.7 percent is the midway point between two of the percentages used in the Beyler and Czajka 2012 memorandum for estimating the sample sizes needed for an SES. Their examples indicated that a sample size of 300 would be sufficient for districts with direct certification rates of 50 percent or higher, while a sample size of 600 would be sufficient for districts with direct certification rates of 33.3 percent or lower, but they do not include calculations for percentages between 33.3 and 50.

Figure H.1. Estimated costs to conduct SES with 80 percent response rate

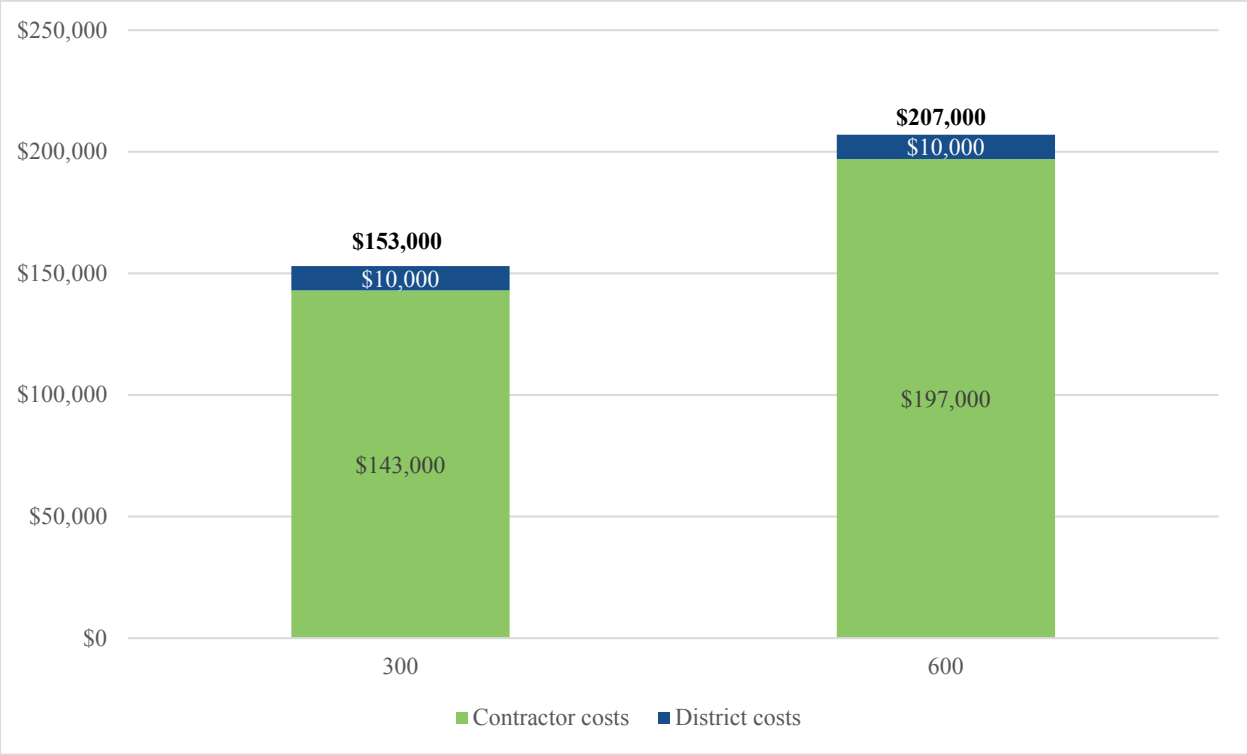


Table H.2. Estimated cost of SES household survey development, implementation, and analysis tasks per district, by contractor versus district costs and by survey sample size

Tasks	Sample size	
	300 interviews completed	600 interviews completed
Contractor		
Kickoff/planning meeting	$2,000	$2,000
Data use agreement	$3,000	$3,000
Develop sample	$13,000	$13,000
Develop survey and preparations	$10,000	$10,000
Data collection	$86,000	$140,000
Data analysis and memo	$20,000	$20,000
Ongoing communication	$9,000	$9,000
Contractor subtotal	**$143,000**	**$197,000**
District		
Secure contract	$2,000	$2,000
Prepare sampling frame	$500	$500
Project oversight	$2,500	$2,500
Input into analysis and report	$5,000	$5,000
District subtotal	**$10,000**	**$10,000**
Total	**$153,000**	**$207,000**

percentages of students directly certified, we added $206,000 (corresponding to a sample size of 600) to the costs of direct certification from the survey. In each case, the total is then divided by four—based on the assumption that claiming percentages would be established every four years under the SES alternative—to obtain the annual cost.

Although survey cost estimates do not vary by district size, for comparison to administrative costs of standard procedures and other options for developing claiming percentages, we compute average annual cost per student for the SES certification alternative.[152] The estimated annual cost is divided by enrollment in the district. Then we take the average cost per student across districts. Figure H.2 presents these results.

B. Comparisons to costs of current certification options

The estimated district cost of standard certification procedures and of each of the special provisions is estimated based on the costs reported by control group districts on the DC-M cost survey (Table H.1). As described in Chapter VI, the district cost survey was used to estimate the costs of three categories of certification activities: (1) direct certification, (2) processing of household applications, and (3) other administrative costs that apply to both types of certification.[153] Our estimates of average annual costs per enrolled student for each certification alternative are as follows:

- **Standard procedures** (processing of household applications combined with direct certification). Average total certification costs (for all three activity categories) per enrolled student across the control group districts.
- **Provision 2/Provision 3.** Costs of standard procedures divided by four (based on the assumption that the base year estimates are gathered every four years).[154]
- **CEP.** Average of direct certification plus other certification costs per student across control group districts.

The estimates presented in Figure H.2 indicate that the annual administrative cost of an SES certification alternative per enrolled student ($51.56 to $79.56 for an SES of 300 to 600), on average, would be considerably higher than the costs of standard procedures ($17.70) and the special provisions currently available ($2.20 to $8.80 for the CEP—depending on whether districts are assumed to conduct direct certification every four years, the minimum frequency required, or annually—and $4.43 for Provision 2/3).[155] These estimates suggest the SES

[152] Because the necessary sample sizes do not vary by district size, total SES costs would be similar regardless of enrollment. Thus, the cost per enrolled student would be lower for large districts and higher for small districts.

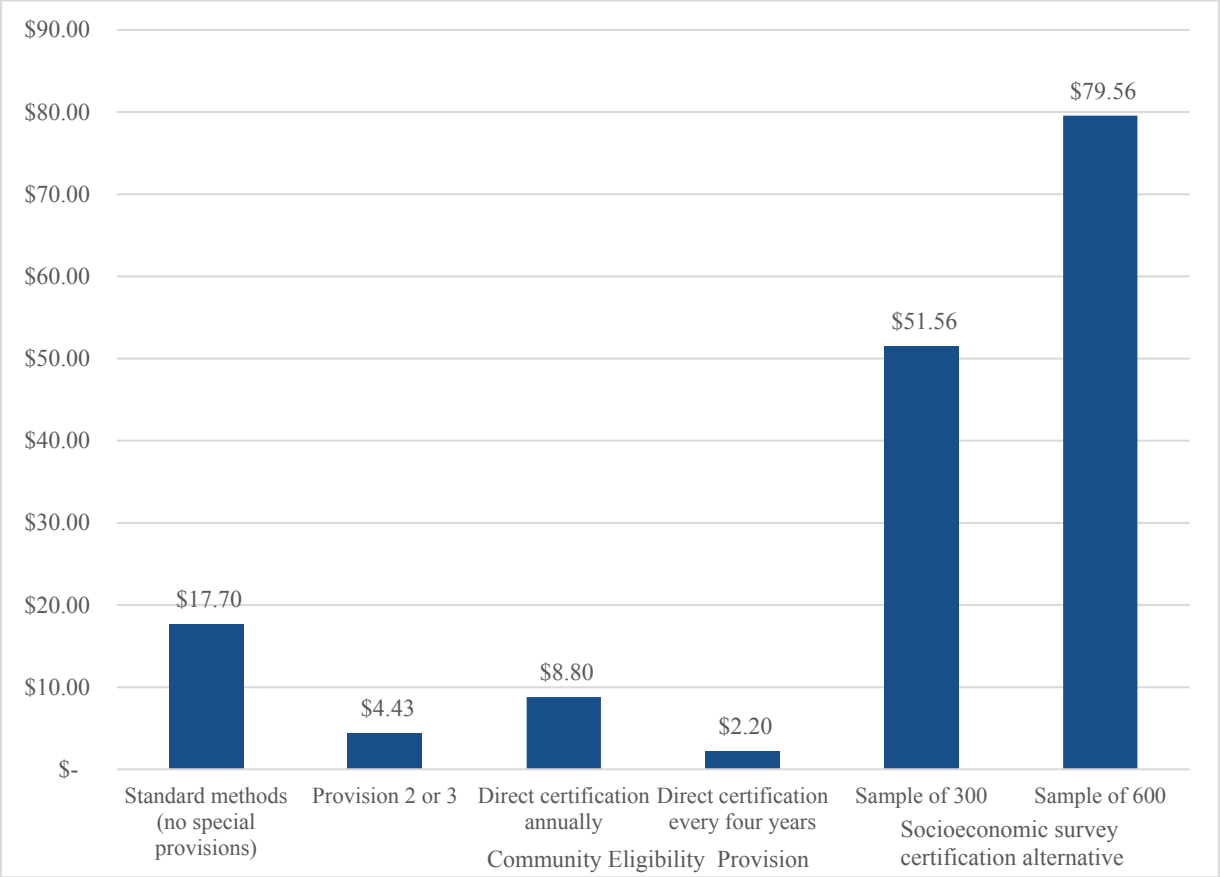
[153] Other certification costs include labor hours for documenting certification status, notifying parents of their children's status, responding to certification questions, and making certification results available to school food service cashiers. They also include postage and other delivery costs for certification-related communications.

[154] With State Agency permission, districts may extend the period before they need to do another base year. Many districts do this, which would further reduce their certification costs. For this exercise, we assume special provisions are applied at the district level (when, in fact, they may be applied in single schools or groups of schools).

[155] If direct certification were conducted annually in SES districts, the estimates would for that alternative would be somewhat higher: 55.71 per enrolled student for a sample of 300 and 86.24 for a sample of 600.

alternative is unlikely to be attractive to many districts in terms of reductions in administrative cost. However, for each certification alternative, the estimated per-student cost is for the average district in the DCM control group. Costs for any particular district could differ from these averages. For example, per-student costs might be much lower for a very large district, or higher for a small district. In addition, the ultimate calculation depends not only on administrative costs, but also on the relative reimbursement rates under each option.

Figure H.2. Administrative cost per student enrolled (dollars)



Source: Control group responses to DC-M Demonstration District Cost Survey, SY 2013-2014, and SES estimates standardized by average enrollment.

FNS had also requested a comparison of the costs of an SES certification alternative to the costs of standard procedures plus DC-M, but the different samples resulting from issues with DC-M implementation in some States and months do not allow for comparable estimates. However, the DC-M impact analyses (discussed in Chapter VI) do not indicate any statistically significant differences in costs at the district level due to DC-M. Therefore, for comparison to the costs of an SES, it seems plausible that DC-M plus standard procedures would have costs similar, in general, to those of standard certification procedures.

C. Limitations and other considerations

The estimates of SES certification alternative costs presented here are based on a particular set of assumptions, but costs could vary for different types of districts. For example, districts in

labor markets with higher wages are likely to have higher survey costs.[156] Some caveats about these estimates are:

- Estimates of CEP and P2/3 costs presented here are based on the results of the DC-M district cost survey, which excluded districts with any CEP or high proportions of P2/3 schools.[157] Furthermore, our cost estimates are based on the assumption that any special provision applies to all schools in a district, although they can be used for single schools or groups of schools.
- This exercise pertains to district administrative certification costs and does not consider operational costs, including the costs of food, labor, and equipment for preparing and serving school meals, all of which could be higher under an SES certification alternative or other special provisions than under standard procedures, if students take more meals when all meals are served for free. However, , higher participation rates create the potential for greater economies of scale, which may lead to lower costs per student. It also does not address whether participation or Federal reimbursements would differ under an SES certification alternative. In particular, because reimbursements are calculated differently under the CEP, the CEP could generate higher or lower reimbursements than would be calculated under an SES certification alternative, depending on district certification rates and percentages of students directly certified. In addition, the sample on which these estimates are based includes many low-poverty districts, which would not be eligible for the CEP and would have no incentive to adopt any of the special provisions.
- Although not quantifiable based on the available data for this study, the various certification methods place different levels of burden on parents. The SES certification alternative would be easier for parents, in general, relative to household applications, because they would not fill out applications. It could be more burdensome for the small group of parents who must complete the survey, but that burden should be similar to completing the usual application form. On the other hand, CEP places minimal burden on parents.

[156] Survey costs could also vary in districts of different sizes. For example, the need to contact more schools might result in higher costs for that activity in larger districts. Conversely, larger districts might have better data systems, which could lower costs.

[157] Specifically, it excludes districts in which more than 20 percent of schools were operating under Provision 2 or Provision 3 and districts that included any CEP schools.

APPENDIX I

SENSITIVITY ANALYSES

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In addition to the main analyses in Florida, we conducted sensitivity analyses to explore two alternative approaches to the analysis of districts that began DC-M in the second year of the demonstration (referred to as Cohort 2 districts).[158] These analyses examine the sensitivity of findings to alternative approaches to two analytic decisions: (1) the districts included in the analysis sample and (2) the year used for baseline measures. This appendix describes these sensitivity analyses, presents the results, and discusses how the findings from the sensitivity analyses compare to the main findings presented in Chapters III through VI.

Sample. The impact analyses presented in the main body of the report are based on all districts that are eligible for inclusion in the Year 2 analysis. This is the largest sample for which internally valid impact estimates can be obtained and thus provides the greatest power to detect impacts.

We noted unusual certification patterns in two of the four Cohort 2 districts in Florida. Specifically, one district in the treatment group in Cohort 2 had a relatively large (10 percentage point) increase between Year 0 and Year 1 (that is, before implementing DC-M) in the percentage of students directly certified and then almost no change after the implementation of DC-M (that is, between Year 1 and Year 2). A Cohort 2 district in the control group had a similarly large increase between Year 1 and Year 2 in the percentage of students directly certified. The cause of these increases are unknown, but they would not be due to DC-M if the first district complied with the assigned DC-M start date and the second with assignment to the control group. Although these are not the most extreme patterns observed in the data across districts from all of the demonstration States, they are certainly unusual, and because the Cohort 2 districts in Florida are very large, they have the potential to affect the results.[159]

Baseline year. The regression models adjust for baseline values of relevant characteristics, measured for the year immediately before the State began conducting DC-M (that is, Year 0 for Florida). This approach ensured that any year-specific effect was captured in the same way for both cohorts. However, the Year 0 baseline is two years before Cohort 2 districts began DC-M but only one year before Cohort 1 districts began DC-M.

Sensitivity analyses. To explore these issues, we conducted two different sensitivity analyses related to cohort:

- First, we excluded the Cohort 2 districts entirely and examined impacts on the sample of 26 Florida districts in Cohort 1.[160]

[158] The only other State in which additional districts joined the demonstration in Year 2 is Illinois, which was not included in the analyses due to implementation issues.

159 Although there are only four Cohort 2 districts in the Year 2 analysis sample in Florida, together they contain more students than the 26 Cohort 1 districts combined. In Year 2, more than 892,000 students were enrolled in schools in the Cohort 2 districts (including more than 534,000 certified to receive free meals), compared with fewer than 590,000 students (including almost 271,000 certified to receive free meals) in the Cohort 1 districts.

[160] As in the main analysis, this version uses Year 0 as the baseline year for all Florida districts.

- Second, using the same sample as the main analyses, we explored the effect of using Year 1, rather than Year 0, as the baseline year for Cohort 2 districts in Florida.

In the main impact analyses presented in Chapters III through VI (and repeated in the first set of columns in Table I.1), the only statistically significant impacts in Florida were on the percentage of SBP breakfasts served for free, the breakfast reimbursement per student per day, and the average per-meal reimbursement rate for breakfasts (impacts of 1.9 percentage points and 3 and 4 cents, respectively). Under the alternative approaches presented in Table I.1, the impacts on these three outcomes are not statistically significant, but there are impacts on other outcomes. Excluding the Cohort 2 districts from the analysis results in positive impacts on the percentage of students directly certified, the percentage of students certified for free meals, the average number of lunches served per student per day, and NSLP reimbursements per student per day, as well as a significant reduction in district administrative costs for certification. Using Year 1, rather than Year 0, as the baseline year for Cohort 2 districts in Florida yields puzzling negative impacts on the average number of SBP meals served per student per day and the breakfast reimbursement per student per day.

Some of these inconsistent results are driven at least in part by the previously described unusual patterns in the data for two large Cohort 2 districts. More generally, however, the relatively small number of districts in the Florida sample and the wide variation in size makes the findings sensitive to the data and, therefore, the treatment of each large district.

Table I.1. Regression-adjusted impacts of DC-M on key outcomes in SY 2013-2014, with alternative specifications for Cohort 2 districts in Florida

	Main analysis			Alternative analyses					
	Cohort 1 and Cohort 2 districts (n = 30), using Year 0 as the baseline for all districts			Cohort 1 districts only (n = 26)			Cohort 1 and Cohort 2 districts (n = 30), using Year 1 as the baseline for Cohort 2 districts		
	Treatment districts	Control districts	Difference (CI)	Treatment districts	Control districts	Difference (CI)	Treatment districts	Control districts	Difference (CI)
Percentage of students directly certified for free meals[a]	38.9	36.5	2.5 (±3.8)	35.0	28.2	6.7* (±2.5)	38.1	37.2	1.0 (±4.9)
Total percentage of students certified for free meals[b]	55.3	53.4	2.0 (±3.7)	47.4	44.3	3.1* (±2.2)	52.6	55.7	-3.1 (±4.1)
Average number of NSLP meals served per student per day	0.58	0.57	0.02 (±0.02)	0.56	0.53	0.03* (±0.02)	0.58	0.57	0.01 (±0.03)
Percentage of NSLP meals served for free	72.6	73.4	-0.8 (±1.2)	67.1	66.6	0.5 (±1.1)	72.9	73.1	-0.2 (±1.5)
Average number of SBP meals served per student per day	0.24	0.23	0.01 (±0.01)	0.17	0.17	-0.01 (±0.01)	0.22	0.24	-0.02* (±0.02)
Percentage of SBP meals served for free	78.0	76.2	1.9* (±1.1)	79.0	78.6	0.3 (±1.5)	76.6	77.6	-0.9 (±2.1)
Federal NSLP reimbursement costs per student per day ($)	1.44	1.42	0.02 (±0.06)	1.31	1.24	0.06* (±0.05)	1.43	1.42	0.01 (±0.07)

Table I.1 *(continued)*

State	Main analysis: Cohort 1 and Cohort 2 districts (n = 30), using Year 0 as the baseline for all districts			Alternative analyses: Cohort 1 districts only (n = 26)			Alternative analyses: Cohort 1 and Cohort 2 districts (n = 30), using Year 1 as the baseline for Cohort 2 districts		
	Treatment districts	Control districts	Difference (CI)	Treatment districts	Control districts	Difference (CI)	Treatment districts	Control districts	Difference (CI)
Blended NSLP reimbursement rate ($)[c]	2.47	2.49	-0.02 (±0.03)	2.32	2.33	-0.01 (±0.03)	2.48	2.48	0.00 (±0.03)
Federal SBP reimbursement costs per student per day ($)	0.39	0.36	0.03* (±0.03)	0.27	0.28	-0.01 (±0.02)	0.36	0.39	-0.03* (±0.04)
Blended SBP reimbursement rate ($)[c]	1.63	1.59	0.04* (±0.03)	1.64	1.64	-0.01 (±0.03)	1.60	1.62	-0.02 (±0.03)
District administrative certification costs per student ($)[d]	3.00	2.16	0.84 (±2.03)	1.56	6.95	-5.39* (±5.27)	1.61	3.37	-1.76 (±2.90)

Source: October certification data and monthly administrative claims data provided by the States and DC-M Demonstration District Cost Survey data.

Notes: The results for some outcomes reported in this table are aggregated across months, excluding months during which the State used an incorrect measure of income for conducting DC-M (January 2014 through May 2014). The variables included in the regression adjustments are listed in Appendix A.

[a]Includes all students certified to receive free meals but not subject to verification, including those directly certified based on information from the SNAP, FDPIR, TANF, or Medicaid agency; children on the homeless liaison list; income-eligible Head Start -participants; residential students in RCCIs; and nonapplicants approved by local officials.

[b]Including by application, direct certification, or other categorical eligibility.

[c]The blended reimbursement rate is the per-meal reimbursement rate.

[d]Costs per student was calculated as the sum of district certification costs across all districts in the sample divided by the sum of enrolled students across all districts in the sample.

* Estimate for treatment districts is significantly different from the estimate for control districts at the 0.05 level.

CI = 95 percent confidence interval half-width; DC-M = Direct Certification-Medicaid; FDPIR = Food Distribution Program on Indian Reservations; NSLP = National School Lunch Program; RCCI = residential child care institution; SBP = School Breakfast Program; SNAP = Supplemental Nutrition Assistance Program; SY = school year; TANF = Temporary Assistance for Needy Families.

APPENDIX J

DISTRICT ADMINISTRATIVE COSTS DATA COLLECTION INSTRUMENTS

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OMB Control #: 0584-0586
Expiration Date: 08/31/2016

DISTRICT COST SURVEY

SY 2013-2014

EVALUATION OF DEMONSTRATIONS OF

NSLP/SBP DIRECT CERTIFICATION OF

CHILDREN RECEIVING MEDICAID BENEFITS

Public Burden Statement

The information collected in this survey is solicited under the authority of Section 103 of Public Law 111-296, the Healthy, Hunger-Free Kids Act of 2010 (HHFKA). HHFKA amended the National School Lunch Act (NSLA) to authorize FNS to conduct and evaluate multi-year demonstration projects beginning in July 2012 in selected States and districts to test the effectiveness of direct certification with the Medicaid program in determining eligibility for free school meals. It also provides access to data for the purposes of conducting program monitoring, evaluations and performance measurements of States and districts participating in the Child Nutrition Program and mandates the cooperation of relevant State and local agencies in Department of Agriculture studies and evaluations related to Programs authorized under the NSLA and the CAN. Participants in this study will be subject to safeguards as provided by the Privacy Act of 1974 (5 USC 552a), which requires the safeguarding of individuals against invasion of privacy. The Privacy Act also provides for the confidential treatment of records maintained by a Federal agency according to either the individual's name or some other identifier. The information you provide will be used only for research and statistical purposes by the survey sponsor, their contractors, and collaborating researchers for the purpose of analyzing data and preparing scientific reports and articles. Any information publicly released (such as statistical summaries) will be in a form that does not personally identify you or your district.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control number for this survey is 0584-0586.

Actual time to complete the questionnaire may vary depending upon your circumstances, but on average it will take about 45 minutes.

I. INTRODUCTION

ALL

This survey is designed to help us estimate the cost of certifying students for free or reduced price meals in both districts that are part of the Direct Certification with Medicaid (DC-M) demonstration and those that are serving as the control group for the evaluation. It is set up to be completed by the food service program director or a designated member of staff who has knowledge of certification procedures. **One or more staff in your district may complete the survey; please circulate the survey among appropriate staff, if necessary,** to obtain all responses. In some districts, one staff member may be able to complete the entire survey. In other districts, multiple staff may complete sections, including staff from the human resources, payroll, or business offices. During the survey, we will ask about the following key topics:

- The matching method, steps and individuals involved in conducting **direct certification** in your district, including the number of hours spent on different tasks
- The steps and individuals involved in the **certification by application** process in your district, including the number of hours spent on different tasks
- Salary and benefit levels for relevant categories of staff

You will be able to save your progress and return to complete the survey at a later time if you need to. However, once you log out of the survey you will not be able to go back and change the responses to previous questions. Please email us at DC-M@mathematica-mpr.com with any questions.

A. DIRECT CERTIFICATION

ALL

Direct certification is the process whereby school officials determine a child's eligibility for free school meals in the National School Lunch Program (NSLP) based on data provided by the State or local public assistance office about participation in the Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF), Food Distribution Program on Indian Reservations (FDPIR), or Medicaid (for districts participating in the Direct Certification – Medicaid demonstration). Direct certification can be implemented at the State or district level.

A1. With State-level matching, a State agency (usually Child Nutrition) is responsible for a system that matches a list of children in NSLP schools with a list of children in SNAP households (and/or a list of children in other qualifying programs) using a common identifier or identifiers.

Does your State conduct matching at the State level for direct certification?

DxA01

- ❍ Yes..... 1
- ❍ No 0

HARD CHECK: IF A1=NO RESPONSE; **A response to this question is required to continue. Please provide a response.**

ALL

A2. With district-level matching, districts are responsible for matching a list of children enrolled in their schools with a list of children in SNAP households (and/or in other qualifying programs) using a common identifier or identifiers. Districts may use manual methods or their own computer systems. Does your district conduct matching at the district level for direct certification?

DxA02

- ❍ Yes..... 1
- ❍ No 0

HARD CHECK: IF A2=NO RESPONSE; **A response to this question is required to continue. Please provide a response.**

A1 = 1 AND A2 = 1

A3. Which entity performs matching for direct certification first?

DxA03

Select one only

- ❍ State 1
- ❍ District 2

HARD CHECK: IF A3=NO RESPONSE; **A response to this question is required to continue. Please provide a response.**

A1 NE 1 AND A2 NE 1

A4. How is direct certification conducted in your district?

DxA04
DxA04_oth

Select one only

- ❍ Direct certification is not used 1
- ❍ Other (SPECIFY) ..... 2 GO TO B1

Specify ☐ (STRING 250)

NO RESPONSE ..... M GO TO B1

A4 = 1

A5. Why is direct certification not conducted in your district?

DxA05

☐ GO TO C1

(STRING 250)

NO RESPONSE ..... M GO TO C1

SOFT CHECK: IF A5=NO RESPONSE; **Your response to this question is important. Please provide a response and continue.**

B. DIRECT CERTIFICATION PROCESS

ALL

The next questions are about the direct certification process in your district.

B1. Which levels of staff are involved with the direct certification process?

DxB01_01
DxB01_02
DxB01_03
DxB01_04
DxB01_05
DxB01_06
DxB01_07
DxB01_98
DxB01_98oth
DxB01_99
DxB01_99oth

Select all that apply

- ☐ District food service director 1
- ☐ Superintendent 2
- ☐ Business manager 3
- ☐ Student database administrator 4
- ☐ Database or programming staff 5
- ☐ District-level food service clerical or administrative staff 6
- ☐ Other district-level clerical or administrative staff 7
- ☐ Other (SPECIFY) 98

Specify [ ] (STRING 250)

- ☐ Other (SPECIFY) 99

Specify [ ] (STRING 250)

HARD CHECK: IF B1=NO RESPONSE; **A response to this question is required to continue. Please provide a response.**

ALL

B2. Who is responsible for supervising the direct certification process in your district?

DxB02
DxB02_oth

Select one only

- ❍ District food service director 1
- ❍ Superintendent 2
- ❍ Business manager 3
- ❍ Student database administrator 4
- ❍ District-level food service clerical or administrative staff 5
- ❍ Other (SPECIFY) 99

Specify [ ] (STRING 250)

NO RESPONSE ..... M

PROGRAMMER BOX B2

ASK B3 OR B3A FOR FIRST RESPONSE SELECTED AT B1, THEN ASK FOLLOW UP QUESTION B4 IF APPLICABLE. THEN ASK B3 OR B3A FOR SECOND RESPONSE SELECTED AT B1, THEN ASK FOLLOW UP QUESTION B4 IF APPLICABLE. CONTINUE LOOP UNTIL B3 OR B3A (AND FOLLOW UP) HAS BEEN ASKED FOR EACH RESPONSE SELECTED AT B1, THEN GO TO C1.

((A2 = 1 AND (A1 = 0 OR A3 = 2)) OR (A4=2 OR A4=M)) AND B1 NE M

FILL WITH RESPONSE OPTIONS SELECTED AT B1. IF OPTIONS 98 AND 99 ARE SELECTED AT B1, FILL WITH TEXT FROM OTH_SPECIFY. IF OTH_SPECIFY TEXT IS EMPTY, FILL **other staff member you mentioned**

B3. In which steps is the [JOB TITLE FROM B1] involved?

DxB03_01
DxB03_02
DxB03_03
DxB03_04
DxB03_05
DxB03_06
DxB03_07
DxB03_08
DxB03_09
DxB03_98
DxB03_98oth
DxB03_99
DxB03_99oth

Select all that apply

- ☐ Receiving or downloading files from the State Agency of children receiving SNAP, TANF, FDPIR, and/or Medicaid 1
- ☐ Updating match specifications, developing programming to implement them, and testing and refining programs 2
- ☐ Extracting relevant student data from district files 3
- ☐ Updating database to include new fields or change previous fields 4
- ☐ Running district-level matching of student data and SNAP, TANF, FDPIR, and/or Medicaid data and identifying matches 5
- ☐ Researching close or partial matches 6
- ☐ Reviewing remaining lists of SNAP, TANF, FDPIR and other Medicaid eligibles manually to identify additional matches, including siblings of matched students 7
- ☐ Merging direct certification results to point-of-sale and/or main student databases or other approaches to making information available to cashiers 8
- ☐ Making sure all state and federal regulations are followed 9
- ☐ Other (SPECIFY) 98

Specify ☐ (STRING 250)

- ☐ Other (SPECIFY) 99

Specify ☐ (STRING 250)

NO RESPONSE ..... M

SOFT CHECK: IF B3=NO RESPONSE; **Your response to this question is important. Please provide a response and continue.**

PROGRAMMER BOX B3

ASK B4 FOR EACH RESPONSE SELECTED AT B3.

A1 = 1 AND (A2 = 0 OR A3 = 1) AND B1 NE M
FILL WITH RESPONSE OPTIONS SELECTED AT B1. IF OPTIONS 98 AND 99 ARE SELECTED AT B1, FILL WITH TEXT FROM OTH_SPECIFY. IF OTH_SPECIFY TEXT IS EMPTY, FILL **other staff member you mentioned**

B3A. In which steps is the [JOB TITLE FROM B1] involved?

DxB03A_01
DxB03A_02
DxB03A_03
DxB03A_04
DxB03A_05
DxB03A_06
DxB03A_07
DxB03A_98
DxB03A_98oth
DxB03A_99
DxB03A_99oth

Select all that apply

- ☐ Uploading student enrollment files to the state system for matching 1
- ☐ Receiving file of matches from the state and reviewing 2
- ☐ Researching close or partial matches 3
- ☐ Reviewing remaining lists of SNAP, TANF, FDPIR and other Medicaid eligibles manually to identify additional matches, including siblings of matched students 4
- ☐ Merging direct certification results to point-of-sale and/or main student databases or other approaches to making information available to cashiers 5
- ☐ Communications with State Agency 6
- ☐ Making sure all state and federal regulations are followed 7
- ☐ Other (SPECIFY) 98

Specify ☐ (STRING 250)

- ☐ Other (SPECIFY) 99

Specify ☐ (STRING 250)

NO RESPONSE ..... M

SOFT CHECK: IF B3A=NO RESPONSE; **Your response to this question is important. Please provide a response and continue.**

PROGRAMMER BOX B3A
ASK B4 FOR EACH RESPONSE SELECTED AT B3A.

(B3 NE 0 OR B3A NE 0) AND (B3 NE M OR B3A NE M)
FILL **[JOB TITLE FROM B1]** WITH RESPONSE OPTIONS SELECTED AT B1. IF OPTIONS 98 AND 99 ARE SELECTED AT B1, FILL WITH TEXT FROM OTH_SPECIFY. IF OTH_SPECIFY TEXT IS EMPTY, FILL **other staff member you mentioned**
FILL **[TASK FROM B3 AND/OR B3A]** WITH RESPONSE OPTIONS SELECTED AT B3 OR B3A. IF OPTIONS 98 AND 99 ARE SELECTED AT B3 OR B3A, FILL WITH TEXT FROM OTH_SPECIFY. IF OTH_SPECIFY TEXT IS EMPTY, FILL **the other task you mentioned**

B4. How many total hours did the [JOB TITLE FROM B1] spend on [TASK FROM B3 AND/OR B3A] each month? Please include management time. *(Your best estimate is fine. Please include total hours for all staff in this category.)*

PROGRAMMER: RANGE FOR GRID IS 0 – 999

		HOURS
DxB04a	a. Hours in [MONTH 1]	
DxB04b	b. Hours in [MONTH 2]	
DxB04c	c. Hours in [MONTH 3]	

SOFT CHECK: IF B4a OR B4b=NO RESPONSE; **One or more fields have been left blank. Please update your response and continue.**

C. CERTIFICATION BY APPLICATION

ALL

Next, we ask about the certification by application process in your district.

C1. Who is responsible for supervising the certification by application process in your district?

DxC01
DxC01_oth

Select one only

- ❍ District food service director 1
- ❍ Superintendent 2
- ❍ Business manager 3
- ❍ Student database administrator 4
- ❍ District-level food service clerical or administrative staff 5
- ❍ Other (SPECIFY) 99

Specify ☐ (STRING 250)

NO RESPONSE ..... M GO TO C3

C1 NE M

C2. What are the main duties of the [RESPONSE FROM C1] in supervising the certification by application process?

DxC02_01
DxC02_02
DxC02_03
DxC02_04
DxC02_99
DxC02_99oth

Select all that apply

- ☐ Supervising district-level steps 1
- ☐ Working with principals who supervise school-level steps 2
- ☐ Supervising school-level steps directly 3
- ☐ Making sure all state and federal regulations are followed 4
- ☐ Other (SPECIFY) 99

Specify ☐ (STRING 250)

NO RESPONSE ..... M

ALL

C3. Is most of the work involved with certification by application done at the school level or at the district level?

DxC03

Select one only

- ❍ Primarily school level 1
- ❍ Primarily district level 2
- ❍ School level and district level equally 3

NO RESPONSE ..... M

ALL

C4. Does your district have a web-based application process?

DxC04

- ❍ Yes 1
- ❍ No ..... 0 GO TO C11

NO RESPONSE ..... M GO TO C11

C4 = 1

C5. How long has the web-based application process been in place?

DxC05_yr
DxC05_mn

[ ] YEARS AND/OR [ ] MONTHS
(RANGE 0 – 30) (RANGE 0 – 12)

NO RESPONSE ..... M

C4 = 1

C6. What percentage of applications is received through the web-based process?

DxC06

[ ] %
(RANGE 0 – 100)

- ❍ Don't know yet (first year of use) ..... D

NO RESPONSE ..... M

HARD CHECK: IF NUMBER IS ENTERED AND C6=D; **Please either enter a percentage or select "Don't know yet" at C6, then continue.**

C4 = 1

C7. Who manages the web-based application site? *Please include work on developing and testing the site.*

DxC07
DxC07_oth

Select one only

- ❍ District staff manages 1
- ❍ Contractor manages 2
- ❍ District and contractor manage jointly 3
- ❍ Other (SPECIFY) 99

Specify [ ] (STRING 250)

NO RESPONSE ..... M

C7 = 2 OR C7 = 3

C8. How much money was paid to the contractor each month for managing the web-based application site? *(Your best estimate is fine. Please round to the nearest dollar.)*

DxC08a
DxC08b
DxC08c

PROGRAMMER: RANGE FOR GRID IS 0 – 999,999

	DOLLARS
a. Cost in [MONTH 1]	$
b. Cost in [MONTH 2]	$
c. Cost in [MONTH 3]	$

NO RESPONSE ..... M

C7=1 OR C7=3

C9. Who at the district works on managing the web-based application site? *Please include work on developing and testing the site.*

DxC09_01
DxC09_02
DxC09_03
DxC09_04
DxC09_05
DxC09_06
DxC09_07
DxC09_08
DxC09_98
DxC09_98oth
DxC09_99
DxC09_99oth
DxC09_N

Select all that apply

☐ District food service director 1
☐ Superintendent 2
☐ Business manager 3
☐ Student database administrator 4
☐ Database or programming staff 5
☐ District-level food service clerical or administrative staff 6
☐ District-level communications department 7
☐ Other district-level clerical or administrative staff 8
☐ Other (SPECIFY) 98
Specify ____ (STRING 250)
☐ Other (SPECIFY) 99
Specify ____ (STRING 250)
☐ Not applicable ..... N GO TO C11

NO RESPONSE ..... M GO TO C11

SOFT CHECK: IF C9=NO RESPONSE; **Your response to this question is important. Please provide a response and continue.**

C9 NE M
FILL RESPONSE OPTIONS (A-H) FROM RESPONSES SELECTED AT C9
FILL RESPONSE OPTIONS I AND J FROM C9oth_specify; IF C9oth_specify IS EMPTY, FILL **The other staff member you mentioned**

C10. How many total hours did all staff in each of the following categories spend <u>managing the web-based application site</u> each month? Please include management time, as well as time spent developing and testing the site. *(Your best estimate is fine.)*

PROGRAMMER: RANGE FOR GRID IS 0 – 999

	Hours in [MONTH 1]	Hours in [MONTH 2]	Hours in [MONTH 3]	
a. District food service director				*DxC10a_01* *DxC10a_02* *DxC10a_03*
b. Superintendent				*DxC10b_01* *DxC10b_02* *DxC10b_03*
c. Business manager				*DxC10c_01* *DxC10c_02* *DxC10c_03*
d. Student database administrator				*DxC10d_01* *DxC10d_02* *DxC10d_03*
e. Database or programming staff				*DxC10e_01* *DxC10e_02* *DxC10e_03*
f. District-level food service clerical or administrative staff				*DxC10f_01* *DxC10f_02* *DxC10f_03*
g. District-level communications department				*DxC10g_01* *DxC10g_02* *DxC10g_03*
h. Other district-level clerical or administrative staff				*DxC10h_01* *DxC10h_02* *DxC10h_03*
i. [Fill from C9oth_specify /The other staff member you mentioned]				*DxC10i_01* *DxC10i_02* *DxC10i_03*
j. [Fill from C9oth_specify /The other staff member you mentioned]				*DxC10j_01* *DxC10j_02* *DxC10j_03*

SOFT CHECK: IF ANY C10a-C10j=NO RESPONSE; **One or more fields have been left blank. Please update your response and continue.**

ALL

C11. Was there need to update the content of the application forms for the 2013-2014 school year?

DxC11

- ❍ Yes 1
- ❍ No 0

NO RESPONSE ..... M

ALL

C12. Was there need for any new translation of the application forms for the 2013-2014 school year?

DxC12

❍ Yes 1

❍ No 0

NO RESPONSE ..... M

C11=1 OR C12=1

IF C12=1, FILL **and translations**

C13. Who coordinates or works on revising the content of the application form [and translations]?

DxC13_01
DxC13_02
DxC13_03
DxC13_04
DxC13_05
DxC13_06
DxC13_07
DxC13_08
DxC13_09
DxC13_10
DxC13_11
DxC13_11oth
DxC13_98
DxC13_98oth
DxC13_99
DxC13_99oth
DxC13_N

Select all that apply

☐ District food service director 1

☐ Superintendent 2

☐ Business manager 3

☐ Student database administrator 4

☐ Database or programming staff 5

☐ District-level food service clerical or administrative staff 6

☐ District-level communications department 7

☐ Other district-level clerical or administrative staff 8

☐ Principals 9

☐ School secretaries or administrative staff 10

☐ Other school-level staff 11

Specify [ ] (STRING 250)

☐ Other (SPECIFY) 98

Specify [ ] (STRING 250)

☐ Other (SPECIFY) 99

Specify [ ] (STRING 250)

☐ Not applicable ..... N GO TO C15

NO RESPONSE ..... M GO TO C15

SOFT CHECK: IF C13=NO RESPONSE; **Your response to this question is important. Please provide a response and continue.**

(C11=1 OR C12=1) AND C13 NE M AND C13 NE N
IF C12=1, FILL **and translations**
FILL RESPONSE OPTIONS (A-J) FROM RESPONSES SELECTED AT C13
FILL RESPONSE OPTION K FROM C13oth_specify; IF C13oth_specify IS EMPTY, FILL **The other school-level staff member you mentioned**
FILL RESPONSE OPTIONS L AND M FROM C13oth_specify; IF C13oth_specify IS EMPTY, FILL **The other staff member you mentioned**

C14. How many total hours did all staff in each of the following categories spend <u>revising the content of the application form [and translations]</u> each month? Please include management time. *(Your best estimate is fine.)*

PROGRAMMER: RANGE FOR GRID IS 0 – 999

	Hours in [MONTH 1]	Hours in [MONTH 2]	Hours in [MONTH 3]	
a. District food service director				*DxC14a_01* *DxC14a_02* *DxC14a_03*
b. Superintendent				*DxC14b_01* *DxC14b_02* *DxC14b_03*
c. Business manager				*DxC14c_01* *DxC14c_02* *DxC14c_03*
d. Student database administrator				*DxC14d_01* *DxC14d_02* *DxC14d_03*
e. Database or programming staff				*DxC14e_01* *DxC14e_02* *DxC14e_03*
f. District-level food service clerical or administrative staff				*DxC14f_01* *DxC14f_02* *DxC14f_03*
g. District-level communications department				*DxC14g_01* *DxC14g_02* *DxC14g_03*
h. Other district-level clerical or administrative staff				*DxC14h_01* *DxC14h_02* *DxC14h_03*
i. Principals				*DxC14i_01* *DxC14i_02* *DxC14i_03*
j. School secretaries or administrative staff				*DxC14j_01* *DxC14j_02* *DxC14j_03*
k. [Fill from C13oth_specify/ The other school-level staff member you mentioned]				*DxC14k_01* *DxC14k_02* *DxC14k_03*
l. [Fill from C13oth_specify /The other staff member you mentioned]				*DxC14l_01* *DxC14l_02* *DxC14l_03*
m. [Fill from C13oth_specify /The other staff member you mentioned]				*DxC14m_01* *DxC14m_02* *DxC14m_03*

SOFT CHECK: IF ANY C14a-C14m=NO RESPONSE; **One or more fields have been left blank. Please update your response and continue.**

ALL

C15. Are hardcopy application forms printed by district or school staff each year?

DxC15

- ❍ Yes 1
- ❍ No ..... 0 GO TO C18

NO RESPONSE ..... M GO TO C18

SOFT CHECK: IF C15=NO RESPONSE; **Your response to this question is important. Please provide a response and continue.**

C15 = 1

C16. Who coordinates or works on printing hardcopy application forms?

Select all that apply

DxC16_01
DxC16_02
DxC16_03
DxC16_04
DxC16_05
DxC16_06
DxC16_07
DxC16_08
DxC16_09
DxC16_10
DxC16_11
DxC16_11oth
DxC16_98
DxC16_98oth
DxC16_99
DxC16_99oth
DxC16_N

- ☐ District food service director 1
- ☐ Superintendent 2
- ☐ Business manager 3
- ☐ Student database administrator 4
- ☐ Database or programming staff 5
- ☐ District-level food service clerical or administrative staff 6
- ☐ District-level communications department 7
- ☐ Other district-level clerical or administrative staff 8
- ☐ Principals 9
- ☐ School secretaries or administrative staff 10
- ☐ Other school-level staff 11

Specify [ ] (STRING 250)

- ☐ Other (SPECIFY) 98

Specify [ ] (STRING 250)

- ☐ Other (SPECIFY) 99

Specify [ ] (STRING 250)

- ☐ Not applicable ..... N GO TO C18

NO RESPONSE ..... M GO TO C18

SOFT CHECK: IF C16=NO RESPONSE; **Your response to this question is important. Please provide a response and continue.**

C16 NE M AND C16 NE N
FILL RESPONSE OPTIONS (A-J) FROM RESPONSES SELECTED AT C16
FILL RESPONSE OPTION K FROM C16oth_specify; IF C16oth_specify IS EMPTY, FILL **The other school-level staff member you mentioned**
FILL RESPONSE OPTIONS L AND M FROM C16oth_specify; IF C16oth_specify IS EMPTY, FILL **The other staff member you mentioned**

C17. How many total hours did all staff in each of the following categories spend <u>having hardcopy applications printed</u> each month? Please include management time as well as time spent printing forms. *(Your best estimate is fine.)*

PROGRAMMER: RANGE FOR GRID IS 0 – 999

	Hours in [MONTH 1]	Hours in [MONTH 2]	Hours in [MONTH 3]	
a. District food service director				*DxC17a_01* *DxC17a_02* *DxC17a_03*
b. Superintendent				*DxC17b_01* *DxC17b_02* *DxC17b_03*
c. Business manager				*DxC17c_01* *DxC17c_02* *DxC17c_03*
d. Student database administrator				*DxC17d_01* *DxC17d_02* *DxC17d_03*
e. Database or programming staff				*DxC17e_01* *DxC17e_02* *DxC17e_03*
f. District-level food service clerical or administrative staff				*DxC17f_01* *DxC17f_02* *DxC17f_03*
g. District-level communications department				*DxC17g_01* *DxC17g_02* *DxC17g_03*
h. Other district-level clerical or administrative staff				*DxC17h_01* *DxC17h_02* *DxC17h_03*
i. Principals				*DxC17i_01* *DxC17i_02* *DxC17i_03*
j. School secretaries or administrative staff				*DxC17j_01* *DxC17j_02* *DxC17j_03*
k. [Fill from C16oth_specify/ The other school-level staff member you mentioned]				*DxC17k_01* *DxC17k_02* *DxC17k_03*
l. [Fill from C16oth_specify /The other staff member you mentioned]				*DxC17l_01* *DxC17l_02* *DxC17l_03*
m. [Fill from C16oth_specify /The other staff member you mentioned]				*DxC17m_01* *DxC17m_02* *DxC17m_03*

SOFT CHECK: IF ANY C17a-C17m=NO RESPONSE; **One or more fields have been left blank. Please update your response and continue.**

ALL

C18. How many hardcopy application forms were printed this year? Your best estimate is fine.

DxC18

☐ APPLICATIONS

(RANGE 0 – 1,999,999)

NO RESPONSE ..... M

C15 = 1

C19. What was the cost of the supplies used to print hardcopy application forms this year?

DxC19

$ ☐

(RANGE 0 – 999,999)

NO RESPONSE ..... M

C15 NE 1

C20. If forms are printed by a vendor, what was the cost of printing hardcopy application forms this year?

DxC20

$ ☐

(RANGE 0 – 999,999)

❍ Not printed by a vendor ..... N

NO RESPONSE ..... M

HARD CHECK: IF NUMBER IS ENTERED AND C20=N; **Please either enter a dollar amount or select "Not printed by a vendor," then continue.**

C4 = 1

The next questions are about parent outreach regarding applications.

C21. How does your district let parents or guardians know about the online application process?

DxC21_01
DxC21_02
DxC21_03
DxC21_04
DxC21_05
DxC21_99
DxC21_99oth

Select all that apply

☐ Letters mailed to parents or guardians 1

☐ Emails to parents or guardians 2

☐ School district website 3

☐ Public service announcements 4

☐ At school registration 5

☐ Other (SPECIFY) 99

Specify ☐ (STRING 250)

NO RESPONSE ..... M

ALL

C22. Who works on letting parents or guardians know about the application process for free or reduced-price school meals (online or on paper)?

DxC22_01
DxC22_02
DxC22_03
DxC22_04
DxC22_05
DxC22_06
DxC22_07
DxC22_08
DxC22_09
DxC22_10
DxC22_11
DxC22_11oth
DxC22_98
DxC22_98oth
DxC22_99
DxC22_99oth
DxC22_N

Select all that apply

- ☐ District food service director 1
- ☐ Superintendent 2
- ☐ Business manager 3
- ☐ Student database administrator 4
- ☐ Database or programming staff 5
- ☐ District-level food service clerical or administrative staff 6
- ☐ District-level communications department 7
- ☐ Other district-level clerical or administrative staff 8
- ☐ Principals 9
- ☐ School secretaries or administrative staff 10
- ☐ Other school-level staff 11

Specify ☐ (STRING 250)

- ☐ Other (SPECIFY) 98

Specify ☐ (STRING 250)

- ☐ Other (SPECIFY) 99

Specify ☐ (STRING 250)

- ☐ Not applicable ..... N GO TO C24

NO RESPONSE ..... M GO TO C24

SOFT CHECK: IF C22=NO RESPONSE; **Your response to this question is important. Please provide a response and continue.**

C22 NE M AND C22 NE N
FILL RESPONSE OPTIONS (A-J) FROM RESPONSES SELECTED AT C22
FILL RESPONSE OPTION K FROM C22oth_specify; IF C22oth_specify IS EMPTY, FILL **The other school-level staff member you mentioned**
FILL RESPONSE OPTIONS L AND M FROM C22oth_specify; IF C22oth_specify IS EMPTY, FILL **The other staff member you mentioned**

C23. How many total hours did all staff in each of the following categories spend <u>letting parents or guardians know about the application process</u> each month? Please include management time. *(Your best estimate is fine.)*

PROGRAMMER: RANGE FOR GRID IS 0 – 999

	Hours in [MONTH 1]	Hours in [MONTH 2]	Hours in [MONTH 3]	
a. District food service director				*DxC23a_01 DxC23a_02 DxC23a_03*
b. Superintendent				*DxC23b_01 DxC23b_02 DxC23b_03*
c. Business manager				*DxC23c_01 DxC23c_02 DxC23c_03*
d. Student database administrator				*DxC23d_01 DxC23d_02 DxC23d_03*
e. Database or programming staff				*DxC23e_01 DxC23e_02 DxC23e_03*
f. District-level food service clerical or administrative staff				*DxC23f_01 DxC23f_02 DxC23f_03*
g. District-level communications department				*DxC23g_01 DxC23g_02 DxC23g_03*
h. Other district-level clerical or administrative staff				*DxC23h_01 DxC23h_02 DxC23h_03*
i. Principals				*DxC23i_01 DxC23i_02 DxC23i_03*
j. School secretaries or administrative staff				*DxC23j_01 DxC23j_02 DxC23j_03*
k. [Fill from C22oth_specify/ The other school-level staff member you mentioned]				*DxC23k_01 DxC23k_02 DxC23k_03*
l. [Fill from C22oth_specify /The other staff member you mentioned]				*DxC23l_01 DxC23l_02 DxC23l_03*
m. [Fill from C22oth_specify /The other staff member you mentioned]				*DxC23m_01 DxC23m_02 DxC23m_03*

SOFT CHECK: IF ANY C23a-C23m=NO RESPONSE; **One or more fields have been left blank. Please update your response and continue.**

ALL

C24. How are hardcopy application forms distributed?

DxC24_01
DxC24_02
DxC24_03
DxC24_04
DxC24_99
DxC24_99oth

Select all that apply

- ☐ Picked up at school registration and/or school offices 1
- ☐ Available to print from district website 2
- ☐ Mailed to parents or guardians 3
- ☐ Sent home with students 4
- ☐ Other (SPECIFY) 99

Specify ☐ (STRING 250)

NO RESPONSE ..... M

ALL

C25. Who works on mailing application forms to parents or guardians and/or distributing application forms to schools to send home with students?

DxC25_01
DxC25_02
DxC25_03
DxC25_04
DxC25_05
DxC25_06
DxC25_07
DxC25_08
DxC25_09
DxC25_10
DxC25_11
DxC25_11oth
DxC25_98
DxC25_98oth
DxC25_99
DxC25_99oth
DxC25_N

Select all that apply

- ☐ District food service director 1
- ☐ Superintendent 2
- ☐ Business manager 3
- ☐ Student database administrator 4
- ☐ Database or programming staff 5
- ☐ District-level food service clerical or administrative staff 6
- ☐ District-level communications department 7
- ☐ Other district-level clerical or administrative staff 8
- ☐ Principals 9
- ☐ School secretaries or administrative staff 10
- ☐ Other school-level staff 11

Specify ☐ (STRING 250)

- ☐ Other (SPECIFY) 98

Specify ☐ (STRING 250)

- ☐ Other (SPECIFY) 99

Specify ☐ (STRING 250)

- ☐ Not applicable ..... N GO TO C27

NO RESPONSE ..... M GO TO C27

SOFT CHECK: IF C25=NO RESPONSE; **Your response to this question is important. Please provide a response and continue.**

C25 NE M AND C25 NE N
FILL RESPONSE OPTIONS (A-J) FROM RESPONSES SELECTED AT C25
FILL RESPONSE OPTION K FROM C25oth_specify; IF C25oth_specify IS EMPTY, FILL **The other school-level staff member you mentioned**
FILL RESPONSE OPTIONS L AND M FROM C25oth_specify; IF C25oth_specify IS EMPTY, FILL **The other staff member you mentioned**

C26. How many total hours did all staff in each of the following categories spend <u>mailing application forms to parents or guardians and/or distributing application forms to schools to send home with students</u> each month? Please include management time. *(Your best estimate is fine.)*

PROGRAMMER: RANGE FOR GRID IS 0 – 999

	Hours in [MONTH 1]	Hours in [MONTH 2]	Hours in [MONTH 3]	
a. District food service director				*DxC26a_01 DxC26a_02 DxC26a_03*
b. Superintendent				*DxC26b_01 DxC26b_02 DxC26b_03*
c. Business manager				*DxC26c_01 DxC26c_02 DxC26c_03*
d. Student database administrator				*DxC26d_01 DxC26d_02 DxC26d_03*
e. Database or programming staff				*DxC26e_01 DxC26e_02 DxC26e_03*
f. District-level food service clerical or administrative staff				*DxC26f_01 DxC26f_02 DxC26f_03*
g. District-level communications department				*DxC26g_01 DxC26g_02 DxC26g_03*
h. Other district-level clerical or administrative staff				*DxC26h_01 DxC26h_02 DxC26h_03*
i. Principals				*DxC26i_01 DxC26i_02 DxC26i_03*
j. School secretaries or administrative staff				*DxC26j_01 DxC26j_02 DxC26j_03*
k. [Fill from C25oth_specify/ The other school-level staff member you mentioned]				*DxC26k_01 DxC26k_02 DxC26k_03*
l. [Fill from C25oth_specify /The other staff member you mentioned]				*DxC26l_01 DxC26l_02 DxC26l_03*
m. [Fill from C25oth_specify /The other staff member you mentioned]				*DxC26m_01 DxC26m_02 DxC26m_03*

SOFT CHECK: IF ANY C26a-C26m=NO RESPONSE; **One or more fields have been left blank. Please update your response and continue.**

ALL

C27. Who answers calls with questions about the application process?

DxC27_01
DxC27_02
DxC27_03
DxC27_04
DxC27_05
DxC27_06
DxC27_07
DxC27_08
DxC27_09
DxC27_10
DxC27_11
DxC27_11oth
DxC27_98
DxC27_98oth
DxC27_99
DxC27_99oth
DxC27_N

Select all that apply

- ☐ District food service director 1
- ☐ Superintendent 2
- ☐ Business manager 3
- ☐ Student database administrator 4
- ☐ Database or programming staff 5
- ☐ District-level food service clerical or administrative staff 6
- ☐ District-level communications department 7
- ☐ Other district-level clerical or administrative staff 8
- ☐ Principals 9
- ☐ School secretaries or administrative staff 10
- ☐ Other school-level staff 11

Specify [ ] (STRING 250)

- ☐ Other (SPECIFY) 98

Specify [ ] (STRING 250)

- ☐ Other (SPECIFY) 99

Specify [ ] (STRING 250)

- ☐ Not applicable ..... N GO TO C29

NO RESPONSE ..... M GO TO C29

SOFT CHECK: IF C27=NO RESPONSE; **Your response to this question is important. Please provide a response and continue.**

C27 NE M AND C27 NE N
FILL RESPONSE OPTIONS (A-J) FROM RESPONSES SELECTED AT C27
FILL RESPONSE OPTION K FROM C27oth_specify; IF C27oth_specify IS EMPTY, FILL **The other school-level staff member you mentioned**
FILL RESPONSE OPTIONS L AND M FROM C27oth_specify; IF C27oth_specify IS EMPTY, FILL **The other staff member you mentioned**

C28. How many total hours did all staff in each of the following categories spend <u>answering calls about the application process</u> each month? Please include management time. *(Your best estimate is fine.)*

PROGRAMMER: RANGE FOR GRID IS 0 – 999

	Hours in [MONTH 1]	Hours in [MONTH 2]	Hours in [MONTH 3]	
a. District food service director				*DxC28a_01* *DxC28a_02* *DxC28a_03*
b. Superintendent				*DxC28b_01* *DxC28b_02* *DxC28b_03*
c. Business manager				*DxC28c_01* *DxC28c_02* *DxC28c_03*
d. Student database administrator				*DxC28d_01* *DxC28d_02* *DxC28d_03*
e. Database or programming staff				*DxC28e_01* *DxC28e_02* *DxC28e_03*
f. District-level food service clerical or administrative staff				*DxC28f_01* *DxC28f_02* *DxC28f_03*
g. District-level communications department				*DxC28g_01* *DxC28g_02* *DxC28g_03*
h. Other district-level clerical or administrative staff				*DxC28h_01* *DxC28h_02* *DxC28h_03*
i. Principals				*DxC28i_01* *DxC28i_02* *DxC28i_03*
j. School secretaries or administrative staff				*DxC28j_01* *DxC28j_02* *DxC28j_03*
k. [Fill from C27oth_specify/ The other school-level staff member you mentioned]				*DxC28k_01* *DxC28k_02* *DxC28k_03*
l. [Fill from C27oth_specify /The other staff member you mentioned]				*DxC28l_01* *DxC28l_02* *DxC28l_03*
m. [Fill from C27oth_specify /The other staff member you mentioned]				*DxC28m_01* *DxC28m_02* *DxC28m_03*

SOFT CHECK: IF ANY C28a-C28m=NO RESPONSE; **One or more fields have been left blank. Please update your response and continue.**

C4 = 1

The next questions are about the submission and processing of applications in your district.

C29. How often are applications submitted online processed?

DxC29
DxC29_oth

Select one only

- ❍ On a rolling basis as they are submitted 1
- ❍ Daily 2
- ❍ More than once a week 3
- ❍ Once a week 4
- ❍ Once every two weeks 5
- ❍ Other (SPECIFY) 99

Specify ☐ (STRING 250)

NO RESPONSE ..... M

ALL

C30. Are paper forms returned to the child's school or to a central office?

DxC30

Select one only

- ❍ Child's school 1
- ❍ Central office 2
- ❍ Both child's school and central office 3

NO RESPONSE ..... M

ALL

C31. Is a business reply envelope provided for parents or guardians to return applications?

DxC31

- ❍ Yes 1
- ❍ No 0

NO RESPONSE ..... M

C30 NE 2

C32. Who collects the hardcopy application forms at the school level?

DxC32_01
DxC32_02
DxC32_03
DxC32_04
DxC32_4oth
DxC32_98
DxC32_98oth
DxC32_99
DxC32_99oth
DxC32_N

Select all that apply

☐ Principals 1

☐ School secretaries or administrative staff 2

☐ School-level food service staff 3

☐ Other school-level staff 4

Specify ☐ (STRING 250)

☐ Other (SPECIFY) 98

Specify ☐ (STRING 250)

☐ Other (SPECIFY) 99

Specify ☐ (STRING 250)

☐ Not applicable ..... N GO TO C34

NO RESPONSE ..... M GO TO C34

SOFT CHECK: IF C32=NO RESPONSE; **Your response to this question is important. Please provide a response and continue.**

C30 NE 2 AND C32 NE M AND C32 NE N
FILL RESPONSE OPTIONS A AND B FROM RESPONSES SELECTED AT C32
FILL RESPONSE OPTION C FROM C32oth_specify; IF C32oth_specify IS EMPTY, FILL **The other school-level staff member you mentioned**
FILL RESPONSE OPTIONS D AND E FROM C32oth_specify; IF C32oth_specify IS EMPTY, FILL **The other staff member you mentioned**

C33. How many total hours did all staff in each of the following categories spend <u>collecting hardcopy application forms</u> each month? Please include management time. *(Your best estimate is fine.)*

PROGRAMMER: RANGE FOR GRID IS 0 – 999

	Hours in [MONTH 1]	Hours in [MONTH 2]	Hours in [MONTH 3]	
a. Principals				*DxC33a_01* *DxC33a_02* *DxC33a_03*
b. School secretaries or administrative staff				*DxC33b_01* *DxC33b_02* *DxC33b_03*
c. School-level food service staff				*DxC33c_01* *DxC33c_02* *DxC33c_03*
d. [Fill from C32oth_specify/ The other school-level staff member you mentioned]				*DxC33d_01* *DxC33d_02* *DxC33d_03*
e. [Fill from C32oth_specify /The other staff member you mentioned]				*DxC33e_01* *DxC33e_02* *DxC33e_03*
f. [Fill from C32oth_specify /The other staff member you mentioned]				*DxC33f_01* *DxC33f_02* *DxC33f_03*

SOFT CHECK: IF ANY C33a-C33f=NO RESPONSE; **One or more fields have been left blank. Please update your response and continue.**

C30 NE 2

C34. Are hardcopy applications logged in or processed at the school level?

DxC34

- ❍ Yes 1
- ❍ No 0

NO RESPONSE ..... M

C30 NE 2

C35. Does each school keep originals or copies of the hardcopy applications it receives?

DxC35

❍ Yes 1

❍ No 0

NO RESPONSE ..... M

C30 NE 2

C36. Who logs or copies forms (as applicable) and then sends the hardcopy application forms to the district office?

DxC36_01
DxC36_02
DxC36_03
DxC36_04
DxC36_04oth
DxC36_98
DxC36_98oth
DxC36_99
DxC36_99oth
DxC36_N

Select all that apply

☐ Principals 1

☐ School secretaries or administrative staff 2

☐ School-level food service staff 3

☐ Other school-level staff 4

Specify ☐ (STRING 250)

☐ Other (SPECIFY) 98

Specify ☐ (STRING 250)

☐ Other (SPECIFY) 99

Specify ☐ (STRING 250)

☐ Not applicable ..... N GO TO C38

NO RESPONSE ..... M GO TO C38

SOFT CHECK: IF C36=NO RESPONSE; **Your response to this question is important. Please provide a response and continue.**

C30 NE 2 AND C36 NE M AND C36 NE N
FILL RESPONSE OPTIONS A AND B FROM RESPONSES SELECTED AT C36
FILL RESPONSE OPTION C FROM C36oth_specify; IF C36oth_specify IS EMPTY, FILL **The other school-level staff member you mentioned**
FILL RESPONSE OPTIONS D AND E FROM C36oth_specify; IF C36oth_specify IS EMPTY, FILL **The other staff member you mentioned**

C37. How many total hours did all staff in each of the following categories spend at the school level <u>logging, tracking, or sending hardcopy application forms to the district office</u> each month? Please include management time. *(Your best estimate is fine.)*

PROGRAMMER: RANGE FOR GRID IS 0 – 999

	Hours in [MONTH 1]	Hours in [MONTH 2]	Hours in [MONTH 3]	
a. Principals				*DxC37a_01* *DxC37a_02*
b. School secretaries or administrative staff				*DxC37a_03* *DxC37b_01* *DxC37b_02*
c. School-level food service staff				*DxC37b_03* *DxC37c_01*
d. [Fill from C36oth_specify/ The other school-level staff member you mentioned]				*DxC37c_02* *DxC37c_03* *DxC37d_01*
e. [Fill from C36oth_specify /The other staff member you mentioned]				*DxC37d_02* *DxC37d_03* *DxC37e_01*
f. [Fill from C36oth_specify /The other staff member you mentioned]				*DxC37e_02* *DxC37e_03* *DxC37f_01* *DxC37f_02* *DxC37f_03*

SOFT CHECK: IF ANY C37a-C37f=NO RESPONSE; **One or more fields have been left blank. Please update your response and continue.**

C30 NE 2

C38. How often are hardcopy application forms sent to the district office?

DxC38
DxC38_oth

Select one only

- ❍ Daily 1
- ❍ 2 -4 times a week 2
- ❍ Once a week 3
- ❍ Once every two weeks 4
- ❍ Kept at school level 5
- ❍ Other (SPECIFY) 99

Specify ☐ (STRING 250)

NO RESPONSE ..... M

ALL

C39. Who works on logging and tracking hardcopy application forms at the <u>district</u> level?

DxC39_01
DxC39_02
DxC39_03
DxC39_04
DxC39_05
DxC39_06
DxC39_07
DxC39_08
DxC39_98
DxC39_98oth
DxC39_99
DxC39_99oth
DxC39_N

Select all that apply

- ☐ District food service director 1
- ☐ Superintendent 2
- ☐ Business manager 3
- ☐ Student database administrator 4
- ☐ Database or programming staff 5
- ☐ District-level food service clerical or administrative staff 6
- ☐ District-level communications department 7
- ☐ Other district-level clerical or administrative staff 8
- ☐ Other (SPECIFY) 98

Specify [ ] (STRING 250)

- ☐ Other (SPECIFY) 99

Specify [ ] (STRING 250)

- ☐ Not applicable ..... N GO TO C41

NO RESPONSE ..... M GO TO C41

SOFT CHECK: IF C39=NO RESPONSE; **Your response to this question is important. Please provide a response and continue.**

C39 NE M
FILL RESPONSE OPTIONS (A-H) FROM RESPONSES SELECTED AT C39
FILL RESPONSE OPTIONS I AND J FROM C39oth_specify; IF C39oth_specify IS EMPTY, FILL **The other staff member you mentioned**

C40. How many total hours did all staff in each of the following categories spend <u>logging and tracking application forms at the district level</u> each month? Please include management time. *(Your best estimate is fine.)*

PROGRAMMER: RANGE FOR GRID IS 0 – 999

	Hours in [MONTH 1]	Hours in [MONTH 2]	Hours in [MONTH 3]	
a. District food service director				*DxC40a_01* *DxC40a_02* *DxC40a_03*
b. Superintendent				*DxC40b_01* *DxC40b_02* *DxC40b_03*
c. Business manager				*DxC40c_01* *DxC40c_02* *DxC40c_03*
d. Student database administrator				*DxC40d_01* *DxC40d_02* *DxC40d_03*
e. Database or programming staff				*DxC40e_01* *DxC40e_02* *DxC40e_03*
f. District-level food service clerical or administrative staff				*DxC40f_01* *DxC40f_02* *DxC40f_03*
g. District-level communications department				*DxC40g_01* *DxC40g_02* *DxC40g_03*
h. Other district-level clerical or administrative staff				*DxC40h_01* *DxC40h_02* *DxC40h_03*
i. [Fill from C39oth_specify /The other staff member you mentioned]				*DxC40i_01* *DxC40i_02* *DxC40i_03*
j. [Fill from C39oth_specify /The other staff member you mentioned]				*DxC40j_01* *DxC40j_02* *DxC40j_03*

SOFT CHECK: IF ANY C40a-C40j=NO RESPONSE; **One or more fields have been left blank. Please update your response and continue.**

C30 NE 2

C41. Are hardcopy application forms checked for completeness at the school level or at the district level?

DxC41

Select one only

- ❍ School level 1
- ❍ District level 2
- ❍ Both school level and district level 3

NO RESPONSE ..... M

ALL

C42. Who works on checking hardcopy application forms for completeness and collecting critical missing information?

DxC42_01
DxC42_02
DxC42_03
DxC42_04
DxC42_05
DxC42_06
DxC42_07
DxC42_08
DxC42_09
DxC42_10
DxC42_11
DxC42_12
DxC42_12oth
DxC42_98
DxC42_98oth
DxC42_99
DxC42_99oth
DxC42_N

Select all that apply

- ☐ District food service director 1
- ☐ Superintendent 2
- ☐ Business manager 3
- ☐ Student database administrator 4
- ☐ Database or programming staff 5
- ☐ District-level food service clerical or administrative staff 6
- ☐ District-level communications department 7
- ☐ Other district-level clerical or administrative staff 8
- ☐ Principals 9
- ☐ School secretaries or administrative staff 10
- ☐ School-level food service staff 11
- ☐ Other school-level staff 12

Specify [ ] (STRING 250)

- ☐ Other (SPECIFY) 98

Specify [ ] (STRING 250)

- ☐ Other (SPECIFY) 99

Specify [ ] (STRING 250)

- ☐ Not applicable ..... N GO TO C44

NO RESPONSE ..... M GO TO C44

SOFT CHECK: IF C42=NO RESPONSE; **Your response to this question is important. Please provide a response and continue.**

C42 NE M AND C42 NE N
FILL RESPONSE OPTIONS (A-J) FROM RESPONSES SELECTED AT C42
FILL RESPONSE OPTION K FROM C42oth_specify; IF C42oth_specify IS EMPTY, FILL **The other school-level staff member you mentioned**
FILL RESPONSE OPTIONS L AND M FROM C42oth_specify; IF C42oth_specify IS EMPTY, FILL **The other staff member you mentioned**

C43. How many total hours did all staff in each of the following categories spend <u>checking hardcopy application forms for completeness and/or collecting critical missing information</u> each month? Please include management time. *(Your best estimate is fine.)*

PROGRAMMER: RANGE FOR GRID IS 0 – 999

	Hours in [MONTH 1]	Hours in [MONTH 2]	Hours in [MONTH 3]	
a. District food service director				*DxC43a_01 DxC43a_02 DxC43a_03*
b. Superintendent				*DxC43b_01 DxC43b_02 DxC43b_03*
c. Business manager				*DxC43c_01 DxC43c_02 DxC43c_03*
d. Student database administrator				*DxC43d_01 DxC43d_02 DxC43d_03*
e. Database or programming staff				*DxC43e_01 DxC43e_02 DxC43e_03*
f. District-level food service clerical or administrative staff				*DxC43f_01 DxC43f_02 DxC43f_03*
g. District-level communications department				*DxC43g_01 DxC43g_02 DxC43g_03*
h. Other district-level clerical or administrative staff				*DxC43h_01 DxC43h_02 DxC43h_03*
i. Principals				*DxC43i_01 DxC43i_02 DxC43i_03*
j. School secretaries or administrative staff				*DxC43j_01 DxC43j_02 DxC43j_03*
k. School-level food service staff				*DxC43k_01 DxC43k_02 DxC43k_03*
l. [Fill from C42oth_specify/ The other school-level staff member you mentioned]				*DxC43l_01 DxC43l_02 DxC43l_03*
m. [Fill from C42oth_specify /The other staff member you mentioned]				*DxC43m_01 DxC43m_02 DxC43m_03*
n. [Fill from C42oth_specify /The other staff member you mentioned]				*DxC43n_01 DxC43n_02 DxC43n_03*

SOFT CHECK: IF ANY C43a-C43n=NO RESPONSE; **One or more fields have been left blank. Please update your response and continue.**

ALL

C44. How is critical missing information from a hardcopy application (such as a signature) obtained?

DxC44_01
DxC44_02
DxC44_03
DxC44_04
DxC44_05
DxC44_99
DxC44_99oth

Select all that apply

- ☐ Letters mailed to parents or guardians 1
- ☐ Letters sent home with students 2
- ☐ Telephone calls or text messages to parents or guardians 3
- ☐ E-mail to parents or guardians 4
- ☐ Visits to students' homes 5
- ☐ Other (SPECIFY) 99

Specify [ ] (STRING 250)

NO RESPONSE ..... M

ALL

C45. For "complete" applications, is there an automated process in place to determine students' certification status?

DxC45

Select one only

- ❍ Yes, fully automated process in place 1
- ❍ Yes, partly automated process in place with some manual steps 2
- ❍ No automated process in place 0

NO RESPONSE ..... M

ALL

C46. Who reviews "complete" applications to determine certification status? Please include internal review of initial determination.

DxC46_01
DxC46_02
DxC46_03
DxC46_04
DxC46_05
DxC46_06
DxC46_07
DxC46_08
DxC46_09
DxC46_10
DxC46_11
DxC46_12
DxC46_12oth
DxC46_98
DxC46_98oth
DxC46_99
DxC46_99oth
DxC46_N

Select all that apply

- ☐ Automated review process 1
- ☐ District food service director 2
- ☐ Superintendent 3
- ☐ Business manager 4
- ☐ Student database administrator 5
- ☐ Database or programming staff 6
- ☐ District-level food service clerical or administrative staff 7
- ☐ District-level communications department 8
- ☐ Other district-level clerical or administrative staff 9
- ☐ Principals 10
- ☐ School secretaries or administrative staff 11
- ☐ Other school-level staff 12

Specify [ ] (STRING 250)

- ☐ Other (SPECIFY) 98

Specify [ ] (STRING 250)

- ☐ Other (SPECIFY) 99

Specify [ ] (STRING 250)

- ☐ Not applicable ..... N GO TO C48

NO RESPONSE ..... M GO TO C48

SOFT CHECK: IF C46=NO RESPONSE; **Your response to this question is important. Please provide a response and continue.**

C46=2 OR C46=3 OR C46=4 OR C46=5 OR C46=6 OR C46=7 OR C46=8 OR C46=9 OR C46=10 OR C46=11 OR C46=12 OR C46=98 OR C46=99
FILL RESPONSE OPTIONS (A-K) FROM RESPONSES SELECTED AT C46
FILL RESPONSE OPTION L FROM C46oth_specify; IF C46oth_specify IS EMPTY, FILL **The other school-level staff member you mentioned**
FILL RESPONSE OPTIONS M AND N FROM C46oth_specify; IF C46oth_specify IS EMPTY, FILL **The other staff member you mentioned**

C47. How many total hours did all staff in each of the following categories spend <u>reviewing completed applications to determine certification status</u> each month? Please include management time and time spent on internal reviews of initial determination. *(Your best estimate is fine.)*

PROGRAMMER: RANGE FOR GRID IS 0 – 999

	Hours in [MONTH 1]	Hours in [MONTH 2]	Hours in [MONTH 3]	
a. NO OPTION A IN THIS VERSION				*DxC47b_01* *DxC47b_02*
b. District food service director				*DxC47b_03* *DxC47c_01* *DxC47c_02*
c. Superintendent				*DxC47c_03* *DxC47d_01* *DxC47d_02*
d. Business manager				*DxC47d_03* *DxC47e_01* *DxC47e_02*
e. Student database administrator				*DxC47e_03* *DxC47f_01* *DxC47f_02*
f. Database or programming staff				*DxC47f_03* *DxC47g_01* *DxC47g_02*
g. District-level food service clerical or administrative staff				*DxC47g_03* *DxC47h_01* *DxC47h_02*
h. District-level communications department				*DxC47h_03* *DxC47i_01* *DxC47i_02*
i. Other district-level clerical or administrative staff				*DxC47i_03* *DxC47j_01* *DxC47j_02*
j. Principals				*DxC47j_03* *DxC47k_01* *DxC47k_02*
k. School secretaries or administrative staff				*DxC47k_03* *DxC47l_01* *DxC47l_02*
l. [Fill from C46oth_specify/ The other school-level staff member you mentioned]				*DxC47l_03* *DxC47m_01* *DxC47m_02*
m. [Fill from C46oth_specify /The other staff member you mentioned]				*DxC47m_03* *DxC47n_01* *DxC47n_02*
n. [Fill from C46oth_specify /The other staff member you mentioned]				*DxC47n_03*

SOFT CHECK: IF ANY C47a-C47m=NO RESPONSE; **One or more fields have been left blank. Please update your response and continue.**

ALL

C48. For how long are hardcopy application forms stored?

DxC48_01
DxC48_02
DxC48_03
DxC48_04
DxC48_05
DxC48_99
DxC48_99oth

Select all that apply

- ☐ Stored electronically 1
- ☐ Less than one year 2
- ☐ Between one year and three years 3
- ☐ Between three years and five years 4
- ☐ Longer than five years 5
- ☐ Other (SPECIFY) 99

Specify ☐ (STRING 250)

NO RESPONSE ..... M

ALL

C49. Are hardcopy application forms stored at the school level or the district level?

DxC49

Select one only

- ❍ Stored at the school level only 1
- ❍ Stored at the district level only 2
- ❍ Stored at both the school level and the district level 3

NO RESPONSE ..... M

ALL

C50. How many applications for free or reduced-price lunch were <u>received</u> during each month?

PROGRAMMER: RANGE FOR GRID IS 0 – 1,500,000

DxC50a
DxC50b
DxC50c

	Applications
a. Number received in [MONTH 1]	
b. Number received in [MONTH 2]	
c. Number received in [MONTH 3]	

SOFT CHECK: IF C50=NO RESPONSE; **Your response to this question is important. Please provide a response and continue.**

ALL

C51. How many applications for free or reduced-price lunch were <u>approved</u> during each month?

PROGRAMMER: RANGE FOR GRID IS 0 – 1,500,000

DxC51a
DxC51b
DxC51c

	Applications
a. Number approved in [MONTH 1]	
b. Number approved in [MONTH 2]	
c. Number approved in [MONTH 3]	

SOFT CHECK: IF C51=NO RESPONSE; **Your response to this question is important. Please provide a response and continue.**

*D. NOTIFICATION OF CERTIFICATION STATUS

ALL

The remaining questions are about students certified through the application process, as well as those who are directly certified.

D1. Who works on maintaining required documentation of certification status?

Select all that apply

DxD01_01	☐ District food service director	1
DxD01_02	☐ Superintendent	2
DxD01_03	☐ Business manager	3
DxD01_04	☐ Student database administrator	4
DxD01_05	☐ Database or programming staff	5
DxD01_06	☐ District-level food service clerical or administrative staff	6
DxD01_07	☐ District-level communications department	7
DxD01_08	☐ Other district-level clerical or administrative staff	8
DxD01_09	☐ Principals	9
DxD01_10	☐ School secretaries or administrative staff	10
DxD01_11	☐ School-level food service staff	11
DxD01_12	☐ Other school-level staff	12
DxD01_12oth	Specify ☐ (STRING 250)	
DxD01_98	☐ Other (SPECIFY)	98
DxD01_98oth	Specify ☐ (STRING 250)	
DxD01_99	☐ Other (SPECIFY)	99
DxD01_99oth	Specify ☐ (STRING 250)	
DxD01_N	☐ Not applicable	N GO TO D3
	NO RESPONSE	M GO TO D3

SOFT CHECK: IF D1=NO RESPONSE; **Your response to this question is important. Please provide a response and continue.**

D1 NE M AND D1 NE N
FILL RESPONSE OPTIONS (A-J) FROM RESPONSES SELECTED AT D1
FILL RESPONSE OPTION K FROM D1oth_specify; IF D1oth_specify IS EMPTY, FILL **The other school-level staff member you mentioned**
FILL RESPONSE OPTIONS L AND M FROM D1oth_specify; IF D1oth_specify IS EMPTY, FILL **The other staff member you mentioned**

D2. **How many total hours did all staff in each of the following categories spend <u>maintaining required documentation of certification status</u> each month? Please include management time.** *(Your best estimate is fine.)*

PROGRAMMER: RANGE FOR GRID IS 0 – 999

	Hours in [MONTH 1]	Hours in [MONTH 2]	Hours in [MONTH 3]
a. District food service director			
b. Superintendent			
c. Business manager			
d. Student database administrator			
e. Database or programming staff			
f. District-level food service clerical or administrative staff			
g. District-level communications department			
h. Other district-level clerical or administrative staff			
i. Principals			
j. School secretaries or administrative staff			
k. School-level food service staff			
l. [Fill from D1oth_specify/ The other school-level staff member you mentioned]			
m. [Fill from D1oth_specify /The other staff member you mentioned]			
n. [Fill from D1oth_specify /The other staff member you mentioned]			

DxD02a_01
DxD02a_02
DxD02a_03
DxD02b_01
DxD02b_02
DxD02b_03
DxD02c_01
DxD02c_02
DxD02c_03
DxD02d_01
DxD02d_02
DxD02d_03
DxD02e_01
DxD02e_02
DxD02e_03
DxD02f_01
DxD02f_02
DxD02f_03
DxD02g_01
DxD02g_02
DxD02g_03
DxD02h_01
DxD02h_02
DxD02h_03
DxD02i_01
DxD02i_02
DxD02i_03
DxD02j_01
DxD02j_02
DxD02j_03
DxD02k_01
DxD02k_02
DxD02k_03
DxD02l_01
DxD02l_02
DxD02l_03
DxD02m_01
DxD02m_02
DxD02m_03
DxD02n_01
DxD02n_02
DxD02n_03

SOFT CHECK: IF ANY D1a-D1n=NO RESPONSE; **One or more fields have been left blank. Please update your response and continue.**

ALL

D3. Who works on drafting or updating the letters sent to notify parents or guardians of their children's certification status?

DxD03_01
DxD03_02
DxD03_03
DxD03_04
DxD03_05
DxD03_06
DxD03_07
DxD03_08
DxD03_09
DxD03_10
DxD03_11
DxD03_11oth
DxD03_98
DxD03_98oth
DxD03_99
DxD03_99oth
DxD03_N

Select all that apply

- ☐ District food service director 1
- ☐ Superintendent 2
- ☐ Business manager 3
- ☐ Student database administrator 4
- ☐ Database or programming staff 5
- ☐ District-level food service clerical or administrative staff 6
- ☐ District-level communications department 7
- ☐ Other district-level clerical or administrative staff 8
- ☐ Principals 9
- ☐ School secretaries or administrative staff 10
- ☐ Other school-level staff 11

Specify [ ] (STRING 250)

- ☐ Other (SPECIFY) 98

Specify [ ] (STRING 250)

- ☐ Other (SPECIFY) 99

Specify [ ] (STRING 250)

- ☐ Not applicable ..... N GO TO D5

NO RESPONSE ..... M GO TO D5

SOFT CHECK: IF D3=NO RESPONSE; **Your response to this question is important. Please provide a response and continue.**

D3 NE M AND D3 NE N
FILL RESPONSE OPTIONS (A-J) FROM RESPONSES SELECTED AT D3
FILL RESPONSE OPTION K FROM D3oth_specify; IF D3oth_specify IS EMPTY, FILL **The other school-level staff member you mentioned**
FILL RESPONSE OPTIONS L AND M FROM D3oth_specify; IF D3oth_specify IS EMPTY, FILL **The other staff member you mentioned**

D4. **How many total hours did all staff in each of the following categories spend <u>drafting or updating notification letters</u> each month? Please include management time.** *(Your best estimate is fine.)*

PROGRAMMER: RANGE FOR GRID IS 0 – 999

	Hours in [MONTH 1]	Hours in [MONTH 2]	Hours in [MONTH 3]	
a. District food service director				*DxD04a_01* *DxD04a_02*
b. Superintendent				*DxD04a_03* *DxD04b_01* *DxD04b_02*
c. Business manager				*DxD04b_03* *DxD04c_01* *DxD04c_02*
d. Student database administrator				*DxD04c_03* *DxD04d_01* *DxD04d_02*
e. Database or programming staff				*DxD04d_03* *DxD04e_01* *DxD04e_02*
f. District-level food service clerical or administrative staff				*DxD04e_03* *DxD04f_01* *DxD04f_02*
g. District-level communications department				*DxD04f_03* *DxD04g_01* *DxD04g_02*
h. Other district-level clerical or administrative staff				*DxD04g_03* *DxD04h_01* *DxD04h_02*
i. Principals				*DxD04h_03* *DxD04i_01* *DxD04i_02*
j. School secretaries or administrative staff				*DxD04i_03* *DxD04j_01* *DxD04j_02*
k. [Fill from D3oth_specify/ The other school-level staff member you mentioned]				*DxD04j_03* *DxD04k_01* *DxD04k_02*
l. [Fill from D3oth_specify /The other staff member you mentioned]				*DxD04k_03* *DxD04l_01* *DxD04l_02*
m. [Fill from D3oth_specify /The other staff member you mentioned]				*DxD04l_03* *DxD04m_01* *DxD04m_02* *DxD04m_03*

SOFT CHECK: IF ANY D4a-D4m=NO RESPONSE; **One or more fields have been left blank. Please update your response and continue.**

ALL

D5. Who works on printing or copying the letters sent to notify parents or guardians of certification status?

DxD05_01
DxD05_02
DxD05_03
DxD05_04
DxD05_05
DxD05_06
DxD05_07
DxD05_08
DxD05_09
DxD05_10
DxD05_11
DxD05_11oth
DxD05_98
DxD05_98oth
DxD05_99
DxD05_99oth
DxD05_N

Select all that apply

- ☐ District food service director 1
- ☐ Superintendent 2
- ☐ Business manager 3
- ☐ Student database administrator 4
- ☐ Database or programming staff 5
- ☐ District-level food service clerical or administrative staff 6
- ☐ District-level communications department 7
- ☐ Other district-level clerical or administrative staff 8
- ☐ Principals 9
- ☐ School secretaries or administrative staff 10
- ☐ Other school-level staff 11

Specify [ ] (STRING 250)

- ☐ Other (SPECIFY) 98

Specify [ ] (STRING 250)

- ☐ Other (SPECIFY) 99

Specify [ ] (STRING 250)

- ☐ Not applicable ..... N GO TO D7

NO RESPONSE ..... M GO TO D7

SOFT CHECK: IF D5=NO RESPONSE; **Your response to this question is important. Please provide a response and continue.**

D5 NE M AND D5 NE N
FILL RESPONSE OPTIONS (A-J) FROM RESPONSES SELECTED AT D5
FILL RESPONSE OPTION K FROM D5oth_specify; IF D5oth_specify IS EMPTY, FILL **The other school-level staff member you mentioned**
FILL RESPONSE OPTIONS L AND M FROM D5oth_specify; IF D5oth_specify IS EMPTY, FILL **The other staff member you mentioned**

D6. **How many total hours did all staff in each of the following categories spend <u>printing or copying notification letters</u> each month? Please include management time.** *(Your best estimate is fine.)*

PROGRAMMER: RANGE FOR GRID IS 0 – 999

	Hours in [MONTH 1]	Hours in [MONTH 2]	Hours in [MONTH 3]	
a. District food service director				*DxD06a_01* *DxD06a_02* *DxD06a_03*
b. Superintendent				*DxD06b_01* *DxD06b_02* *DxD06b_03*
c. Business manager				*DxD06c_01* *DxD06c_02* *DxD06c_03*
d. Student database administrator				*DxD06d_01* *DxD06d_02* *DxD06d_03*
e. Database or programming staff				*DxD06e_01* *DxD06e_02* *DxD06e_03*
f. District-level food service clerical or administrative staff				*DxD06f_01* *DxD06f_02* *DxD06f_03*
g. District-level communications department				*DxD06g_01* *DxD06g_02* *DxD06g_03*
h. Other district-level clerical or administrative staff				*DxD06h_01* *DxD06h_02* *DxD06h_03*
i. Principals				*DxD06i_01* *DxD06i_02* *DxD06i_03*
j. School secretaries or administrative staff				*DxD06j_01* *DxD06j_02* *DxD06j_03*
k. [Fill from D5oth_specify/ The other school-level staff member you mentioned]				*DxD06k_01* *DxD06k_02* *DxD06k_03*
l. [Fill from D5oth_specify /The other staff member you mentioned]				*DxD06l_01* *DxD06l_02* *DxD06l_03*
m. [Fill from D5oth_specify /The other staff member you mentioned]				*DxD06m_01* *DxD06m_02* *DxD06m_03*

SOFT CHECK: IF ANY D6a-D6m=NO RESPONSE; **One or more fields have been left blank. Please update your response and continue.**

ALL

D7. How much money was spent on postage or other delivery costs for certification-related activities each month? Please include costs of mailing applications to parents or guardians, business reply envelopes, letters to parents or guardians notifying them of certification status, and any other postage or delivery costs.

PROGRAMMER: RANGE FOR GRID IS 0 – 999,999

DxD07a
DxD07b
DxD07c

	AMOUNT
a. Costs in [MONTH 1]	$
b. Costs in [MONTH 2]	$
c. Costs in [MONTH 3]	$

NO RESPONSE ..... M

ALL

D8. Who responds to questions about certification decisions?

Select all that apply

DxD08_01
DxD08_02
DxD08_03
DxD08_04
DxD08_05
DxD08_06
DxD08_07
DxD08_08
DxD08_09
DxD08_10
DxD08_11
DxD08_11oth
DxD08_98
DxD08_98oth
DxD08_99
DxD08_99oth
DxD08_N

- ☐ District food service director 1
- ☐ Superintendent 2
- ☐ Business manager 3
- ☐ Student database administrator 4
- ☐ Database or programming staff 5
- ☐ District-level food service clerical or administrative staff 6
- ☐ District-level communications department 7
- ☐ Other district-level clerical or administrative staff 8
- ☐ Principals 9
- ☐ School secretaries or administrative staff 10
- ☐ Other school-level staff 11

Specify [ ] (STRING 250)

- ☐ Other (SPECIFY) 98

Specify [ ] (STRING 250)

- ☐ Other (SPECIFY) 99

Specify [ ] (STRING 250)

- ☐ Not applicable ..... N GO TO D10

NO RESPONSE ..... M GO TO D10

SOFT CHECK: IF D8=NO RESPONSE; **Your response to this question is important. Please provide a response and continue.**

D8 NE M AND D8 NE N
FILL RESPONSE OPTIONS (A-J) FROM RESPONSES SELECTED AT D8
FILL RESPONSE OPTION K FROM D8oth_specify; IF D8oth_specify IS EMPTY, FILL **The other school-level staff member you mentioned**
FILL RESPONSE OPTIONS L AND M FROM D8oth_specify; IF D8oth_specify IS EMPTY, FILL **The other staff member you mentioned**

D9. How many total hours did all staff in each of the following categories spend <u>responding to questions about certification decisions</u> each month? Please include management time.
(Your best estimate is fine.)

PROGRAMMER: RANGE FOR GRID IS 0 – 999

	Hours in [MONTH 1]	Hours in [MONTH 2]	Hours in [MONTH 3]	
a. District food service director				*DxD09a_01* *DxD09a_02* *DxD09a_03*
b. Superintendent				*DxD09b_01* *DxD09b_02* *DxD09b_03*
c. Business manager				*DxD09c_01* *DxD09c_02* *DxD09c_03*
d. Student database administrator				*DxD09d_01* *DxD09d_02* *DxD09d_03*
e. Database or programming staff				*DxD09e_01* *DxD09e_02* *DxD09e_03*
f. District-level food service clerical or administrative staff				*DxD09f_01* *DxD09f_02* *DxD09f_03*
g. District-level communications department				*DxD09g_01* *DxD09g_02* *DxD09g_03*
h. Other district-level clerical or administrative staff				*DxD09h_01* *DxD09h_02* *DxD09h_03*
i. Principals				*DxD09i_01* *DxD09i_02* *DxD09i_03*
j. School secretaries or administrative staff				*DxD09j_01* *DxD09j_02* *DxD09j_03*
k. [Fill from D8oth_specify/ The other school-level staff member you mentioned]				*DxD09k_01* *DxD09k_02* *DxD09k_03*
l. [Fill from D8oth_specify /The other staff member you mentioned]				*DxD09l_01* *DxD09l_02* *DxD09l_03*
m. [Fill from D8oth_specify /The other staff member you mentioned]				*DxD09m_01* *DxD09m_02* *DxD09m_03*

SOFT CHECK: IF ANY D9a-D9m=NO RESPONSE; **One or more fields have been left blank. Please update your response and continue.**

ALL

D10. How are certification results made available to school food service cashiers?

DxD10
DxD10_oth

Select one only

❍ Transmitted through an automated process 1
❍ Lists printed and distributed 2
❍ Other (SPECIFY) 99

Specify [ ] (STRING 250)

NO RESPONSE ..... M

ALL

D11. Who coordinates or works on making certification results available to school food service cashiers? Please include entering certification status into electronic systems as well as creating printed lists.

DxD11_01
DxD11_02
DxD11_03
DxD11_04
DxD11_05
DxD11_06
DxD11_07
DxD11_08
DxD11_09
DxD11_10
DxD11_11
DxD11_12
DxD11_12oth
DxD11_98
DxD11_98oth
DxD11_99
DxD11_99oth
DxD11_N

Select all that apply

☐ District food service director 1
☐ Superintendent 2
☐ Business manager 3
☐ Student database administrator 4
☐ Database or programming staff 5
☐ District-level food service clerical or administrative staff 6
☐ District-level communications department 7
☐ Other district-level clerical or administrative staff 8
☐ Principals 9
☐ School secretaries or administrative staff 10
☐ School-level food service staff 11
☐ Other school-level staff 12

Specify [ ] (STRING 250)

☐ Other (SPECIFY) 98

Specify [ ] (STRING 250)

☐ Other (SPECIFY) 99

Specify [ ] (STRING 250)

☐ Not applicable ..... N GO TO E1

NO RESPONSE ..... M GO TO E1

SOFT CHECK: IF D11=NO RESPONSE; **Your response to this question is important. Please provide a response and continue.**

D11 NE M AND D11 NE N
FILL RESPONSE OPTIONS (A-J) FROM RESPONSES SELECTED AT D11
FILL RESPONSE OPTION K FROM D11oth_specify; IF D11oth_specify IS EMPTY, FILL **The other school-level staff member you mentioned**
FILL RESPONSE OPTIONS L AND M FROM D11oth_specify; IF D11oth_specify IS EMPTY, FILL **The other staff member you mentioned**

D12. How many total hours did all staff in each of the following categories spend <u>making certification results available to school food service cashiers</u> each month? Please include management time and time spent entering certification status into electronic systems, as well as time spent creating printed lists. *(Your best estimate is fine.)*

PROGRAMMER: RANGE FOR GRID IS 0 – 999

	Hours in [MONTH 1]	Hours in [MONTH 2]	Hours in [MONTH 3]	
a. District food service director				*DxD11a_01* *DxD11a_02* *DxD11a_03*
b. Superintendent				*DxD11b_01* *DxD11b_02* *DxD11b_03*
c. Business manager				*DxD11c_01* *DxD11c_02* *DxD11c_03*
d. Student database administrator				*DxD11d_01* *DxD11d_02* *DxD11d_03*
e. Database or programming staff				*DxD11e_01* *DxD11e_02* *DxD11e_03*
f. District-level food service clerical or administrative staff				*DxD11f_01* *DxD11f_02* *DxD11f_03*
g. District-level communications department				*DxD11g_01* *DxD11g_02* *DxD11g_03*
h. Other district-level clerical or administrative staff				*DxD11h_01* *DxD11h_02* *DxD11h_03*
i. Principals				*DxD11i_01* *DxD11i_02* *DxD11i_03*
j. School secretaries or administrative staff				*DxD11j_01* *DxD11j_02* *DxD11j_03*
k. School-level food service staff				*DxD11k_01* *DxD11k_02* *DxD11k_03*
l. [Fill from D11oth_specify/ The other school-level staff member you mentioned]				*DxD11l_01* *DxD11l_02* *dxD11l_03*
m. [Fill from D11oth_specify /The other staff member you mentioned]				*DxD11m_01* *DxD11m_02* *DxD11m_03*
n. [Fill from D11oth_specify /The other staff member you mentioned]				*DxD11n_01* *DxD11n_02* *DxD11n_03*

SOFT CHECK: IF ANY D12a-D12n=NO RESPONSE; **One or more fields have been left blank. Please update your response and continue.**

E. STAFF SALARIES

ALL
FILL RESPONSE OPTIONS (A-N) FROM RESPONSES SELECTED IN PRIOR QUESTIONS, AS INDICATED IN TABLE BELOW

E1. Each of the staff categories that you have indicated were involved in certification activities are listed below. Please enter the *average* salary or hourly rate (do not include fringe benefit costs) that employees in each category are paid. *(Please round to the nearest dollar.)*

DxE01a_amt
DxE01a_unit
DxE01b_amt
DxE01b_unit
DxE01c_amt
DxE01c_unit
DxE01d_amt
DxE01d_unit
DxE01e_amt
DxE01e_unit
DxE01f_amt
DxE01f_unit
DxE01g_amt
DxE01g_unit
DxE01h_amt
DxE01h_unit
DxE01i_amt
DxE01i_unit
DxE01j_amt
DxE01j_unit
DxE01k_amt
DxE01k_unit
DxE01l_amt
DxE01l_unit
DxE01m_amt
DxE01m_unit
DxE01n_amt
DxE01n_unit

For each salary or hourly rate, please indicate if that is per hour, per week, biweekly, bimonthly, per month or per year.

Staffing Position	Pay Rate (dollars)	Basis Paid (select from list)
(B1=1 OR C9=1OR C13=1 OR C16=1 OR C22=1 OR C25=1 OR C27=1 OR C39=1 OR C42=1 OR C46=2 OR D1=1 OR D3=1 OR D5=1 OR D8=1 OR D11=1) **a. District food service director**	a. ☐ (STRING 0.00 – 99,999,99)	a. 1 ❍ per hour 2 ❍ per week 3 ❍ biweekly 4 ❍ bimonthly 5 ❍ per month 6 ❍ per year
(B1=2 OR C9=2 OR C13=2 OR C16=2 OR C22=2 OR C25=2 OR C27=2 OR C39=2 OR C42=2 OR C46=3 OR D1=2 OR D3=2 OR D5=2 OR D8=2 OR D11=2) **b. Superintendent**	b.	b.
(B1=3 OR C9=3 OR C13=3 OR C16=3 OR C22=3 OR C25=3 OR C27=3 OR C39=3 OR C42=3 OR C46=4 OR D1=3 OR D3=3 OR D5=3 OR D8=3 OR D11=3) **c. Business manager**	c.	c.
(B1=4 OR C9=4 OR C13=4 OR C16=4 OR C22=4 OR C25=4 OR C27=4 OR C39=4 OR C42=4 OR C46=5 OR D1=4 OR D3=4 OR D5=4 OR D8=4 OR D11=4) **d. Student database administrator**	d.	d.
(B1=5 OR C9=5 OR C13=5 OR C16=5 OR C22=5 OR C25=5 OR C27=5 OR C39=5 OR C42=5 OR C46=6 OR D1=5 OR D3=5 OR D5=5 OR D8=5 OR D11=5) **e. Database or programming staff**	e.	e.

(B1=6 OR C9=6 OR C13=6 OR C16=6 OR C22=6 OR C25=6 OR C27=6 OR C39=6 OR C42=6 OR C46=7 OR D1=6 OR D3=6 OR D5=6 OR D8=6 OR D11=6) **f. District-level food service clerical or administrative staff**	f.	f.
(C9=7 OR C13=7 OR C16=7 OR C22=7 OR C25=7 OR C27=7 OR C39=7 OR C42=7 OR C46=8 OR D1=7 OR D3=7 OR D5=7 OR D8=7 OR D11=7) **g. District-level communications department**	g.	g.
(B1=7 OR C9=8 OR C13=8 OR C16=8 OR C22=8 OR C25=8 OR C27=8 OR C39=8 OR C42=8 OR C46=9 OR D1=8 OR D3=8 OR D5=8 OR D8=8 OR D11=8) **h. Other district-level clerical or administrative staff**	h.	h.
(C13=9 OR C16=9 OR C22=9 OR C25=9 OR C27=9 OR C32=1 OR C36=1 OR C42=9 OR C46=10 OR D1=9 OR D3=9 OR D5=9 OR D8=9 OR D11=9) **i. Principals**	i.	i.
(C13=10 OR C16=10 OR C22=10 OR C25=10 OR C27=10 OR C32=2 OR C36=2 OR C42=10 OR C46=11 OR D1=10 OR D3=10 OR D5=10 OR D8=10 OR D11=10) **j. School secretaries or administrative staff**	j.	j.
(C32=3 OR C36=3 OR C42=11 OR D1=11 OR D11=11) **k. School-level food service staff**	k.	k.
(C13=11 OR C16=11 OR C22=11 OR C25=11 OR C27=11 OR C32=4 OR C36=4 OR C42=12 OR C46=12 OR D1=12 OR D3=11 OR D5=11 OR D8=11 OR D11=12) **l. The other school-level staff member you mentioned**	l.	l.
(B1=98 OR C9=98 OR C13=98 OR C16=98 OR C22=98 OR C25=98 OR C27=98 OR C32=98 OR C36=98 OR C39=98 OR C42=98 OR C46=98 OR D1=98 OR D3=98 OR D5=98 OR D8=98 OR D11=98) **m. The other staff member you mentioned**	m.	m.
(B1=99 OR C9=99 OR C13=99 OR C16=99 OR C22=99 OR C25=99 OR C27=99 OR C32=99 OR C36=99 OR C39=99 OR C42=99 OR C46=99 OR D1=99 OR D3=99 OR D5=99 OR D8=99 OR D11=99) **n. The other staff member you mentioned**	n.	n.

SOFT CHECK: IF ANY E1a-E1n=NO RESPONSE; **One or more fields have been left blank. Please update your response and continue.**

ALL
FILL RESPONSE OPTIONS (A-N) FROM RESPONSES SELECTED IN PRIOR QUESTIONS, AS INDICATED IN TABLE BELOW

E2. For employees in each category, are fringe benefits calculated as a percentage (such as 50 percent of salary), or some other way?

If calculated as a percentage, please enter the rate in column E2a.

If fringe benefits are not calculated as a percentage, but as an amount or some other way, please enter the dollar amount in column E2b. *(Please round to the nearest dollar.)*

Please only include employer contributions to fringe benefits, including mandated benefits.

E1. Staffing Position (Fill with staff categories at Q…)	E2. Fringe Benefit	E2a. Fringe Benefit Percentage	E2b. Calculated another way (Enter dollar amount of fringe benefits):
(B1=1 OR C9=1OR C13=1 OR C16=1 OR C22=1 OR C25=1 OR C27=1 OR C39=1 OR C42=1 OR C46=2 OR D1=1 OR D3=1 OR D5=1 OR D8=1 OR D11=1) **a. District food service director**	a. 1 ❍ Percentage 2 ❍ Some other way	a. ☐ PERCENTAGE	a. $ ☐
(B1=2 OR C9=2 OR C13=2 OR C16=2 OR C22=2 OR C25=2 OR C27=2 OR C39=2 OR C42=2 OR C46=3 OR D1=2 OR D3=2 OR D5=2 OR D8=2 OR D11=2) **b. Superintendent**	b.	b.	b.
(B1=3 OR C9=3 OR C13=3 OR C16=3 OR C22=3 OR C25=3 OR C27=3 OR C39=3 OR C42=3 OR C46=4 OR D1=3 OR D3=3 OR D5=3 OR D8=3 OR D11=3) **c. Business manager**	c.	c.	c.

DxE02a
DxE02a_a
DxE02a_b
DxE02b
DxE02b_a
DxE02b_b
DxE02c
DxE02c_a
DxE02c_b
DxE02d
DxE02d_a
DxE02d_b
DxE02e
DxE02e_a
DxE02e_b
DxE02f
DxE02f_a
DxE02f_b
DxE02g
DxE02g_a
DxE02g_b
DxE02h
DxE02h_a
DxE02h_b
DxE02i
DxE02i_a
DxE02i_b
DxE02j
DxE02j_a
DxE02j_b
DxE02k
DxE02k_a
DxE02k_b
DxE02l
DxE02l_a
DxE02l_b
DxE02m
DxE02m_a
DxE02m_b
DxE02n
DxE02n_a
DxE02n_b

(B1=4 OR C9=4 OR C13=4 OR C16=4 OR C22=4 OR C25=4 OR C27=4 OR C39=4 OR C42=4 OR C46=5 OR D1=4 OR D3=4 OR D5=4 OR D8=4 OR D11=4) **d. Student database administrator**	d.	d.	d.
(B1=5 OR C9=5 OR C13=5 OR C16=5 OR C22=5 OR C25=5 OR C27=5 OR C39=5 OR C42=5 OR C46=6 OR D1=5 OR D3=5 OR D5=5 OR D8=5 OR D11=5) **e. Database or programming staff**	e.	e.	e.
(B1=6 OR C9=6 OR C13=6 OR C16=6 OR C22=6 OR C25=6 OR C27=6 OR C39=6 OR C42=6 OR C46=7 OR D1=6 OR D3=6 OR D5=6 OR D8=6 OR D11=6) **f. District-level food service clerical or administrative staff**	f.	f.	f.
(C9=7 OR C13=7 OR C16=7 OR C22=7 OR C25=7 OR C27=7 OR C39=7 OR C42=7 OR C46=8 OR D1=7 OR D3=7 OR D5=7 OR D8=7 OR D11=7) **g. District-level communications department**	g.	g.	g.
(B1=7 OR C9=8 OR C13=8 OR C16=8 OR C22=8 OR C25=8 OR C27=8 OR C39=8 OR C42=8 OR C46=9 OR D1=8 OR D3=8 OR D5=8 OR D8=8 OR D11=8) **h. Other district-level clerical or administrative staff**	h.	h.	h.

(C13=9 OR C16=9 OR C22=9 OR C25=9 OR C27=9 OR C32=1 OR C36=1 OR C42=9 OR C46=10 OR D1=9 OR D3=9 OR D5=9 OR D8=9 OR D11=9) **i. Principals**	i.	i.	i.
(C13=10 OR C16=10 OR C22=10 OR C25=10 OR C27=10 OR C32=2 OR C36=2 OR C42=10 OR C46=11 OR D1=10 OR D3=10 OR D5=10 OR D8=10 OR D11=10) **j. School secretaries or administrative staff**	j.	j.	j.
(C32=3 OR C36=3 OR C42=11 OR D1=11 OR D11=11) **k. School-level food service staff**	k.	k.	k.
(C13=11 OR C16=11 OR C22=11 OR C25=11 OR C27=11 OR C32=4 OR C36=4 OR C42=12 OR C46=12 OR D1=12 OR D3=11 OR D5=11 OR D8=11 OR D11=12) **l. The other school-level staff member you mentioned**	l.	l.	l.
(B1=98 OR C9=98 OR C13=98 OR C16=98 OR C22=98 OR C25=98 OR C27=98 OR C32=98 OR C36=98 OR C39=98 OR C42=98 OR C46=98 OR D1=98 OR D3=98 OR D5=98 OR D8=98 OR D11=98) **m. The other staff member you mentioned**	m.	m.	m.

(B1=99 OR C9=99 OR C13=99 OR C16=99 OR C22=99 OR C25=99 OR C27=99 OR C32=99 OR C36=99 OR C39=99 OR C42=99 OR C46=99 OR D1=99 OR D3=99 OR D5=99 OR D8=99 OR D11=99) **n. The other staff member you mentioned**	n.	n.	n.

SOFT CHECK: IF E2=NO RESPONSE OR (E2=1 AND E2a=NO RESPONSE) OR (E2=2 AND E2b=NO RESPONSE); **Please answer E2 and either E2a or E2b for employees in each category, then continue.**

V. CONTACT INFORMATION

ALL

V1. Who was the individual primarily responsible for completing this survey?

DxV01_01
DxV01_02
DxV01_03

NAME [ ] (STRING 250)

TITLE [ ] (STRING 250)

EMAIL ADDRESS [ ] (STRING 250)

NO RESPONSE ..... M

APPENDIX K

STATE ADMINISTRATIVE COSTS DATA COLLECTION INSTRUCTIONS AND INSTRUMENT

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EVALUATION OF DEMONSTRATIONS OF DIRECT CERTIFICATION OF CHILDREN RECEIVING MEDICAID BENEFITS (DC-M)

INSTRUCTIONS FOR TIME AND COST TRACKING LOG

DETAILED INSTRUCTIONS

TAB 1: Activity Descriptions. This tab provides more detailed descriptions of the activities to be considered/included when completing the Time Log (provided for clarification purposes). It also includes a glossary of terms. The State need not enter any information on this tab.

TAB 2: Time Log. In this tab, we are requesting information on the amount of time each staff member (or group of staff members with the same job category) spent on DC-M during the quarter, by activity. **Please include only time or costs incurred to implement DC-M that are in addition to time or costs already associated with other forms of direct certification for the National School Lunch Program/School Breakfast Program (that is, direct certification through the Supplemental Nutrition Assistance Program, Temporary Assistance for Needy Families, or Food Distribution Program on Indian Reservations).** Next, we provide instructions for completing each column.

Column A: First Name, Initials, or Position of Staff Member. While tracking information on costs, we wish to minimize the amount of personally identifiable information included on the forms. Thus, if only a few staff members work on DC-M, we suggest listing them by first name or initials. If several staff members from a particular job category work on DC-M (such as programmers), they can be grouped on one line (assuming similar salary levels). Please include all staff members within your agency who worked on DC-M, even if the staff member was not specifically from the child nutrition division (for example, IT staff).

Column B: Staff Position. Please provide a descriptive job title for the person listed in Column A, unless he or she was listed by job title there.

Column C: Activity. Clicking on a cell in Column C will display an arrow on the right that opens a drop-down list of activities. Click on the appropriate activity to select it. The Activity Descriptions tab (TAB 1) provides more detailed definitions of the activities. If an activity that was part of DC-M is not listed, click on "Other activities" and describe the activity in Column G (Notes).

Columns D–F: Total Hours Spent in Month: July, August, September. For the person or persons listed in the row and the activity selected in Column C, enter the total hours spent on that activity in July, August, and September. If needed, please consult records or speak to the individual(s) or their supervisor. The staff members' best estimates are fine. To facilitate tracking, we have included a weekly version of the time log for state agencies to use if interested (see **TAB 7: Time Log – Optional Weekly Version**). In future quarters, we will provide you with a revised form early in the quarter that you can use to track costs as they occur, rather than retrospectively.

Column G: Notes. This column is for recording any additional details needed to understand the entries in Columns A–F.

TAB 3: Salary Information. In this tab, we are requesting information on the salaries of each staff member (or group of staff members with the same job category) who spent time related to the implementation of DC-M during the quarter. Next, we provide instructions for completing each column.

***Column A: First Name, Initials, or Position of Staff Member, and Column B: Staff Position*.** Please complete these columns for each staff member (or group of staff members with similar positions and salaries) who conducted DC-M activities, as you did in Tab 1. As with the time log, please include all staff members within your agency who worked on DC-M

***Column C: Pay Rate (dollars)*.** Please enter the dollar amount that the employee is paid for the time period described in Column D.

Column D: Basis Paid. Please specify (using the drop-down menu) whether the pay rate in dollars refers to dollars per hour, per week, twice per month (24 pay periods), bi-weekly (26 pay periods), per month, or per year. If the pay rate is in a different unit than one of these options, please explain in the Notes column. If the staff member received overtime pay, list that rate on a separate line and write "overtime" in the Notes column.

Column E: Fringe Benefit Rate/Amount. If fringe benefits are calculated as a percentage (such as 50 percent of salary), please enter the rate in this column. If fringe benefits are calculated as an amount, please enter the total dollar amount for the staff member(s) in the column. The dollar amount should reflect the same period as the base pay rate.

Column F: Percentage or Amount. Please specify (using the drop-down menu) whether the fringe benefits in Column E are expressed as a percentage or a dollar amount.

Column G: Notes. This column is for recording any additional details needed to understand the entries in Columns A–F.

TAB 4: Other Direct Cost (ODC) Information. In this tab, we are requesting information on any type of nonlabor ("other") direct costs (ODCs) that are incurred in order to implement DC-M. These may include printing and mailing costs for materials provided to school districts, charges for conference calls, or amounts paid to outside contractors for work on the project (such as programming or clerical work). Column A asks for the type of cost, Column B asks for the total dollar amount for the quarter, and Column C provides space for any explanatory notes. If totals by month are easier to report, please record them in the Notes column. If there are no ODCs related to DC-M, just type "no costs" somewhere on the form so we know it was not missed.

TAB 5: Indirect Cost Information. This tab (row 11) asks if the agency uses an indirect cost rate. If the answer is no, you do not need to provide any further information. If the answer is yes, please list the indirect cost rate and explain in row 12 what costs are included in indirect costs and how they are allocated. If there are differing indirect cost rates, depending on the cost to which it is applied, please provide detailed information on how each is allocated. Then, please estimate in row 13 the total indirect costs associated with the direct costs previously reported.

TAB 6: Contact Information. Please provide the requested information on how to contact the person responsible for completing this form (the person who will be the designated contact for further questions and for the follow-up interview). If multiple individuals contributed to the form, please provide this information for the major contributors.

State Child Nutrition Agency Activity	Most Relevant for Matching at:	Activity Description
Negotiate data-sharing agreements	State- and district-level	Draft MOU/MOA; edit and execute the agreements; develop specifications for the data needed from the Medicaid eligibility files.
Develop specifications for matching	State- and district-level	Develop specifications for matching Medicaid data to student data. Decide which match variables should be used in what order, what is considered "exact" or "close" match, formats for resulting files, etc.
Enhance MIS or student database	State- and district-level	Make enhancements to systems and databases to allow for entry of information related to DC-M
Extract student data	State- and district-level	Extract relevant student data from state student database, or files provided by school districts. Extract could cover participating school districts only (in DC-M1 states), or all school districts.
Receive/check Medicaid file	State- and district-level	Receive and check file of Medicaid-eligible school-aged children from the State agency that collects the Medicaid data.
Test match procedures	State-level	Test automated (or manual) match procedures, refine and retest.
Conduct automated match	State-level	Conduct automated match; separate between the full matches, near matches, and non-matches.
Conduct manual match (if necessary)	State-level	Conduct manual matching of cases not matched by the automated system (if State decides to do this).
Merge DC-M students with other DC students	State-level	Merge students who qualify for DC-M with students who qualify through SNAP or TANF (or other public assistance); remove duplicates if needed.
Extract Medicaid file for each district	District-level	Select subset of Medicaid file for each district's area—selection could be by district, or by county, city, or zip code, depending on how school districts are set up and what is most convenient.
Provide data file to districts	State- and district-level	Provide data file to districts. This data will already be matched in States that conduct State-level matching. Otherwise, the file will include Medicaid participation data only.
Provide training and TA to districts	State- and district-level	Provide training and technical assistance (e.g., Webinars) to districts on the DC-M process, and respond to their questions.
Conduct USDA evaluation activities	State- and district-level	Conduct activities related to the USDA DC-M evaluation. These include developing and executing MOUs with Mathematica, discussing the evaluation with Mathematica, and providing administrative data to Mathematica.
Other activities (describe in Notes column)	State- and district-level	Other activities not described above; please specify.

Note: In the time log on the next worksheet, please only include time incurred to implement DC-M that is *in addition to* time already associated with other forms of direct certification for school meals (such as direct certification through SNAP, TANF, or other programs).

Glossary of Terms:

CN: Child Nutrition.
DC-M: Demonstrations of Direct Certification of Children Receiving Medicaid (DC-M).
DC-M1: States where the DC-M occurs only in selected districts.
DC-M2: States where DC-M occurs statewide.
MOU/MOA: Memorandum of Understanding (or Agreement).
SNAP: Supplemental Nutrition Assistance Program.
TANF: Temporary Assistance for Needy Families.
USDA: U.S. Department of Agriculture.

NSLP/SBP Direct Certification of Children Receiving Medicaid Benefits
Time Tracking Log
[STATE NAME] Child Nutrition Agency Version (July - September 2013)

MATHEMATICA Policy Research

DC-M1/DC-M2:	
Name:	
Position/Title:	
Name of Agency/Division:	

First Name, Initials, or Position of Staff Member	Staffing Position (*if not specified in first column*)	Activity (select from list)	*Total Hours Spent During Month*			Notes
			July	August	September	
		[select from list]				
		[select from list]				
		[select from list]				
		[select from list]				
		[select from list]				
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Note: In this time log, please only include time incurred to implement DC-M that is *in addition to* time already associated with other forms of direct certification for school meals (such as direct certification through SNAP, TANF, or other programs).

NSLP/SBP Direct Certification of Children Receiving Medicaid Benefits
Salary Worksheet
[*STATE NAME*] Child Nutrition Agency Version (July - September 2013)

MATHEMATICA Policy Research

DC-M1/DC-M2:	
Name:	
Position/Title:	
Name of Agency/Division:	

First Name, Initials, or Position of Staff Member (include each staff listed in Time Log)	Staffing Position (*if not specified in first column*)	Pay Rate (dollars)	Basis Paid (select from list)	Fringe Benefit Percentage/ Amount	Fringe Benefits Calculated as:	Notes
			[select from list]		[select from list]	
			[select from list]		[select from list]	
			[select from list]		[select from list]	
			[select from list]		[select from list]	
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			[select from list]		[select from list]	

NSLP/SBP Direct Certification of Children Receiving Medicaid Benefits
Other Direct Costs (ODC) Worksheet
[STATE NAME] Child Nutrition Agency Version (July - September 2013)

MATHEMATICA Policy Research

DC-M1/DC-M2:	
Name:	
Position/Title:	
Name of Agency/Division:	

Type of Other Direct Cost (such as printing and mailing costs, charges for conference calls, or amounts paid to outside contractors for work on the project. Please describe.)	Amount During Quarter (dollars)	Notes

Note: If totals by month are easier to report, please record them in the Notes column.

NSLP/SBP Direct Certification of Children Receiving Medicaid Benefits
Indirect Costs Worksheet
[STATE NAME] Child Nutrition Agency Version (July - September 2013)

MATHEMATICA Policy Research

DC-M1/DC-M2:	
Name:	
Position/Title:	
Name of Agency/Division:	

Question	Response
1. Does your accounting system assign indirect costs to any of the direct labor and ODC costs listed above? (Yes or No)	CHECK ONE: ___YES ___NO
2. If yes, describe how applicable indirect costs are defined and measured. (Hypothetical example: Indirect costs include management, human resources, accounting, IT services, and building maintenance. They are charged at the rates of 12% of labor costs and 2% of ODCs.)	
3. If yes, what were the total indirect costs associated with Direct Certification-Medicaid in July-September? (in dollars)	

NSLP/SBP Direct Certification of Children Receiving Medicaid Benefits
Contact Information for Individuals Responsible for Completing Form
[STATE NAME] Child Nutrition Agency Version (July - September 2013)

MATHEMATICA
Policy Research

Name of Agency/Division:	
Address:	
City/State/Zip code:	
Name of Agency/Division #2 (if applicable):	
Address #2 (if applicable):	
City/State/Zip code #2 (if applicable):	
Name of 1st Contact Person:	
Phone Number for 1st Contact:	
Email Address for 1st Contact:	
Name of 2nd Contact Person (optional):	
Phone Number for 2nd Contact (optional):	
Email Address for 2nd Contact: (optional):	

Thank you for completing this form. Your responses will help us determine whether there are savings in administrative costs from the demonstration, and what the extent of the savings is. Your responses will also help us understand the various types of activities you perform when conducting d irect certification. We understand that this task requires the investment of your time and greatly appreciate your participation. While we have tried to make these forms both flexible and straightforward, we will appreciate any suggestions for improvements. Please contact Anne Gordon (agordon@mathematica-mpr.com) or Joshua Leftin (jleftin@mathematica-mpr.com) with any questions.

NSLP/SBP Direct Certification of Children Receiving Medicaid Benefits
Time Tracking Log
[STATE NAME] Child Nutrition Agency Version (July - September 2013)

MATHEMATICA Policy Research

DC-M1/DC-M2:	
Name:	
Position/Title:	
Name of Agency/Division:	

First Name, Initials, or Position of Staff Member	Activity (select from list)	*Total Hours Spent During Week*													Notes
		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	
	[select from list]														
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Note: In this time log, please only include time incurred to implement DC-M that is *in addition to* time already associated with other forms of direct certification for school meals (such as direct certification through SNAP, TANF, or other programs).

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State Medicaid Agency and/or Agency Housing Medicaid Eligibility Files Activity	Activity Description
Negotiate data-sharing agreements	Draft MOU/MOA; edit and execute the agreements; develop specifications for the data needed from the Medicaid eligibility files.
Enhance MIS or student database	Make enhancements to systems and databases to allow for entry of information related to DC-M.
Develop and test programs for extract	Develop and test programs for creating extract. The extract consists of school-age children on Medicaid with income less than 133% of poverty.
Provide test file to CN agency	Provide test file to Child Nutrition agency.
Revise based on feedback	Revise specifications and programming in response to feedback.
Create Extract	Create extract of school-age children on Medicaid with income less than 133% of poverty.
Send file to CN agency	Send file securely to Child Nutrition agency.
Respond to questions	Respond to data questions from Child Nutrition agency.
Conduct USDA evaluation activities	Conduct activities related to the USDA DC-M evaluation. These include developing and executing MOUs with Mathematica, discussing the evaluation with Mathematica, and providing administrative data to Mathematica.
Other activities (describe in Notes column)	Additional activities not described above; please specify.

Note: In the time log on the next worksheet, please only include time incurred to implement DC-M that is *in addition to* time already associated with other forms of direct certification for school meals (such as direct certification through SNAP, TANF, or other programs).

Glossary of Terms:

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DC-M: Demonstrations of Direct Certification of Children Receiving Medicaid (DC-M).
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MOU/MOA: Memorandum of Understanding (or Agreement).
SNAP: Supplemental Nutrition Assistance Program.
TANF: Temporary Assistance for Needy Families.
USDA: U.S. Department of Agriculture

NSLP/SBP Direct Certification of Children Receiving Medicaid Benefits
Time Tracking Log
[*STATE NAME*] Version for Medicaid Agency and/or Agency Housing Medicaid Eligibility Files (July - September, 2012)

MATHEMATICA Policy Research

DC-M1/DC-M2:	
Name:	
Position/Title:	
Name of Agency/Division:	

First Name, Initials, or Position of Staff Member	Staffing Position (*if not specified in first column*)	Activity (select from list)	*Total Hours Spent During Month*			Notes
			July	August	September	
		[select from list]				
		[select from list]				
		[select from list]				
		[select from list]				
		[select from list]				
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Note: In this time log, please only include time incurred to implement DC-M that are *in addition to* time already associated with other forms of direct certification for school meals (such as direct certification through SNAP, TANF, or other programs).

NSLP/SBP Direct Certification of Children Receiving Medicaid Benefits
Salary Worksheet
[STATE NAME] Version for Medicaid Agency and/or Agency Housing Medicaid Eligibility Files (July - September, 2012)

MATHEMATICA Policy Research

DC-M1/DC-M2:	
Name:	
Position/Title:	
Name of Agency/Division:	

First Name, Initials, or Position of Staff Member (include each staff listed in Time Log)	Staffing Position (*if not specified in first column*)	Pay Rate (dollars)	Basis Paid (select from list)	Fringe Benefit Percentage/ Amount	Fringe Benefits Calculated as:	Notes
			[select from list]		[select from list]	
			[select from list]		[select from list]	
			[select from list]		[select from list]	
			[select from list]		[select from list]	
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			[select from list]		[select from list]	

NSLP/SBP Direct Certification of Children Receiving Medicaid Benefits
Other Direct Costs (ODC) Worksheet
[*STATE NAME*] Medicaid Agency Version (July - September, 2012)

MATHEMATICA Policy Research

DC-M1/DC-M2:	
Name:	
Position/Title:	
Name of Agency/Division:	

Type of Other Direct Cost (such as printing and mailing costs, charges for conference calls, or amounts paid to outside contractors for work on the project. Please describe.)	Amount During Quarter (dollars)	Notes

Note: If totals by month are easier to report, please record them in the Notes column.

NSLP/SBP Direct Certification of Children Receiving Medicaid Benefits
Indirect Costs Worksheet
[*STATE NAME*] Medicaid Agency Version (July - September, 2012)

MATHEMATICA Policy Research

DC-M1/DC-M2:	
Name:	
Position/Title:	
Name of Agency/Division:	

Question	Response
1. Does your accounting system assign indirect costs to any of the direct labor and ODC costs listed above? (Yes or No)	CHECK ONE: ___YES ___NO
2. If yes, describe how applicable indirect costs are defined and measured. (Hypothetical example: indirect costs include management, human resources, accounting, IT services, and building maintenance. They are charged at the rates of 12% of labor costs and 2% of ODCs.)	
3. If yes, what were the total indirect costs associated with Direct Certification-Medicaid in July-September? (in dollars)	

NSLP/SBP Direct Certification of Children Receiving Medicaid Benefits

Contact Information for Individuals Responsible for Completing Form

[*STATE NAME*] Version for Medicaid Agency and/or Agency Housing Medicaid Eligibility Files (July - September, 2012)

MATHEMATICA Policy Research

Name of Agency/Division:	
Address:	
City/State/Zip code:	
Name of Agency/Division #2 (if applicable):	
Address #2 (if applicable):	
City/State/Zip code #2 (if applicable):	
Name of 1st Contact Person:	
Phone Number for 1st Contact:	
Email Address for 1st Contact:	
Name of 2nd Contact Person (optional):	
Phone Number for 2nd Contact (optional):	
Email Address for 2nd Contact: (optional):	

Thank you for completing this form. Your responses will help us determine whether there are savings in administrative costs from the demonstration, and what the extent of the savings is. Your responses will also help us understand the various types of activities you perform when conducting d irect certification. We understand that this task requires the investment of your time and greatly appreciate your participation. While we have tried to make these forms both flexible and straightforward, we will appreciate any suggestions for improvements. Please contact Anne Gordon (agordon@mathematica-mpr.com) or Joshua Leftin (jleftin@mathematica-mpr.com) with any questions.

NSLP/SBP Direct Certification of Children Receiving Medicaid Benefits
Time Tracking Log
[STATE NAME] Version for Medicaid Agency and/or Agency Housing Medicaid Eligibility Files (July - September, 2012)

MATHEMATICA Policy Research

DC-M1/DC-M2:	
Name:	
Position/Title:	
Name of Agency/Division:	

First Name, Initials, or Position of Staff Member	Activity (select from list)	*Total Hours Spent During Week*													Notes
		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	
	[select from list]														
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Note: In this time log, please only include time incurred to implement DC-M that is *in addition to* time already associated with other forms of direct certification for school meals (such as direct certification through SNAP, TANF, or other programs).

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APPENDIX L

CHALLENGE INTERVIEW PROTOCOLS

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OMB #: 0584-0586
Expiration Date: 8/31/2016

Interview Protocol: State Child Nutrition Director
Challenges to Implementing Direct Certification with Medicaid Demonstrations of NSLP/SBP Direct Certification of Children Receiving Medicaid Benefits

State:	Date:
Interviewee/Position:	Start time:
Others present/Position:	End time:
Permission to record:	Interviewer:

Introduction

The purpose of this interview is to gather information about [STATE's] demonstration of direct certification of children for the National School Lunch Program and School Breakfast Program, or NSLP/SBP, using Medicaid enrollment data. This interview will last approximately 1 hour.

Winter 2013 Interviews:

We talked to you in [MONTH] about your experiences with the demonstration of direct certification of the National School Lunch Program/School Breakfast Program, or NSLP/SBP, using Medicaid enrollment data. In this interview, we would like to discuss your experiences and progress since the last time we talked.

All Interviews:

Throughout this interview, we will refer to the demonstration of direct certification with Medicaid data as DC-M. The information that we collect in this interview will be used together with information from other States to describe the experiences of all States participating in the demonstration.

Because each State's project is unique, describing a particular State's experiences will likely identify that State. We will not use your name in our reports, but your identity might be inferred from the identity of your State and the nature of the information that you provide. If there is something that you want to say in confidence that you would not otherwise mention, let us know and we'll use it to inform our understanding, but will keep the details private.

We will ask you questions and record your answers in an interview format that will take about an hour. With your permission, we'd like to electronically record your responses to make sure we get them right. Do I have your permission to record the interview?

[*If yes:* Thank you.]

OMB #: 0584-0586
Expiration Date: 8/31/2016

[*If no:* You have my assurance that we will keep anything private that you wish. If you'd prefer, we will not cite anything that you say verbatim from the recording. *Wait for response; if yes, record:* Thank you. *If no:* That's OK. Just bear with me as I take detailed notes.]

Your DC-M implementation began near the start of the 2012-2013 school year, but we're going to focus on your recent efforts regarding the certification process for this school year.

Background

To start, let's talk about how your demonstration has progressed since [MONTH].

3. Have any changes occurred in your DC-M matching process since the initial round of matching was completed? If so, why did you make these changes?

   [*Prob*e: Follow up on anything they mentioned planning during the first round of interviews.]

Implementation Challenges

I'd also like to discuss any implementation challenges that your State might have had to deal with.

4. Have any new challenges arisen since we last spoke?
5. Overall, what challenges have you [*if district-level matching, add:* and local districts] encountered in implementing DC-M? What problems have these challenges caused? [*Probe:* Any other serious challenges?]
   a. [*For each challenge:*] To what extent have you been able to resolve the challenge? How? (If State mentioned challenges in previous interview, ask about their current status in resolving them)]
6. What challenges have you encountered in obtaining the Medicaid data? Describe how you overcame them or, if ongoing, how you plan to do so. (For example, did you implement changes after some data elements from Medicaid did not fully meet your needs?)

Matching

Let's turn to the matching process.

7. First, consider the specifications for matching student enrollment data with Medicaid data.
   a. What challenges have you encountered, if any, related to the availability of identifying information in Medicaid data? Is missing data a particular challenge in key data elements in the Medicaid files?
8. Because children receiving Medicaid are not categorically eligible, DC-M requires States and districts to look at income, in addition to Medicaid receipt, to determine NSLP eligibility. How challenging is conducting that extra step?
9. Is a gross income variable, or any other information used to define the file, provided to you by your State's Medicaid agency? [*If yes:* Do you use the data in any way?] [*If no:* Why

OMB #: 0584-0586
Expiration Date: 8/31/2016

are the income data restricted? What procedures has your agency or Medicaid put in place to review that the appropriate data are provided?]

10. Did you experience any delays in conducting DC-M compared to direct certification with SNAP, or was the timeline about the same? Describe the nature of any delays and the average impact in time.

11. Describe any quality assurance systems in place to ensure the accuracy of matches. [*Probe:* Do you check a sample of cases? How is the sample determined?]

Resources

12. Let's discuss the challenges associated with resources to implement DC-M. First, let's focus on IT capabilities. Since we last spoke, have you been required to make any systems updates in order for your agency to accommodate DC-M? Please explain.

    a. Were any additional systems updates necessary to identify eligible children and conduct the DC-M matching process? Explain the impact of these updates on staffing decisions. What was the impact on the schedule for getting the work done?

13. Now, please think about any challenges you faced in obtaining staff to implement DC-M at the State level, or if applicable, at the district level.

    a. Did you face challenges in identifying staff or obtaining enough of their time to implement DC-M? How did DC-M impact their other responsibilities?

    b. Did you need any temporary or contract staff?

    c. What activities associated with DC-M were most time consuming, difficult to implement, or required significantly more time/effort than originally anticipated?

    d. Were there any particular aspects of your State's systems or processes that made DC-M more or less labor intensive for staff?

    e. Is the staff time in conducting DC-M offset by reduced staff time on other activities? Please explain how and to what extent.

    f. Did you experience any turnover among key staff that affected your continuing ability to conduct DC-M or make changes/improvements to it?

Outcomes

Now, let's talk about outcomes of DC-M.

14. Think about the relative success of matches achieved with DC-M. Overall, roughly what proportion of Medicaid cases were successfully matched under DC-M in your district? How does this compare to the proportion of SNAP cases successfully matched?

    a. Did your experiences with or success in DC-M matching vary by student characteristics or for any subset of cases or groups of children/families? [*Probe:* Were there differences in success by race/ethnicity? Student grade level? Family/household size and composition? Were there name differences among members of the family/household?] Have you had any challenges concerning key data elements being more often missing for certain subgroups?

OMB #: 0584-0586
Expiration Date: 8/31/2016

b. Did success in matching vary by district characteristics such as size of district? Whether it was urban, suburban, or rural? Diversity of district?

15. Are there specific challenges related to obtaining and using Medicaid data that negatively affect the matching success rate? [*Probe:* Have you had difficulties with low-quality data, missing data, high rates of unmatched cases, one-to-many matches, or matching individuals within a household? Any other examples?] [*If district-level matching:* Have districts reported any specific barriers?]
16. What is your estimate of benefits gained from DC-M in helping to meet your State's goals for participating in the demonstration and increasing the participation of students in NSLP/SBP, based on what you know so far?
17. If you were asked whether to recommend continued, full-scale implementation of DC-M for your State based on the investment made, estimated ongoing implementation costs, offsets to other direct certification costs, and gains in helping to certify needy children for free meals, would you recommend continuing the effort? Why or why not?
18. Would you recommend the effort to other States that are similar to your State in terms of needs of the population and availability of systems and resources? Why or why not?

Response to Challenges/Lessons Learned

Now I'd like you to think about the lessons learned to date in implementing the DC-M demonstration.

19. What would you do differently or recommend that other States do differently?
20. What procedures have been planned or implemented to improve the success of DC-M? [*Probe:* Are these planned or already implemented; if planned, for when?]
21. How will the system as implemented be able to adapt to changes in Medicaid income definitions or eligibility criteria in the future?
22. Is there anything else you would like to add?

Closing

That concludes our interview. Thank you for your time. We'll be contacting you again in several months to schedule an interview for [MONTH] to discuss your State's experiences in the next round of DC-M.

OMB #: 0584-0586
Expiration Date: 8/31/2016

Interview Protocol: State Medicaid Director
Challenges to Implementing Direct Certification with Medicaid Demonstrations of NSLP/SBP Direct Certification of Children Receiving Medicaid Benefits

State:	Date:
Interviewee/Position:	Start time:
Others present/Position:	End time:
Permission to Record:	Interviewer:

Introduction

The purpose of this interview is to gather information about [STATE's] demonstration on direct certification of children for the National School Lunch Program and School Breakfast Program, or NSLP/SBP, using Medicaid enrollment data. The interview will last approximately 30 minutes. Since you are involved in the Medicaid program, we will focus on your perspective.

Winter 2013 Interviews:

We talked to you in [MONTH] about your experiences with the demonstration of direct certification of the National School Lunch Program/School Breakfast Program, or NSLP/SBP, using Medicaid enrollment data. In this interview, we would like to discuss your experiences and progress since the last time we talked.

All Interviews:

Throughout this interview, we will refer to the demonstration of direct certification with Medicaid data as DC-M. The information that we collect in this interview will be used together with information from other States to describe the experiences of all States participating in the demonstration.

Because each State's project is unique, describing a particular State's experiences will likely identify that State. We will not use your names in our reports, but your identity might be inferred from the identity of your State and the nature of the information that you provide. If there is something that you want to say in confidence that you would not otherwise mention, let us know and we'll use it to inform our understanding, but will keep the details private.

We will ask you questions and record your answers in an interview format that will take about a half hour. With your permission, we'd like to electronically record your responses to make sure we get them right. Do I have your permission to record the interview?

[*If yes:* Thank you.]

[*If no:* You have my assurance that we will keep anything private that you wish. If you'd prefer, we will not cite anything that you say verbatim from the recording. *Wait for response; if yes, record:* Thank you. *If no:* That's OK. Just bear with me as I take detailed notes.]

OMB #: 0584-0586
Expiration Date: 8/31/2016

Your DC-M implementation began near the start of the 2012-2013 school year, but we're going to focus on your recent efforts regarding the certification process for this school year.

Background

To start, let's talk about how your demonstration has progressed since [MONTH].

1. Have any changes occurred in your DC-M matching process since the initial round of matching was completed? If so, why did you make these changes? [*Prob*e: Follow up on anything they mentioned planning during the first round of interviews.]

Implementation challenges

I'd also like to discuss any implementation challenges that your State might have had to deal with.

2. Have any new challenges arisen since we last spoke?
3. Overall, what challenges have you encountered in implementing DC-M? What problems have these challenges caused? [*Probe:* Any other serious challenges?]
   a. [*For each challenge:*] To what extent have you been able to resolve the challenge? How? (If State mentioned challenges in previous interview, ask about their current status in resolving them)

Providing the data

4. Because children receiving Medicaid are not categorically eligible, DC-M requires States and districts to look at income, in addition to Medicaid receipt, to determine NSLP eligibility. How challenging is conducting that extra step? How does your State assess income of children in the Medicaid data for DC-M?
   a. Do you use a simple gross income variable, program or category codes, or a combination of the two to determine eligibility? [If gross income: Was the appropriate single data element already in your system or did you need to construct it?] [If program/category codes: How easy was it for your agency to decide which program codes were eligible and which were not? Did this process require any clarification from the Child Nutrition Agency?]
   b. Is a gross income variable included in the file your agency sends to Child Nutrition staff?
   c. DC-M requires information on income "before the application of any expense, block or other income disregard," rather than the income definition used in determining Medicaid eligibility. How were you able to account for this difference so that you could use Medicaid income to determine eligibility for DC-M? How challenging was this aspect of the process? Would it have been easier to provide the income definition used in determining Medicaid eligibility?

      [*If respondent says that Medicaid receipt is used as an indicator of NSLP eligibility:* Is the measure of income used for Medicaid eligibility gross income? What exclusions and

OMB #: 0584-0586
Expiration Date: 8/31/2016

deductions do you make? And what income cutoff is used for Medicaid eligibility (Is it 133 percent? Higher? Lower?)]

5. Describe any challenges in exchanging data from system to system and how you overcame them.

6. Now that you've accommodated requests to provide data for DC-M, do you anticipate any continuing impacts on your agency besides the ongoing provision of data? If so, what are they?

7. How often does your agency provide Medicaid enrollment data files for the match?

   a. To what extent has providing the files on this schedule been a challenge? [*If challenge:* How have you adapted to this challenge over time?]

Resources

8. Let's discuss the challenges associated with resources to implement DC-M. First, let's focus on IT capabilities. Since we last spoke, have you been required to make any systems updates in order for your agency to accommodate DC-M?

   a. Explain the impact of these updates on staffing decisions and the time constraints to accomplish this.

9. Now, please think about any challenges in obtaining staff to implement DC-M.

   a. What activities associated with DC-M were most time consuming and difficult to implement for staff? To what extent, if any, did activities require significantly more time/effort than originally anticipated?

   b. Were there any particular aspects of your State's systems or processes that made DC-M more or less labor intensive for staff?

   c. Did you need any temporary or contract staff?

Response to Challenges/Lessons Learned

Now I'd like you to think about the lessons learned to date in response to implementing the DC-M demonstration.

10. What would you do differently or recommend that other States do differently?

11. How will the system as implemented be able to adapt to changes in Medicaid income definitions or eligibility criteria in the future?

12. Is there anything else you would like to add?

Closing

That concludes our interview. Thank you for your time. We'll be contacting you again in several months to schedule an interview for [MONTH] to discuss your State's experiences in the next round of DC-M.

OMB #: 0584-0586
Expiration Date: 8/31/2016

Interview Protocol: SFA Director/District Lead
Challenges to Implementing Direct Certification with Medicaid Demonstrations of NSLP/SBP Direct Certification of Children Receiving Medicaid Benefits

Introduction

The purpose of this interview is to gather information about [DISTRICT's] experience with [STATE's] demonstration of direct certification of children for the National School Lunch Program and School Breakfast Program or NSLP/SBP, using Medicaid enrollment data. This interview will last approximately 1 hour.

Fall Interviews:

The study will assess the impact of the demonstration on NSLP/SBP participation and certification costs. This interview will focus on the challenges you experienced in [MONTH(S)] when implementing the demonstration in your district, and the extent to which you have overcome those challenges to date. We will conduct additional interviews in February 2014 to discuss the experiences and challenges of the next round of certification matching. In addition to these interviews, the study will use quantitative data to assess the demonstration's impact on NSLP/SBP participation and costs. [STATE] is among six participating States, two with statewide demonstrations and four with local district-based demonstrations.

Subsequent Interviews:

We talked to you in [MONTH] about your experiences using Medicaid enrollment data for direct certification for free school meals. In this interview, we would like to discuss your experiences and progress since the last time we talked.

All Interviews:

Throughout this interview, we will refer to the demonstration of direct certification with Medicaid data as DC-M. The information that we collect in this interview will be used together with information from other States and districts to describe the experiences of all States participating in the demonstration.

Because each State's and district's project is unique, describing a particular district's experiences will likely identify the State and could identify the district. We will not use your name in our reports, but your identity might be inferred from the identity of your State and the nature of the information that you provide. If there is something that you want to say in confidence that you would not otherwise mention, let us know and we'll use it to inform our understanding, but will keep the details private.

We will ask you questions and record your answers in an interview format that will take about an hour. With your permission, we'd like to electronically record your responses to make sure we get them right. Do I have your permission to record the interview?

[*If yes*: Thank you.]

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[*If no:* You have my assurance that we will keep anything private that you wish. If you'd prefer, we will not cite anything that you say verbatim from the recording. *Wait for response; if yes, record:* Thank you. *If no:* That's OK. Just bear with me as I take detailed notes.]

Your DC-M implementation began near the start of the 2012-2013 [or 2013-2014] school year. For the most part, we're going to focus on your recent efforts regarding the certification process for this school year, but let's begin with the context of DC-M in your State.

Start-Up Issues and Concerns

Let's begin by focusing on your preparations for DC-M.

13. Did the State approach your district about DC-M during the application process, or after your State was selected by FNS for inclusion in the demonstration? [If before:] What were your reasons for participating in DC-M when the State approached your district? [*Probe:* Any other reasons?]
    a. Was your participation in DC-M influenced by any limitations or weaknesses of direct certification efforts using other public assistance programs in your district? [*If yes:* To what extent was your participation influenced by limitations and weaknesses for:
        i. SNAP?
        ii. TANF?
        iii. FDPIR?
        iv. Other programs, if any, specific to your State or district? [*If so:* What programs?]
14. Overall, what would you say were the most serious concerns or operational challenges your district faced in planning and preparing for DC-M?
15. What did the State education or child nutrition agency do to make your participation in DC-M easier? [Probe: Anything else?]
16. What else could the State education or child nutrition agency have done to make your participation in DC-M easier? [Probe: Anything else?]
17. Prior to this demonstration, were you using Medicaid data for direct verification of NSLP applications? Was that at the State or district level?

[If yes at the district level] Explain the transitions that you made to scale up from DV-M to DC-M and how your experience with DV-M affected your preparation for DC-M.

Implementation Challenges

Turning to implementation of DC-M, let's discuss some implementation challenges that your district might have had to deal with. If something was handled entirely by the State, just let us know, and we'll move on to the next topic.

18. Overall, what challenges have you as a district encountered in implementing DC-M? What problems have these challenges caused? [*Probe:* Any other serious challenges?]

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- [*For each challenge:*] To what extent have you been able to resolve the challenges? How?
- To what extent did the State help you in resolving the challenges that you have overcome? Did you access any other resources for help?

Obtaining the data

Let's talk about the process for obtaining the data you use for DC-M matching.

19. How are Medicaid data provided to your district? Does the process differ from the way SNAP data are provided? How? Do you receive a separate file or list of children receiving Medicaid, or are they included in the same list with children receiving SNAP?
20. What challenges have you encountered in obtaining the Medicaid data? Describe how you overcame them or, if ongoing, how you plan to do so.
21. We want to understand the lag time between enrollment in Medicaid and the potential to benefit from DC-M in your district. How often are Medicaid data provided to your district?
    a. How recent is the Medicaid data when you receive it? For example, if a match is conducted on August 1, what is the most recent Medicaid enrollment date of students who might be matched? Those enrolled in Medicaid a month before, by July 1, or two weeks before, by July 15, or something else (please specify)?

Matching

Let's turn to the matching process.

22. First, consider the specifications and algorithms for matching student enrollment data with Medicaid data. [*if asked for clarification*: by specifications and algorithms, we mean the specific criteria and process you use to determine whether there is a match.]
    d. Are the specifications and algorithms the same as those used for direct certification with SNAP? Why or why not? [Probe: Is this a State-level or district-level decision?]

    e. Are the same identifying variables that you use to match files for DC-SNAP also available in the Medicaid data? What challenges have you encountered, if any, related to the availability of identifying information in Medicaid data? Is missing data a particular challenge in key data elements in the Medicaid files?

23. Because children receiving Medicaid are not categorically eligible, DC-M requires States and districts to look at income, in addition to Medicaid receipt, to determine NSLP eligibility. How does your district assess income of children in the Medicaid data? How challenging is conducting that extra step? [Probe: Is your district responsible for looking at the income data in the Medicaid files, or does the State handle this? Please explain.]

DC-M requires information on income "before the application of any expense, block or other income disregard," rather than the income definition used in determining Medicaid eligibility. How were you able to account for this difference so that you could use Medicaid income to determine eligibility for free meals? How challenging was this aspect of the process?

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Did your district face any challenges in identifying the correct economic unit for which to look at income?

24. Do you conduct DC-M simultaneously with DC-SNAP, or is direct certification conducted sequentially for different programs? [*If sequentially:* How do you combine the results? Did you have any concerns related to the sequencing of different direct certification methods (e.g., SNAP, TANF, FDPIR) for a household/applicant. If yes, what were they?
25. Did you experience any delays in conducting DC-M compared to direct certification with SNAP, or was the timeline about the same? Describe the nature of any delays and the average impact in time.

When did you conduct your first DC-M match? How often does your district conduct matching? Are there any State requirements or may the district set its own schedule?

To what extent is this matching schedule successful in certifying students as quickly as possible?

26. Describe any quality assurance systems in place to ensure the accuracy of matches. [*Probe:* Do you check a sample of cases? How? How is the sample determined?]
27. What process is used for identifying other children in the same household with those who are directly certified? [Probe: Do you conduct additional matching to identify siblings? How?] How challenging is this step?
28. How does your system ensure that students certified under DC-M remain certified if they transfer to another school district, or that students certified in other districts remain certified if they transfer into your district? [*If DC-M1:* Discuss differences in how the process works for districts participating in DC-M and those not participating in DC-M.]

Resources

29. Let's discuss the challenges associated with resources to implement DC-M. First, let's focus on IT capabilities. Thinking about technology, did you have all of the software and systems needed to get the job done, or did you have to acquire or develop some? Please explain.

What systems updates, if any, did you have to make in your district to identify eligible children and conduct the DC-M matching process? Explain the impact of these updates on your staffing needs and decisions. What was the impact on the schedule for getting the work done?

30. Now, please think about any challenges you faced in obtaining staff to implement DC-M at the district level.

Did you face challenges in identifying staff or obtaining enough of their time to implement DC-M? How did DC-M impact their other responsibilities?

Did you need any temporary or contract staff?

What activities associated with DC-M were most time consuming, difficult to implement, or required significantly more time/effort than originally anticipated?

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Were there any particular aspects of your systems or processes that made DC-M more or less labor intensive for staff?

Is the staff time in conducting DC-M offset by reduced staff time on other activities? Please explain how and to what extent.

[*For subsequent interview only]* Did you experience any turnover among key staff that affected your continuing ability to conduct DC-M or make changes/improvements to it?

Outcomes

Now, let's talk about outcomes of DC-M.

31. Think about the relative success of matching achieved with DC-M. Overall, roughly what proportion of Medicaid cases were successfully matched under DC-M in your district? How does this compare to the proportion of SNAP cases successfully matched?

Did your experiences with or success in DC-M matching vary by student characteristics or for any subset of cases or groups of children/families? [*Probe:* Were there differences in success by race/ethnicity? Student grade level? Family/household size and composition? Were there name differences among members of the family/household?] Have you had any challenges concerning key data elements being more often missing for certain subgroups?

32. Are there specific challenges related to obtaining and using Medicaid data that negatively affect the matching success rate? [*Probe:* Have you had difficulties with low-quality data, missing data, high rates of unmatched cases, one-to-many matches, or matching individuals within a household? Any other examples?]
33. What is your estimate of benefits gained from DC-M in helping to meet your State's and district's goals for participating in the demonstration and increasing the participation of students in NSLP/SBP, based on what you know so far?
34. If you were asked whether to recommend continued, full-scale implementation of DC-M for your State and district based on the investment made, estimated ongoing operational costs, offsets to other certification costs, and gains in helping to certify needy children for free meals, would you recommend continuing the effort? Why or why not?

Response to Challenges/Lessons Learned

Now I'd like you to think about the lessons learned to date in implementing the DC-M demonstration.

35. What would you do differently or recommend that other districts do differently?
36. What procedures have been planned or implemented to improve the success of DC-M? [*Probe*: Are these planned or already implemented; if planned, for when?]
37. How will the system as implemented be able to adapt to changes in Medicaid income definitions or eligibility criteria in the future?
38. Is there anything else you would like to add?

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Closing

That concludes our interview. Thank you for your time. We'll be contacting you again in several months to schedule an interview for [MONTH] to discuss your district's experiences in the next round of DC-M.

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APPENDIX M

CHALLENGE INTERVIEWS CODING SCHEME

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01 Challenges
- Data availability & quality
- Defining households
- Implementation & eligibility determination
- Other & unknown
- Resolution
- Staffing & turnover
- Start-up

02 History & Motivation

03 Changes in DC-M Process

04 Data sharing agreements

05 Preparations

06 Direct verification

07 Medicaid Data
- Income & other variables
- Provision of data
- Schedule

08 Matching Process
- Data elements used for matching
- Household
- Length of certification period
- Probable matches
- Sequencing
- Student transfers
- Timeline

09 Quality Assurance

10 IT Systems & Upgrades

11 Human Resources
- Staffing
- Time-consuming
- Time-saving

12 Outcomes
- Estimate of benefits
- Results

13 Recommendations

14 Future changes, improvements, & adaptability

15 State strengths

16 District strengths

17 Unknown

18 State
- Florida
- Illinois
- Kentucky
- Massachusetts
- New York City
- New York State
- Pennsylvania

19 Interview
- State
- District

20 District size
- < 2000
- 2,000-4,999
- 5,000-9,999
- 10,000+

21 Percent free and reduced meals
- 0-20 percent
- 21-40 percent
- 41-60 percent
- 61+ percent

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