

## **FNS RESEARCH CORNER SUMMARY OF RESEARCH**

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The FNS Research Corner provides a continuing series to summarize recently completed and current research conducted by the U.S. Department of Agriculture's Food and Nutrition Service (FNS) in the area of child nutrition. For further information, contact the Office of Policy Support (OPS) at (703) 305-2117. Links to published studies and reports as well as descriptions of ongoing studies conducted by OPS are available from the FNS web site at <http://www.fns.usda.gov/ops/research-and-analysis>.

### **RECENTLY COMPLETED RESEARCH**

#### **FARM TO SCHOOL CENSUS AND COMPREHENSIVE REVIEW**

This study examines the multiple facets of farm to school efforts across the country. It includes the 2019 Farm to School Census; a descriptive review of the USDA Farm to School Grant Program; a review of published research on farm to school since 2010; and a set of interviews with school food distributors. The 2019 Farm to School Census Report will be released later in 2021.

The Farm to School Literature Review report summarizes findings from a review of published research on farm to school since 2010. The Literature Review synthesized current findings and analyzed gaps in available knowledge and data related to: (1) farm to school policy and funding at the State and local level; (2) farm to school activities, their impact on students, and characteristics of participating School Food Authorities; (3) local food procurement practices and challenges; and (4) the impact of farm to school spending on the local economy. An appendix of the Farm to School Literature Review report summarizes findings from interviews with school food distributors conducted in 2019. (Published 3/15/21)

#### Key findings:

- Studies found increasing nationwide participation in farm to school, encompassing many types of activities.
- Despite barriers, school meal programs increased spending on local foods and used a range of strategies to purchase local products.
- Studies found some associations between farm to school programs and students' nutritional knowledge but inconsistent associations between farm to school programs and students' fruit and vegetable consumption or academic achievement.

The Farm to School Grantee Report analyzes baseline, progress and final reports submitted to FNS by 365 grantees who received Farm to School Grant awards in fiscal years 2013–2017. It provides

an assessment of Farm to School grantee efforts nationwide, focusing on grantee-reported achievements, challenges, and lessons learned. (Published 3/29/21)

Key findings:

- Grantees implemented a range of activities focused on local foods, including using school garden produce in school meals and cooking from scratch, and reported an increase in school and school district policies supporting farm to school efforts over the course of the grant.
- Almost all grantees reported that their partner schools served local foods in their cafeterias, though definitions of “local” varied by school or district.
- Among grantees, 91 percent reported that grant funds were sufficient for meeting the project goals.

### **EVALUATION OF THE DIRECT CERTIFICATION WITH MEDICAID FOR FREE AND REDUCED-PRICE MEAL (DCM-F/RP) DEMONSTRATIONS, YEAR 2**

This report examines the impact of using Medicaid data to directly certify students for free and reduced-price school meals in the National School Lunch Program and School Breakfast Program in fifteen states in School Year 2017-18. Unlike other direct certification methods with programs that confer categorical eligibility for free school meals (e.g., with Supplemental Nutrition Assistance Program (SNAP) administrative data), Medicaid participation does not confer categorical eligibility. Rather, income data from the State Medicaid agency must be matched to student records to determine eligibility.

In SY 2016-17, FNS awarded demonstrations to seven States to evaluate the use of Medicaid data to directly certify students for both free and reduced-price meals. An evaluation of the first year of the DCM-F/RP demonstration found that it resulted in a small increase in the number and percentage of students certified for free and reduced-price meals and the percentage of meals served for free but found limited, mixed effects on participation and Federal reimbursement rates.

For SY 2017-18, a second cohort of States was added to the demonstration. This report discusses Year 2 of the evaluation, examining certification, participation, and reimbursement outcomes for Cohort 1 States in their second year of implementation and Cohort 2 States in their first year of implementation. (Published 9/15/20)

Key findings:

- Similar to SY 2016-17, DCM-F/RP resulted in an incremental increase in the number and percentage of students certified for free and reduced-price meals, but effects varied across states. In total, 1,019,865 students across 12 States were certified for free meals and 258,893 students across 14 States were certified for reduced-price meals using Medicaid data through DCM-F/RP in SY 2017-18. This represents 7.5 percent and 2.0 percent respectively of all students in the demonstration states.

- It is likely that many of those students directly certified through DCM-F/RP had been previously certified for free or reduced-price meals by application because the change in *total* certifications at the free and reduced-price levels was much lower than the increase in certifications using Medicaid data. Additionally, changes in certification rates were not associated with corresponding changes in participation or reimbursement rates. In cases where students who were previously certified by application were directly certified with Medicaid data, the demonstration alleviated administrative burden on both households and School Food Authorities by reducing the need to complete and process applications by hand.
- Implementation of DCM-F/RP was generally successful but with longer timelines than expected. Administrative costs to state agencies involved in the demonstrations were modest during start-up and largely negligible following implementation.

### **CHILD AND ADULT CARE FOOD PROGRAM (CACFP) FAMILY DAY CARE HOMES MEAL CLAIMS FEASIBILITY STUDY**

This study sought to design and test a data collection method to enable FNS to better estimate the number of meals claimed in error by family day care homes (FDCHs). The study tested the use of smartphones to collect meal claims data from FDCH providers and parents of children who are enrolled at the day care homes. This information along with meal claims data submitted by the FDCHs for reimbursement were used to estimate and validate improper payments. (Published 9/1/20)

#### Key findings:

- Two different approaches estimated similar overall meal claiming error rates (percentage of meals that were over-claimed) of approximately 18 to 21 percent.
- The response and participation rates for FDCH providers and parents were low, preventing generalizability of findings.
- Due to missing data, a high percentage of data were imputed. Imputation on a national scale would be time consuming and could potentially introduce error.
- The estimated costs of implementing these data collection systems on a national scale would be substantial.

### **ASSESSING THE CHILD NUTRITION STATE ADMINISTRATION EXPENSE (SAE) FORMULA**

This study examines the formula used for allocations of SAE funds, identifies factors that influence State agency spending, and presents a series of options for consideration to potentially improve SAE allocations and procedures. It analyzed administrative data and in-person interviews with respondents collected school year 2018-2019. (Published 8/25/20)

#### Key findings:

- State agency perceptions of the adequacy of their SAE allocation were closely linked to the size of their programs. State agencies that administer multiple CNPs in large-

population States reported that SAE funding is sufficient. However, small-size, multi-program agencies and the single-program agencies (especially those administering only CACFP or USDA Foods in Schools) reported that their base SAE allocation is not enough to cover their costs.

- The total dollar value of initial SAE allocations steadily increased over time, with recent growth at a slower rate than in the past. Initial allocations of SAE funds increased by an annual average of 5.3 percent from FY 2006 to FY 2019.
- Options to improve SAE allocations and processes include increasing the current minimum levels in the allocation formula, increasing base allocations, increasing funding related to USDA Foods in Schools, and increasing funding for the administrative review.

### **ASSESSMENT OF THE ADMINISTRATIVE REVIEW PROCESS**

Administrative Review (AR) is the process state agencies use to assess compliance with federal requirements of School Food Authorities participating in the National School Lunch Program and the School Breakfast Program. This study assesses the AR process including the management of review and oversight resources and the extent to which these reviews effectively identify risk areas and noncompliance with program requirements. (Published 8/25/20)

Key findings:

- Review of AR forms showed low levels of noncompliance, with few application errors, missing meal components, resource management issues, or fiscal actions.
- The State Agencies interviewed use a variety of approaches to staff AR activities. Most used automated systems, and all conducted annual training for staff focused on teaming a new reviewer with someone more experienced.
- Suggestions for improvement include considering additional flexibilities in the AR process to reduce burden while also maintaining program integrity; improving AR forms, guidance, and resources; utilizing stakeholder feedback for continuous improvement and providing training in a variety of formats.

### **EVALUATION OF CHILD NUTRITION SPECIAL GRANTS: ADMINISTRATIVE REVIEWS AND TRAINING (ART) GRANTS**

This report examines in-depth the accomplishments, challenges, and lessons learned from 20 states that received and completed Administrative Review and Training (ART) Grants by the end of FY 2017. ART Grants provide funding for diverse activities aimed at reducing administrative error, including training for administrative personnel and improving state-level technologies in the National School Lunch Program and School Breakfast Program. (Published 8/25/20)

## Key findings:

- ART Grant projects helped grantees improve their administrative review processes, rendering them more efficient and more likely to help reduce administrative error. Many grantees described their post-grant administrative review process as more streamlined, more concise, simpler, or faster than the processes in place prior to implementing the new systems.
- ART Grant projects helped some states reduce administrative costs and burden by reducing paperwork and the time and effort required to conduct administrative reviews. Following implementation of their ART projects, 14 grantees reported that staff spent less time on the administrative review process.
- Almost 10 percent of all money awarded was returned: several states returned significant portions of their ART grant funds, primarily due to changes in implementation plans that yielded cost savings. However, grant periods generally lasted longer than initially expected, requiring no-cost extensions for grantees to complete projects.
- Many grantees reported relying heavily on State Administrative Expense funds, another ART grant, FNS Technology Innovation grants, their own in-house operating budgets, or in-kind resources to maintain and update the IT systems, training modules, and other activities developed under the ART grant.

## RESEARCH IN PROGRESS

### *EXPECTED IN 2021*

#### **CHILD NUTRITION PROGRAM OPERATIONS STUDY II, SCHOOL YEARS 2016-17 AND 2017-18**

The Child Nutrition Program Operations Study II is a multiyear study designed to provide FNS with information on current State Agency and School Food Authority policies, practices, and needs. This includes a range of descriptive information from the State and school district levels, as well as data on special topics of current interest, such as the level of State and local subsidies beyond Federal reimbursements, nutrition education and promotion in schools, policies regarding unpaid meal balances, professional standards and training requirements, and practices related to local food purchasing. Research briefs for school years 2016-17 and 2017-18 are expected to be published in 2021.

#### **STUDY OF NON-RESPONSE TO THE SCHOOL MEALS APPLICATION VERIFICATION PROCESS**

This in-depth case study examined (1) the accuracy of the current verification process, (2) district practices when verifying applications for cause, and (3) the ultimate results of the verification process, including the reasons why households do not respond to verification requests and how many households reapply.

### **COMMUNITY ELIGIBILITY PROVISION CHARACTERISTICS STUDY**

With the expansion of the Community Eligibility Provision (CEP) nationwide in SY 2014-2015, FNS is in need of updated information on the characteristics of participating and eligible non-participating CEP schools and school districts. This study examines operational issues and perceived incentives and barriers for adopting CEP as well as the impacts on National School Lunch Program and School Breakfast Program participation and per meal revenues. Using data collected in SY 2016-2017, the study will update the information obtained in the implementation component of the earlier Community Eligibility Provision Evaluation of the early implementers of CEP.

### **STUDY OF SCHOOL FOOD AUTHORITY PROCUREMENT PRACTICES**

This study examines the decision-making process of School Food Authorities (SFAs) regarding school food procurement practices in SY 2017-2018. By surveying and interviewing a nationally-representative sample of SFAs, this study elaborates on previous studies that concentrate on a single food-service program or focus on a single procurement program (such as USDA Foods or USDA Department of Defense Fresh). The study examines overall procurement practices at the SFA level, including the use of food service management companies, cooperative purchasing entities, small and micro-purchases, recordkeeping, and local purchasing. The results of this study will assist FNS in improving the technical assistance provided to SFAs.

### **EVALUATION OF CHILD NUTRITION SPECIAL GRANTS: FISCAL YEAR (FY) 2016 TEAM NUTRITION TRAINING GRANTS**

The Team Nutrition Training Grants provide states with support for nutrition education, training, and technical assistance activities to support implementation of USDA nutrition standards for meals and snacks offered through the Child Nutrition Programs. This study examines the Team Nutrition Training Grant (TNTG) program in order to describe the activities of grantees, their implementation strategies, and the characteristics of sites and participants for FY16 grantees. With insights gleaned through technical assistance provided to the grantee cohort, the study results will inform guidance for strengthening evaluation practices among future grantees.

### **THIRD ACCESS, PARTICIPATION, ELIGIBILITY AND CERTIFICATION STUDY (APEC-III)**

The Improper Payments Elimination and Recovery Act (IPERA) requires Federal agencies to report annually on the extent of erroneous payments in their programs, including both overpayments and underpayments. The objective of APEC-III is to calculate updated, nationally-representative estimates of annual improper payments in the school meals programs by replicating the methodology implemented in previous APEC studies, using data collected in SY 2017-18. The estimates will measure error in the certification, meal claiming, and aggregation processes. In addition, the study includes: (1) robust, statistically reliable national estimates of the annual amount of erroneous payments in NSLP and SBP among sub-groups, such as student, school, and School Food Authority (SFA) type; (2) a sub-study on the differences in error rates among SFAs using different program integrity implementation strategies; (3) qualitative analyses examining the reasons for erroneous payments; and (4) model-based State-level point estimates of improper payments for the 48 continental States and the District of Columbia.

## **EVALUATION OF THE INDEPENDENT REVIEW PROCESS**

The Healthy Hunger-Free Kids Act of 2010 (HHFKA) included several provisions to help increase effectiveness and integrity in Child Nutrition programs. As part of an effort to decrease certification error during the eligibility determination process, Section 304 of the HHFKA requires certain local educational authorities to conduct a second, independent review of applications for free and reduced-price meal benefits before eligibility determinations are made. FNS published a final rule establishing the requirements related to the provision, which became effective in SY 2014-2015. This evaluation assesses the process and effectiveness of this requirement and will help to determine if changes in the process are necessary.

*EXPECTED IN 2022*

## **EVALUATION OF THE DIRECT CERTIFICATION WITH MEDICAID (DC-M) DEMONSTRATIONS FOR FREE AND REDUCED-PRICE MEALS, YEAR 3**

As noted above, FNS began conducting new demonstrations in SY 2016-17 to directly certify students for both free and reduced-price meals using Medicaid data in the National School Lunch Program and School Breakfast Program. FNS awarded demonstrations to a second cohort of eight states for SY 2017-2018. The third year of the evaluation study collected data in SY 2019-2020 and will examine the impact of the demonstrations in fifteen states that are conducting matching from the first day of the school year.

*EXPECTED IN 2023*

## **SCHOOL MEALS OPERATIONS STUDY**

The School Meals Operations Study is the next iteration of the Child Nutrition Program Operations series, which FNS conducts annually to collect and analyze data on select operational aspects of the Child Nutrition Programs. This includes a wide range of descriptive information from the State and school district levels, as well as data on special topics of current interest. Results are used to inform Child Nutrition Programs management and policy development. SY 2020-21 data collection is currently underway.

*EXPECTED IN 2024*

## **EVALUATION OF THE TEAM NUTRITION E-STAR TRAINING PROGRAM**

This evaluation will examine the implementation and effectiveness of the Team Nutrition Enhanced Strategies, Training, Action Plans, and Resources (E-STAR) Training Grant program. E-STAR, a school food service curriculum developed by the Institute of Child Nutrition, will be implemented starting in SY 2021-22 by Michigan Department of Education, the State agency that received the FY 2019 Team Nutrition E-STAR Training Grant. (Implementation had been planned for SY 2020-21 but was considered infeasible due to the pandemic.)

*EXPECTED IN 2026*

## **FOURTH ACCESS, PARTICIPATION, ELIGIBILITY AND CERTIFICATION STUDY (APEC-IV)**

As noted above, the Improper Payments Elimination and Recovery Act (IPERA) requires Federal agencies to report annually on the extent of erroneous payments in their programs,

including both overpayments and underpayments. APEC-IV will refine the methodology used in previous studies to produce updated, nationally-representative estimates of annual improper payments and error rates in the school meals, using data collected in SY 2023-2024. (Data collection was originally scheduled for SY 2022-23 but has been rescheduled due to the COVID-19 pandemic and rescheduling of SNMCS-II.)

## **CHILD AND ADULT CARE FOOD PROGRAM (CACFP) RESEARCH**

*EXPECTED IN 2021*

### **STUDY OF NUTRITION AND ACTIVITY IN CHILD CARE SETTINGS (SNACS)**

The Study on Nutrition and Activity in Child Care Settings (SNACS) is a congressionally mandated study that: 1) assesses nutrition and wellness policies/practices and meal quality for infants and children participating in CACFP; 2) describes food and nutrient intakes of infants and children in CACFP child care centers and outside of child care; 3) determines the meal costs and revenues in CACFP child care centers; and, 4) describes and assesses plate waste in CACFP child care centers.

*EXPECTED IN 2024*

### **CHILD AND ADULT CARE FOOD PROGRAM OPERATIONS STUDY (CACFP-OPS)**

This project will conduct a study of the Child and Adult Care Food Program (CACFP) to collect and analyze data on select operational aspects of the program, including factors affecting family day care home participation in CACFP.

*EXPECTED IN 2025*

### **SECOND STUDY OF NUTRITION AND WELLNESS QUALITY IN CHILD CARE SETTINGS (SNACS-II)**

The second Study on Nutrition and Wellness Quality in Child Care Settings (SNACS-II) will assess the same issues examined in the first study (SNACS). It will also provide information on any changes since the first study and on how well child care providers are following meal pattern guidelines which were updated in October 2017. Data collection is expected to occur in school year 2022-23.

## **SUMMER MEAL PROGRAMS RESEARCH**

*EXPECTED IN 2021*

### **SUMMER ELECTRONIC BENEFIT TRANSFER (EBT) EVALUATION, 2015-2018**

The Summer EBT for Children demonstrations were authorized and funded by Congress in 2010 as a complement to traditional summer meal programs. Summer EBT provides nutritional assistance to low-income children during the summer months through EBT technology used for the Supplemental Nutrition Assistance Program (SNAP) and the Special Supplemental Nutrition Program for Women, Infants and Children (WIC). A rigorous evaluation of the original cohort of

grantees showed that Summer EBT substantially reduced food insecurity among children and increased the consumption of healthy foods. In 2015, eleven grantees received funding under the demonstration, including nine from the previous cohort. This study examines how Summer EBT projects were implemented and administered during the summers of 2015 through 2018. The evaluation also analyzes grantee administrative costs and describes benefit use during the same time period, including participation and redemption patterns across a number of household and program characteristics.

### **SUMMER MEAL PROGRAM PARTICIPANT CHARACTERISTICS AND MEAL ANALYSIS OF QUALITY (SUMMER MEALS STUDY)**

The Summer Meals Study will provide a comprehensive, up-to-date understanding of sponsor, site, and child-level participation in the Summer Food Service Program (SFSP) and Seamless Summer Option (SSO). This is the first national study to simultaneously examine program characteristics in relation to participation and satisfaction with the programs among households. Specifically, the study will examine children's and their caregivers' satisfaction with the program, ways in which FNS could better accommodate their needs, and reasons why families living in eligible areas are not participating in the Summer Meal Programs. The study will also describe sponsors' and sites' meal service characteristics, the nutritional quality of the meals offered and activities the sites provide in an effort to determine how these factors influence children's participation and satisfaction with the program. In addition, the study will investigate the barriers and facilitators to preparing and serving summer meals and identify reasons former sponsors are no longer participating in the Summer Meal Programs. Data collection was conducted in 2018.

***EXPECTED IN 2022***

### **SUMMER FOOD SERVICE PROGRAM (SFSP) INTEGRITY STUDY**

State Agencies are a critical link in achieving SFSP program integrity by ensuring compliance with program regulations, providing training, and conducting oversight reviews of sponsors and sites. This national study will examine how various State Agencies successfully administer and provide effective program oversight. The study will consider program characteristics and location of various models as well as identify potential best practices and barriers to ensuring the integrity and effective management of program operations. The study results will help FNS identify what resources, training, or technical assistance may be necessary to provide State Agencies in their effective administration and monitoring of the SFSP. Data will be collected in 2021.

***EXPECTED IN 2023***

### **SUMMER ELECTRONIC BENEFIT TRANSFER (EBT) EVALUATION, 2019-2022**

As noted above, the Summer EBT for Children demonstrations were authorized and funded by Congress in 2010 as a complement to traditional summer meal programs. Through a competitive solicitation, USDA selected and funded four multi-year Summer EBT projects. Of those selected, two had experience implementing Summer EBT and two were new to the demonstration project. This study will build off previous iterations of the Summer EBT Evaluation to examine the impact of the 2019 grantee projects on food insecurity and consumption of healthy food.