USDA Food and Nutrition Service
U.S. DEPARTMENT OF AGRICULTURE

Research Summary September 2021

THIRD ACCESS, PARTICIPATION, ELIGIBILITY, and CERTIFICATION STUDY (APEC-III), SCHOOL YEAR 2017-18 (SUMMARY)

Background

The Payment Integrity Information Act of 2019 (PIIA) requires that the Food and Nutrition Service (FNS) of the U.S. Department of Agriculture (USDA) identify and reduce improper payments in its programs. Programs with improper payment rates above 10 percent are considered out of compliance with the Act, which triggers increased scrutiny and reporting.

FNS relies upon the Access, Participation, Eligibility, and Certification (APEC) study series to provide reliable, statistically valid estimates of improper payments made to school districts operating the USDA National School Lunch Program (NSLP) and School Breakfast Program (SBP).

In addition, the APEC studies help identify sources of program error for integrity-focused policy and technical assistance. In addition to their financial implications to the Federal Government, errors in the school meals programs may have other implications for program operators. For example, certification errors may result in students missing out on free or reduced-price meal benefits for which they are eligible.

FNS conducted previous iterations of the study in School Years (SY) 2005-06 (APEC-I) and 2012-13 (APEC-II). Since the last iteration, FNS created the Child Nutrition Office of Program Integrity and greatly expanded direct certification and the Community Eligibility Provision (CEP), which were found to contribute to lower error rates.

Key Findings

- Estimated improper payments in SY 2017-18 were 8.02 percent of total reimbursements in NSLP and 8.40 percent in SBP. This is within the 10-percent threshold required to comply with the Payment Integrity Information Act (PIIA) of 2019.
- An estimated 20.0 percent of certifications in non-CEP schools were in error. On the other hand, the overall certification error rate for CEP schools was very low at 2.7 percent.
- Students certified at the reduced-price level had the highest rates of error, while students directly certified had a much lower error rate than those certified by application.
- Aggregation error was very low and did not substantially contribute to improper payments.
- Meal claiming error rates, which do not contribute to improper payments, did not differ significantly from previous studies in the APEC series.

Methods

APEC-III is a nationally representative study of SAs, SFAs, and participating households in SY 2017-18 that followed the methodological framework established in previous iterations of the study with three key changes: meal claiming error is no longer included in the overall improper payment rate; estimates of improper payments due to aggregation error use only the error at the State-to-FNS level as opposed to the total of error at all intermediate levels; and a change to the methodology for determining error rates in CEP schools, using only required sources for determining certification.

APEC studies three categories of error in school meals programs:

1. **Certification error.** This occurs when a student is certified at the incorrect reimbursement level, e.g., at the higher free level instead of reduced-price (which results in an overpayment) or at the lower paid or reduced-price levels instead of free (which results in an underpayment). This may occur due to errors in household income or household size reporting on an application, administrative error in certifying applications at the SFA level, or through errors in the direct certification process. Direct certification is the

process by which eligible children are certified for free or reduced-price meals without the need for a household application based on participation in one or more means-tested Federal assistance programs. It may also occur in CEP schools. Under CEP, household applications do not need to be collected for program enrollment. Instead, an Identified Student Percentage (ISP) — the percentage of students directly certified — is used to calculate a school's reimbursement rate; error can occur if the incorrect claiming percentages are used to calculate reimbursement levels. Certification error results in an improper payment.

Certification error results in an improper payment when a meal reimbursement is claimed for an erroneously over-certified or under-certified student. Certification error in non-CEP schools may be a result of administrative or household reporting errors. To measure certification error due to administrative errors, certification status was independently determined based on abstracted application data. To measure certification error due to household reporting errors, certification status was independently determined based on data collected from in-depth surveys of a sample of households. This was compared to the SFA's assigned certification status based on the application.

For CEP schools, which do not collect applications, the eligibility status of a sample of students was verified to adjust the ISP (see footnote) and therefore meal claiming rate; if the claimed rate was higher than the corrected rate and the corrected rate was below 62.5 percent, the difference was used to calculate improper payments. In CEP, any ISP at or above 62.5 percent results in all meals being reimbursed at the free level, so a corrected ISP higher than 62.5 percent would not result in any error in payments.

2. **Aggregation error.** This occurs when, in the processing of reimbursements, the incorrect meal counts are recorded or transmitted from schools to SFAs, from SFAs to State Agencies (SAs), or from SAs to FNS. While aggregation error can occur at any step, it only triggers an improper payment if the State ultimately submits an erroneous count to FNS for reimbursement.

   To measure aggregation error, meal count and claiming records from different sources (schools, SFAs, and SAs) were aggregated for a target month and examined for discrepancies in the data reported at each stage. Net aggregation error at the point when counts are reported by SAs to FNS is an appropriate measure of improper payment amounts due to aggregation error because over- and undercounts may cancel out in the aggregation process and a payment is only triggered at the point when these counts are reported to FNS. If a number was reported and corrected before the payment was made, the fact that the wrong number was originally reported would not result in an erroneous payment. The APEC study does not provide this exact measure because the study is representative at the national level, so estimates of State-level error in reporting to FNS are not included. Instead, error in reporting from the SFA to State level is used as a proxy for the preferred State to FNS error.

3. **Meal claiming error.** This occurs at the point of sale when a meal is coded incorrectly based on whether it meets requirements for a reimbursable meal. Meal claiming error is a standard-of-service error rather than an erroneous count triggering a payment for a meal that was not served or a benefit for which a participant was not eligible. For this reason, USDA reports this type of error separately from improper payments.

To measure meal claiming error, data collectors observed a sample of meals served to students through NSLP and SBP to document instances in which meals claimed for reimbursement: (a) did not meet the meal pattern requirements; or (b) were served to an ineligible recipient.

The improper payment rate for school meals includes gross certification error and an estimate of the potential gross aggregation error for each State. Because the error in each State's claims submission to FNS is not available as the study is representative at the national and not State level and counts are aggregated when submitted to FNS, we sum the absolute value of overpayment and underpayment error in each of the SFA counts recorded by the State (referred to as "true gross error"). The estimate represents the potential gross aggregation error

at the time claims are reported to FNS and is likely an overestimate of error.

In addition, APEC-III examined SFA characteristics associated with higher error rates and conducted in-depth qualitative interviews with household members and SFA personnel on sources of error.

Overall improper payment rates estimated in APEC-III cannot be directly compared to rates in previous studies that included meal claiming error as a component of the improper payment rate and used a different measure of aggregation error to calculate improper payments. However, improper payments resulting from certification error can be compared over APEC studies.

Findings on Improper Payments

Estimated gross improper payments in SY 2017-18 were 8.02 percent of total reimbursements in NSLP and 8.40 percent in SBP. This resulted in gross improper payments of $1.09 billion in NSLP and $362 million in SBP (Figure 1). Improper payment rates above 10 percent are considered out of compliance with the Payment Integrity Information Act; based on APEC-III results, both NSLP and SBP comply with the requirements of the Act.

Net improper payment rates (overpayments less underpayments) were 4.90 percent of reimbursements for NSLP and 4.87 percent for SBP. These resulted in net payments in error of $667 million for NSLP and $210 million for SBP.

APEC-III estimates of gross improper payment rates due to certification error were 6.52 percent for NSLP and 6.29 percent for SBP. These resulted in improper payments of $887 million in NSLP and $271 million in SBP. APEC-III improper payment rates due to certification error were lower than comparable APEC-II estimates for NSLP (9.82 percent) and SBP (10.97 percent), but confidence intervals on the NSLP estimates overlap slightly.

Aggregation errors did not substantially contribute to improper payments in NSLP or SBP. In APEC-III, improper payments due to aggregation error for NSLP was estimated at 1.50 percent (overcounts of 0.72 percent plus undercounts of 0.78 percent), or $204 million. Aggregation error for SBP was 2.11 percent (overcounts of 1.29 percent plus undercounts of 0.82 percent), or $91 million. Net improper payments due to aggregation error were close to zero. These low error rates, which are likely high-end estimates due to the methodology used to estimate them, suggest that most overcounts or undercounts due to aggregation error may be corrected or canceled out by the time they are reported to FNS and trigger a payment.

Findings on Certification Error

In 2017-18, the overall certification error rate for CEP schools was very low at 2.7 percent. Applications are not collected in CEP schools, which eliminates the household reporting component of certification error. CEP was available to all eligible schools in the Nation starting SY 2014-2015. As a result, CEP schools received about 30.2 percent of all reimbursements in NSLP and 27.1 percent in SBP. This is up from 2.4 percent and 3.5 percent, respectively, in SY 2012-13 when CEP was only available in seven States.

An estimated 20.0 percent of certifications in non-CEP schools were in error in 2017-18. In total, 14.5 percent of students were overcertified (i.e. certified at a higher reimbursement level than they should have been based on their income) while 5.6 percent were undercertified and did not receive benefits for which they were eligible. The error rate in non-CEP schools in APEC-III was statistically similar to the error rate in APEC-II (20.2 percent), suggesting that decreases in the improper payment rate between 2012-13 and 2017-18 were driven by expansion of CEP with its much lower error rates.

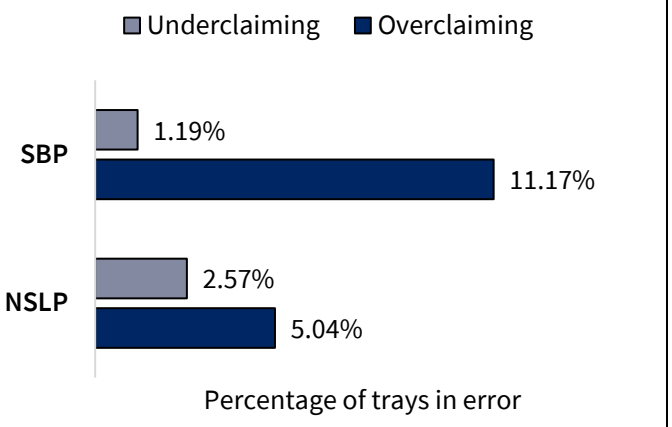
In non-CEP schools, the rate of household reporting error decreased from 23.2 in APEC-I and 16.5 percent in APEC-II, respectively, to 12.0 percent in APEC-III. All of these decreases were statistically significant ($p<0.01$). This correlates with expanded use of direct certification.

Students certified at the free level had the lowest rate of error. This includes both students directly certified for free meals and students approved for free meals through an income application.

Students directly certified for free meals had a substantially lower error rate than those certified free by application, 8.7 percent compared to 25.9 percent.

The error rate for students certified at the reduced-price level in non-CEP schools declined significantly between APEC-II and APEC-III but remains high. Over half of certifications at the reduced-price level were in error. The narrow income band for eligibility at the reduced-price level (between 130 percent and 185 percent of the Federal poverty threshold) may contribute to errors in certification.

Figure 2. Percentage of trays in error in National School Lunch Program (NSLP) and School Breakfast Program (SBP) in 2017-18, by type of error (underclaiming or overclaiming)



In interviews, many SFA directors reported that household reporting mistakes due to misinterpretations of application instructions likely accounted for most certification errors. CEP and direct certifications were acknowledged for their role in reducing error. Moving to online applications was also commonly mentioned as a factor in reducing error.

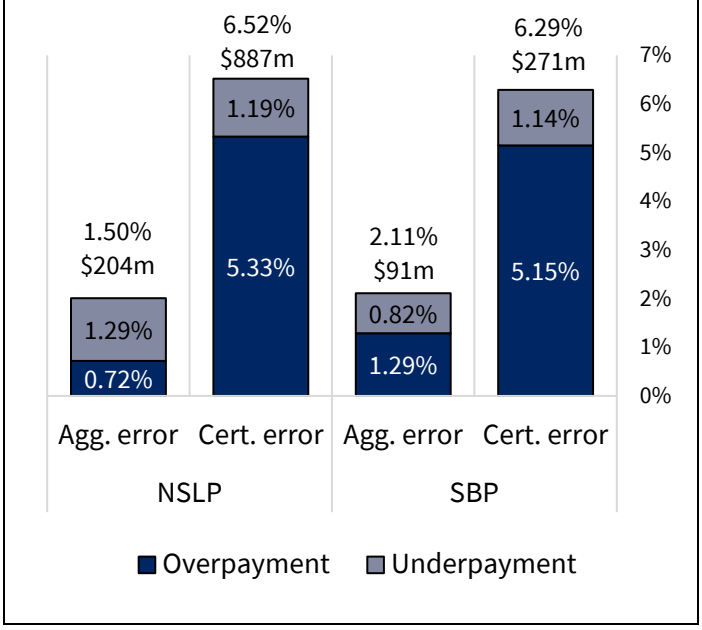
Findings on Aggregation Error

Aggregation error was very low. Improper payment rates from estimated aggregation error for NSLP was estimated at 1.50 percent (overcounts of 0.72 percent plus undercounts of 0.78 percent) and for SBP at 2.11 percent (overcounts of 1.29 percent plus undercounts of 0.82 percent).

When aggregation error did occur, it was concentrated in a small number of schools and SFAs. The vast majority of schools had no aggregation error at all. Only 12.8 percent of schools in NSLP and 13.0 percent of schools in SBP had errors that resulted in improper payments from FNS to State agencies.

In interviews, cafeteria managers and SFA directors suggested that paperwork errors were the cause of most aggregation error. Specifically noted were circumstances where hard-copy counts were involved, such as meals served in the classroom or as a result of point-of-sale system outages.

Figure 1. Improper payment rates in in National School Lunch Program (NSLP) and School Breakfast Program (SBP), School Year (SY) 2017-18 by source of error (aggregation or certification)



Findings on Meal Claiming Error

Overall meal claiming error in APEC-III did not differ significantly from the previous studies in the APEC series. Gross meal claiming error rates were 7.6 percent in NSLP and 12.4 percent in SBP. Overclaiming errors (a student receives a meal that does not meet meal pattern requirements but is coded as reimbursable at point-of-sale) remain significantly more common than underclaiming errors in both NSLP and SBP, and overclaiming error is higher in SBP than for NSLP (Figure 2).

About half of schools (49.6 percent in NSLP and 47.7 percent in SBP) had no meal claiming errors at all. A subgroup analysis of SFAs found that meal claiming error was more common in schools that had 2,000 or more students, independent of other characteristics.

SFA directors and cafeteria managers identified challenges to ensuring every tray was properly reimbursable. These included: the complexity of meal pattern requirements; resistance from students to take certain meal components (such as milk, fruit, or vegetables); the cafeteria environment; and gaps in training of staff.

For More Information:

Milfort et al. (2021). *Third Access, Participation, Eligibility, and Certification Study*. Prepared by Westat, Inc., Contract No. AG-3198-K-15-0054. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support, Project Officer: Conor McGovern. Available online at: www.fns.usda.gov/research-and-analysis.