Background

The Improper Payments Information Act of 2002 (Public Law 107-300) (IPIA) requires all Federal agencies to calculate the amount of erroneous payments in Federal programs and to periodically conduct detailed assessments of vulnerable program components. The Child and Adult Care Food Program (CACFP) subsidizes children's meals and snacks in participating day care centers and family day care homes (FDCHs). The purpose of this pilot was to test possible methods that could lead to valid estimations of the number of meals served by FDCHs. The estimated number of meals served can be used to develop estimates of over- and under-counts of meal claims by FDCH providers that result in erroneous payments.

Method

The pilot tested methods based on observations of meal services, analysis of sign-in/sign-out (SISO) logs, and parent interviews. Observations of eating occasions at FDCHs and interviews with day-care providers were conducted at 6 FDCHs from each of 5 sponsors, for a total of 30 FDCHs, located in New Jersey, New York, and Pennsylvania. In addition, 129 parents were surveyed regarding their children's attendance and participation in meals and snacks at the sampled FDCHs during the week preceding the observations. Monthly claims for meal reimbursement, submitted by the sampled FDCHs, were provided by their sponsors for the months that the observations and parent interviews were conducted, as well as the preceding and following months.

Findings

Sign-in/Sign-out (SISO) logs cannot be used to create a valid indicator of the risk of erroneous payments. The pretest found that in FDCHs where SISO logs are used, their design and use are not consistent across parents, FDCH providers, and sponsoring organizations.

Parents' recalls of meals/snacks served to their children correspond to independent observations in some situations. Given this correspondence, the next step is to determine if it is feasible to compare FDCHs’ meal claims to parent recall data.

Parent recall data cannot validate the degree to which all children at a specific provider have erroneous payments. The study first attempted to determine if an estimate of meals served by a FDCH provider could be developed. The study sampled FDCHs and then attempted to interview all parents of children in the FDCHs. However, interviews could not be completed with all parents. Therefore, the study attempted to weight the data from completed parent interviews to represent meals served to all children at an FDCH. Weighted parent recalls yielded estimates of meals that were different from estimates derived from observations in the homes, and these differences were statistically significant.

Parent recalls, when restricted to their own children, do correspond to independent observations of meals served to their children by the day-care provider. In Figure 1 the average number of meals is restricted to a sample of children with both parent interview and observation data. While parent reports generally resulted in slightly higher estimates of the number of meals served than were observed, none of the differences are statistically significant. Therefore, parent recalls hold promise for validating whether meals claimed for children of interviewed parents are erroneous.

\[\begin{array}{c|c|c|c|c|c}
\text{Meal} & \text{Observed} & \text{Parent Recall} \\
\hline
\text{Breakfast} & 2.4 & 2.8 \\
\text{Lunch} & 3 & 3.1 \\
\text{AM Snack} & 3.5 & 3.4 \\
\text{PM Snack} & 2.1 & 2.5 \\
\end{array}\]

\(a\) The study excluded the day-care providers from interviews, even if they were the parent of a child in care.

\(b\) The analysis was not an individual-level comparison, since the observation data was collected in aggregate form by age group. However, by restricting the sample to cases in which both an interview and an observation occur, the aggregate comparison is effectively between parents and their own children.
It is feasible to compare FDCH meal claims to parent recalls. Because meal claim forms identify which children received which meal, it is possible to compare the meal claims for children of interviewed parents to parent recalls of those meals. When the comparison was made, the study found that parents’ reports for most meal types received by their children exceed the number claimed by FDCHs but the differences were not statistically significant.

Statistical models derived from observations of meal service and the characteristics of FDCHs and enrolled children produce fairly accurate estimates of meal receipt. However, models are unlikely to produce separate estimates of over- and under-payments and are unable to explain all of the variation in meals served.

Parent recall surveys are the method recommended for further testing (see Figure 2). The method has the highest likelihood of yielding accurate national estimates of meals served to children and can produce separate estimates of over- and under-payments.

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<tr>
<td>Observations and Modeling</td>
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Figure 2
Strengths and Weaknesses of Methods for Validating Meal Claims


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