

# Rates of Non-Itemization in a Self-Administered Test of Online Diaries

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# Presentation Outline

- Consumer Expenditure Surveys (CE) background
- Online Panel Self-Administered Diary (OPSAD) background
- Purpose of Analysis
  - ▶ Non-Itemization/Bundling
- Analysis Results
- Conclusions and next steps



# Consumer Expenditure Survey (CE) Background

- Consumer Expenditure Survey (CE) estimates are derived from two separate surveys.
  - ▶ The CE Interview Survey
  - ▶ **The CE Diary Survey**
- CE Diary Survey data come from two sources.
  - ▶ The Household Characteristics Questionnaire
  - ▶ The Spending Diary

# CE Diary Survey Background

- The Household Characteristics Questionnaire
- The Spending Diary
  - ▶ Collects detailed expenditure data for two consecutive 1-week periods.
  - ▶ Four classifications of goods and services:
    1. Meals, snacks, and drinks away from home
    2. Food and drinks for home consumption
    3. Clothing, shoes, jewelry, and accessories
    4. All other products, services, and expenses

# CE Diary Survey Background

- Historically CE production used two one-week **paper** diaries for the spending diary.
  1. Diary placement
  2. Train respondents use the diary
  3. Follow-up to encourage diary keeping
  4. Collect any forgotten expenditures at the end of the diary period
- Online spending diary mode was made available in June of 2020 using these protocols.

# Online Panel Self-Administered Diary Test

- Test conducted on the Ipsos KnowledgePanel®
  - ▶ Probability-based web panel designed to be representative of the U.S.
  - ▶ Field period: November 2021 – January 2022
- Initial Household Characteristics Survey (based on CE CAPI instrument)
- Two-week Consumer Spending Diary (based on CE online spending diary)

# Purpose of Analysis

- To examine the quality of data provided in the Online Panel Self-Administered Diary Test (OPSAD) compared to the CE production equivalent.
- Specifically, comparing the prevalence of non-itemized expenditures.
  - ▶ Also known as bundling
  - ▶ Associated lower data quality

# Analysis Design: Data Compared

- OPSAD Data (November 2021 – January 2022)
  - ▶ 5,864 diary cases
  
- CE Production Data (November 2021 – December 2021)
  - ▶ 1,709 diary cases
  - ▶ January 2022 data not yet available to public.



# Analysis Design: Defining Bundling

- Item descriptions containing the following strings were flagged as “bundled” entries:
  - ▶ GROCERIES
  - ▶ FOOD
  - ▶ CLOTHES
  - ▶ CLOTHING
  - ▶ HOME IMPROVEMENT
  - ▶ HOUSEHOLD
  - ▶ MISCELLANEOUS
  - ▶ MISC

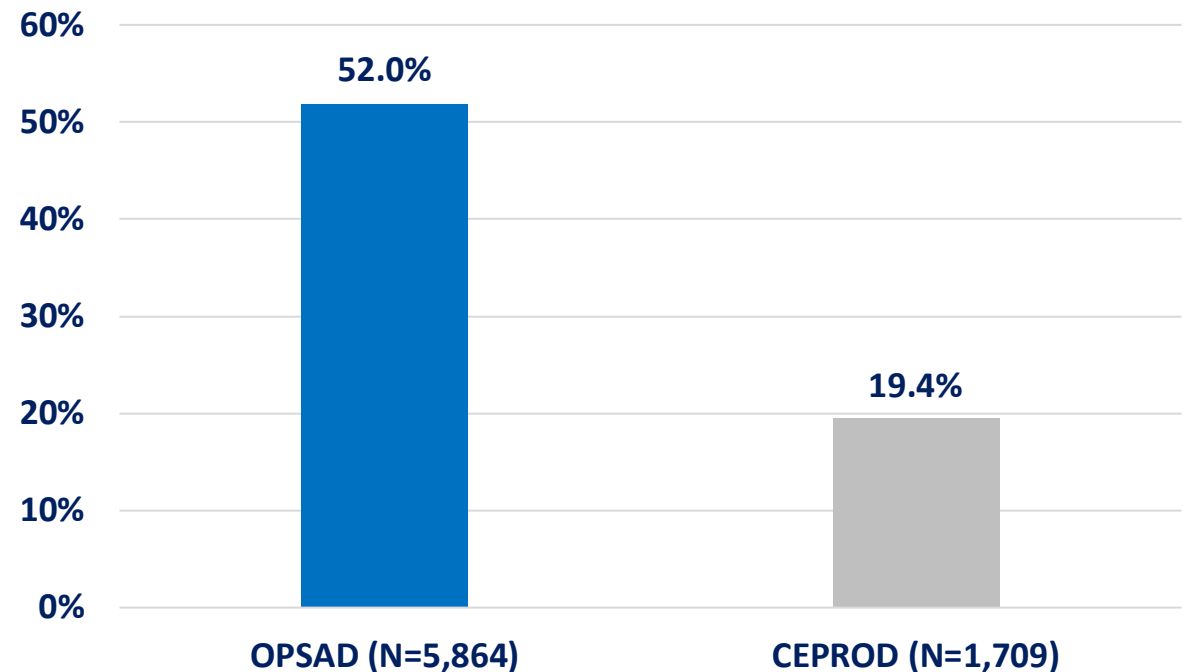


# Analysis Design: Defining Bundling

Main ways of looking at rates of bundling:

- The percentage of diaries with at least one expenditure flagged.
  - ▶ Less granular detail but provides a clear picture.

Percentage of Diary Cases with Any Bundled Expenses

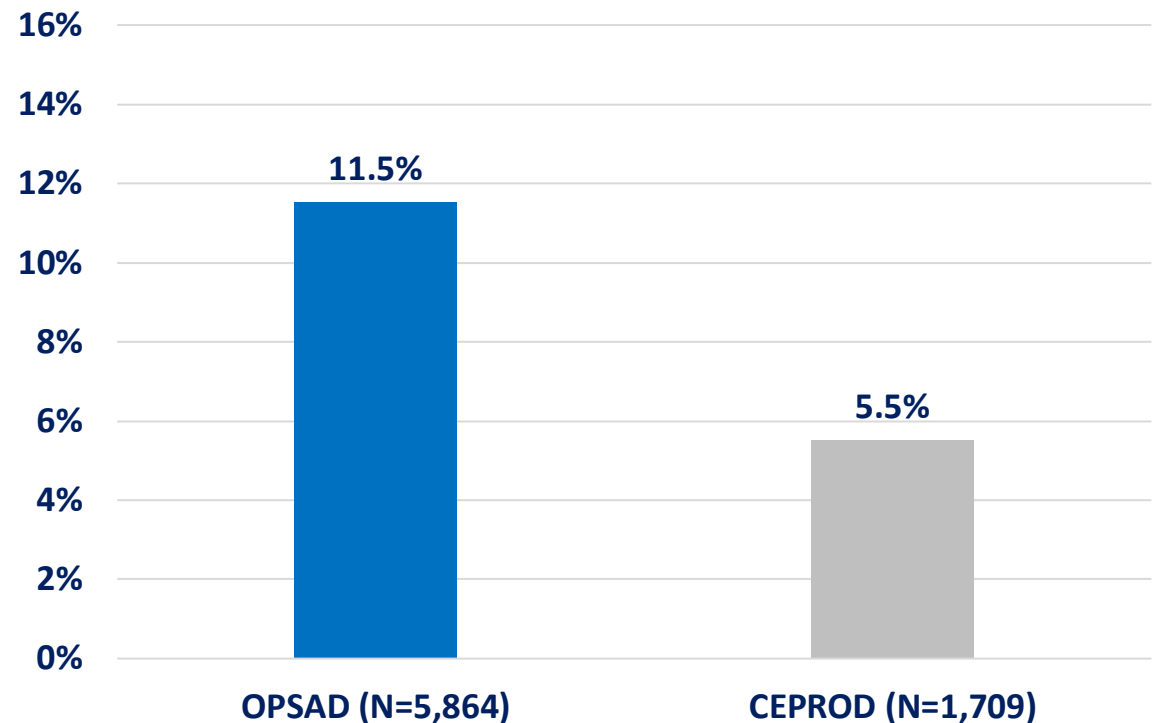


# Analysis Design: Defining Bundling

## ■ The rate of bundled expenditures within diary cases

- ▶ 
$$\frac{\# \text{ of Expenses Flagged in Diary Case}}{\# \text{ of Expenses in Diary Case}}$$
- ▶ Can be misleading if there are few cases.

Average Bundling Rate Within Diary Cases

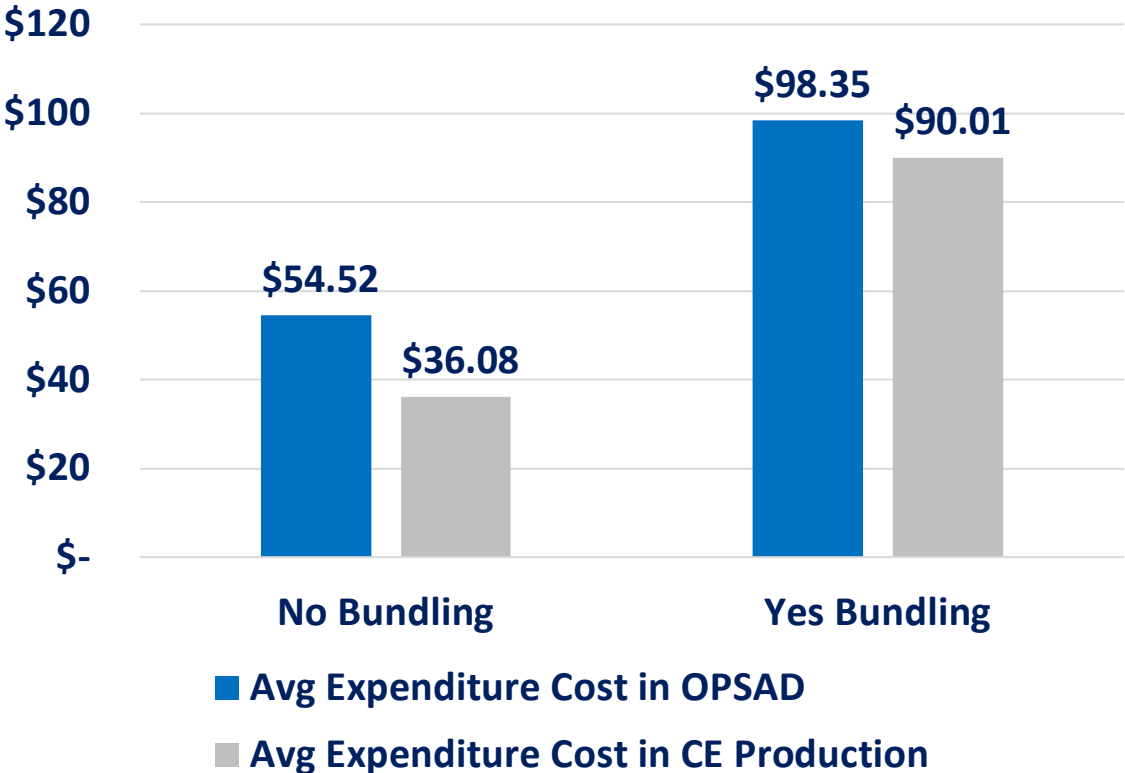


# Analysis Results

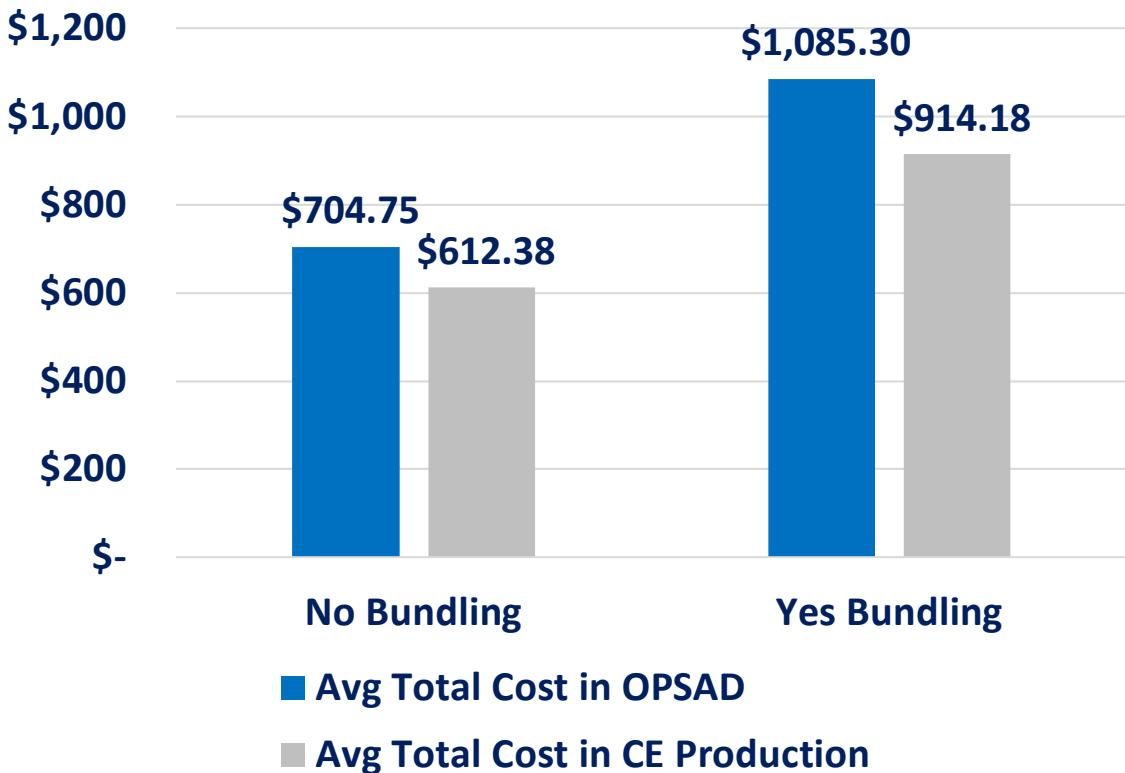


# Cost and Bundling

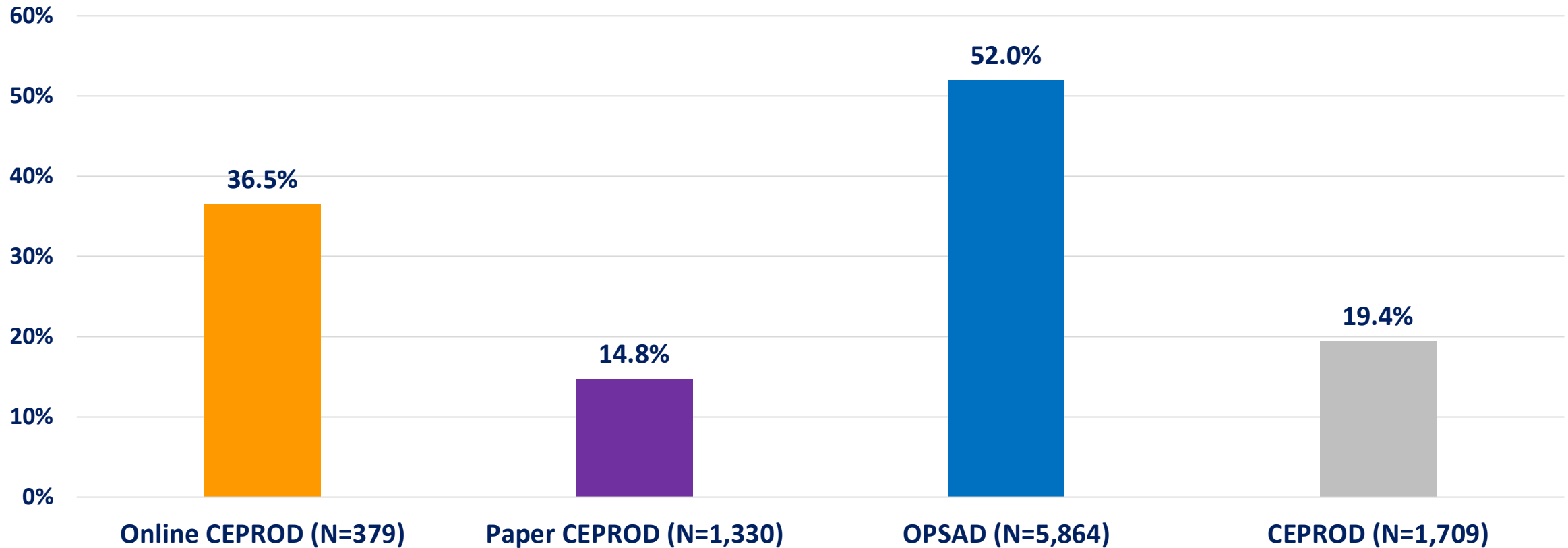
Comparison of Average Expenditure Cost



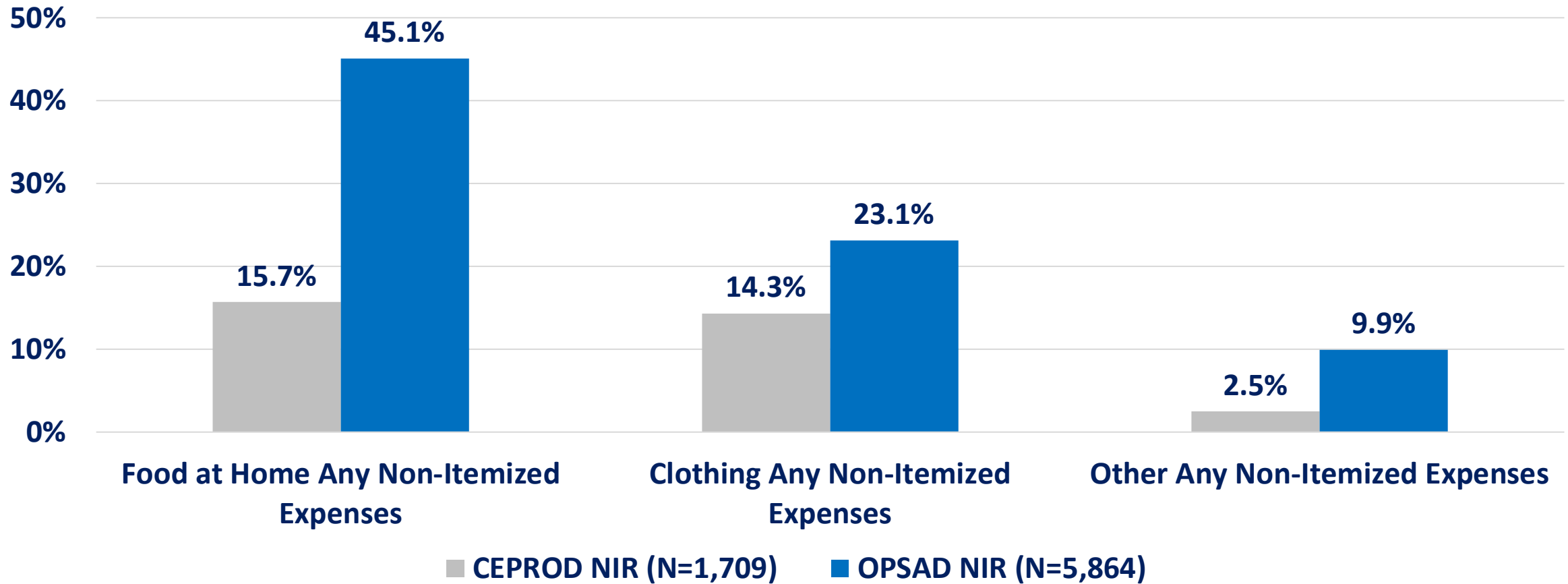
Comparison of Average Total Cost



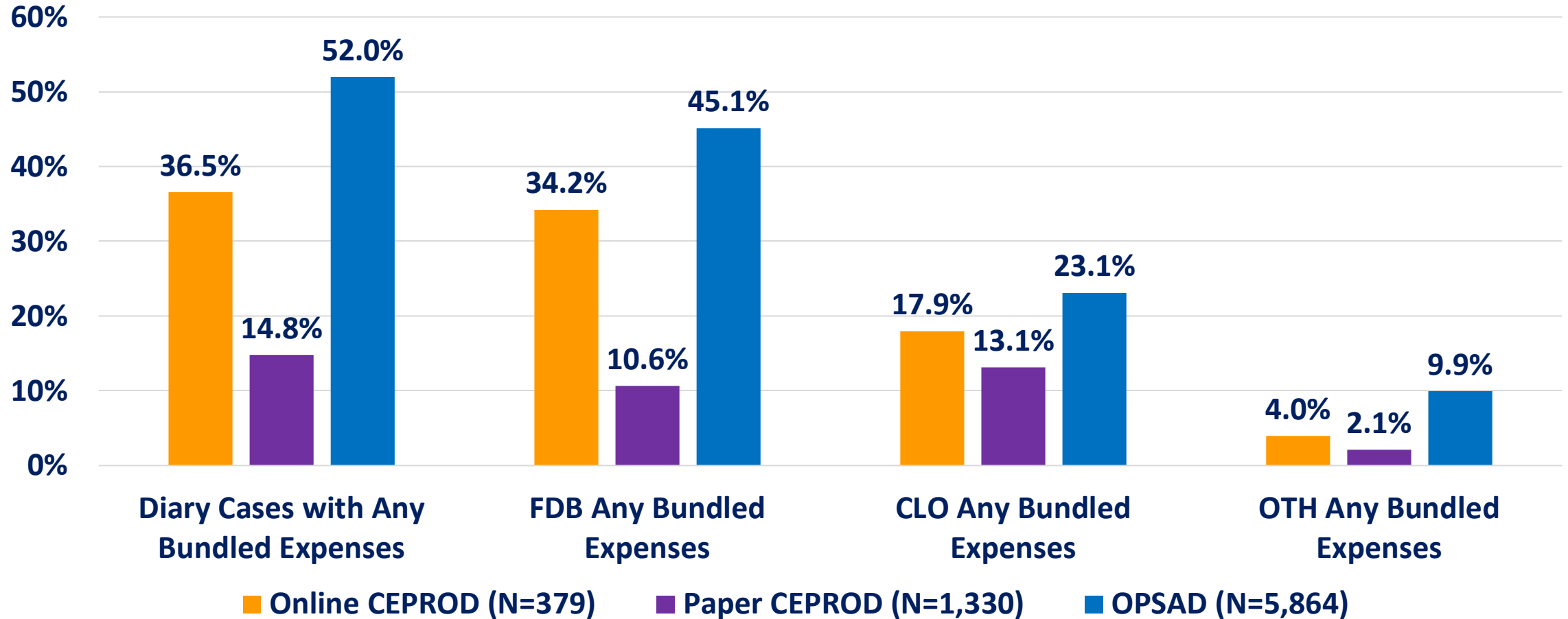
# Percentage of Diary Cases with Any Bundled Expenses by Mode



# Percentage of Diary Cases with Any Bundled Expenses By Type

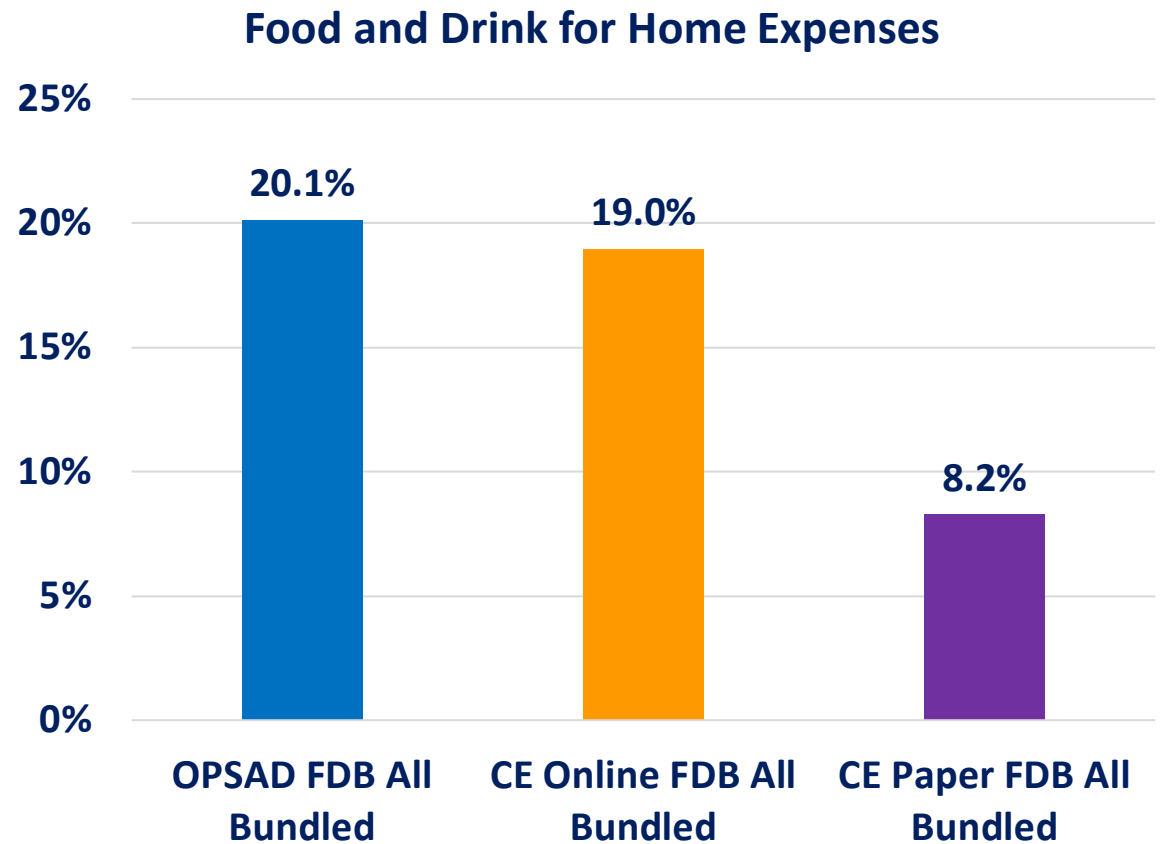
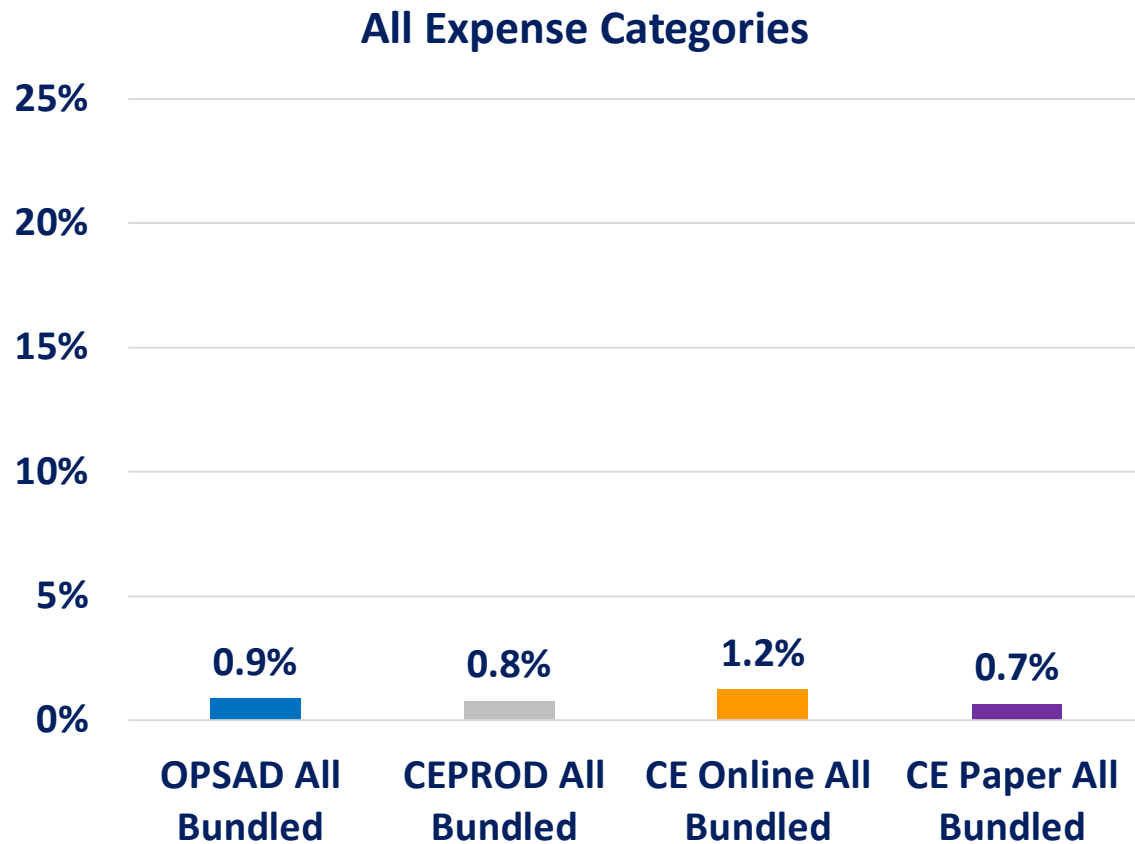


# Percentage of Diary Cases with Bundled Expenses by Mode and Type





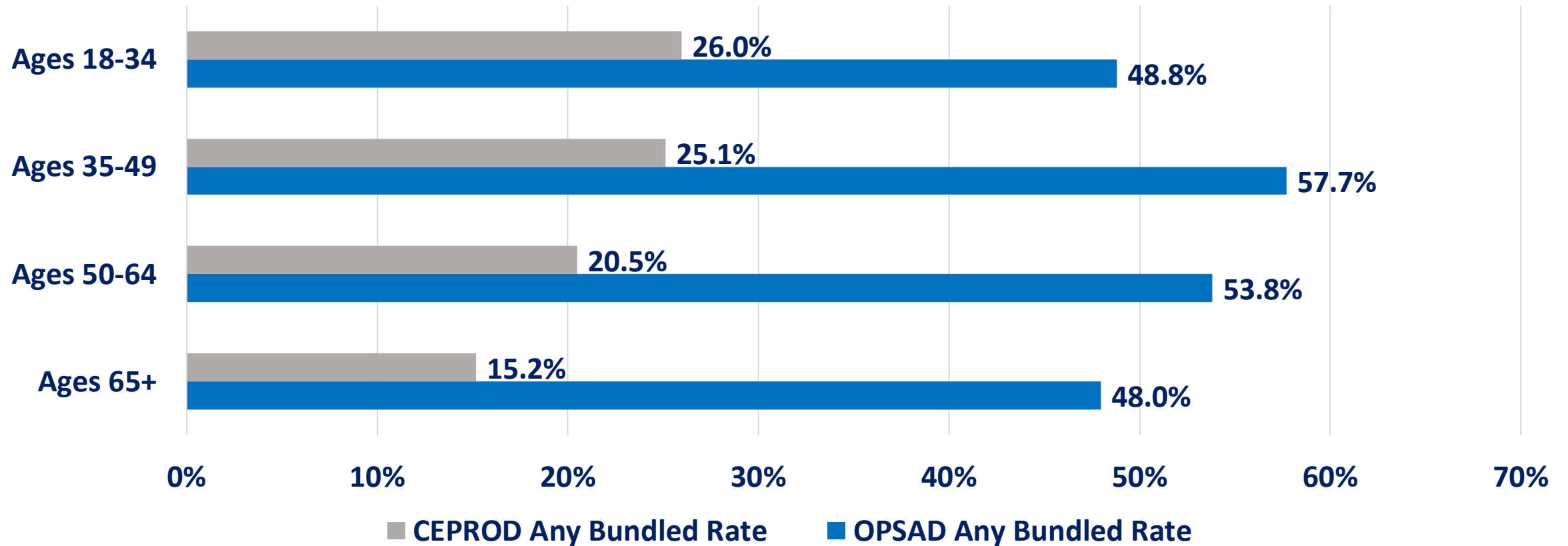
# Percentage of Diary Cases with All Bundled Expenses



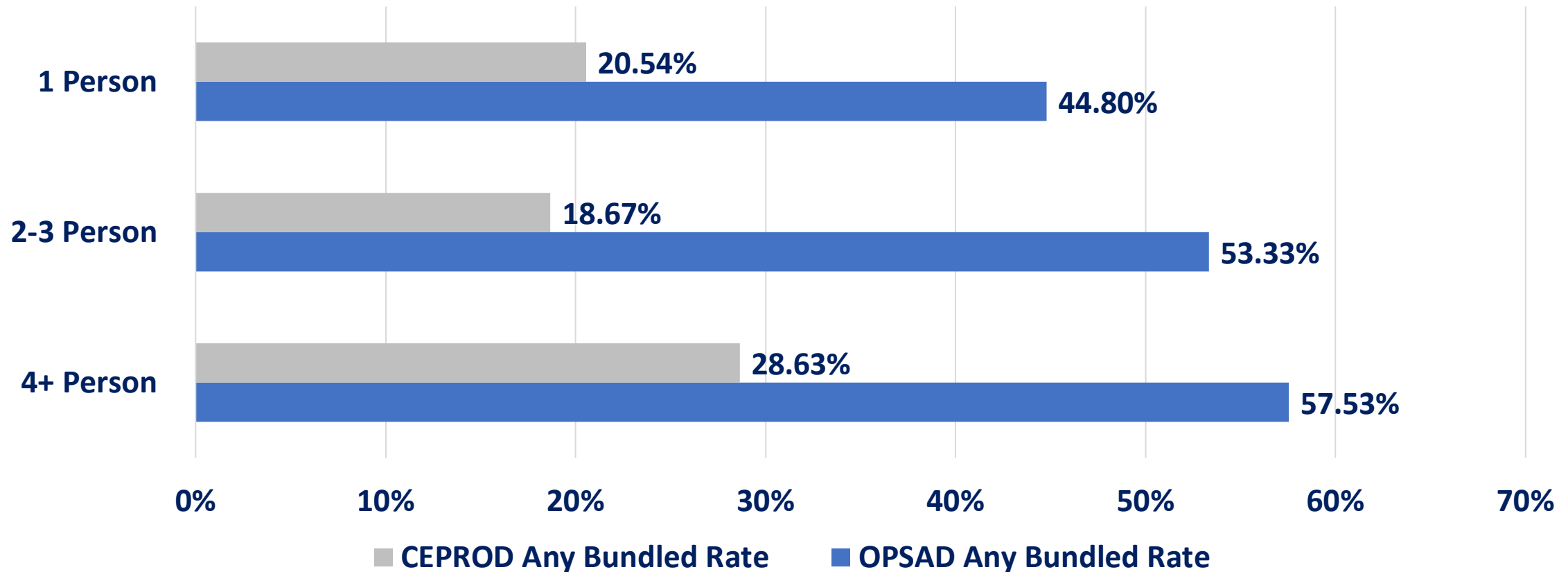
# Differences in Bundling by Demographics

- Likelihood to provide bundled expenses varied significantly by...
  - ▶ Respondent Age (18-34, 35-49, 50-64, and 65+)
  - ▶ Household Size (1 Person, 2-3 Persons, and 4+ Persons)
- Race, ethnicity, education, and income were examined, but were not found to vary significantly.

# Percentage of Diary Cases with Any Bundled Expenses by Age

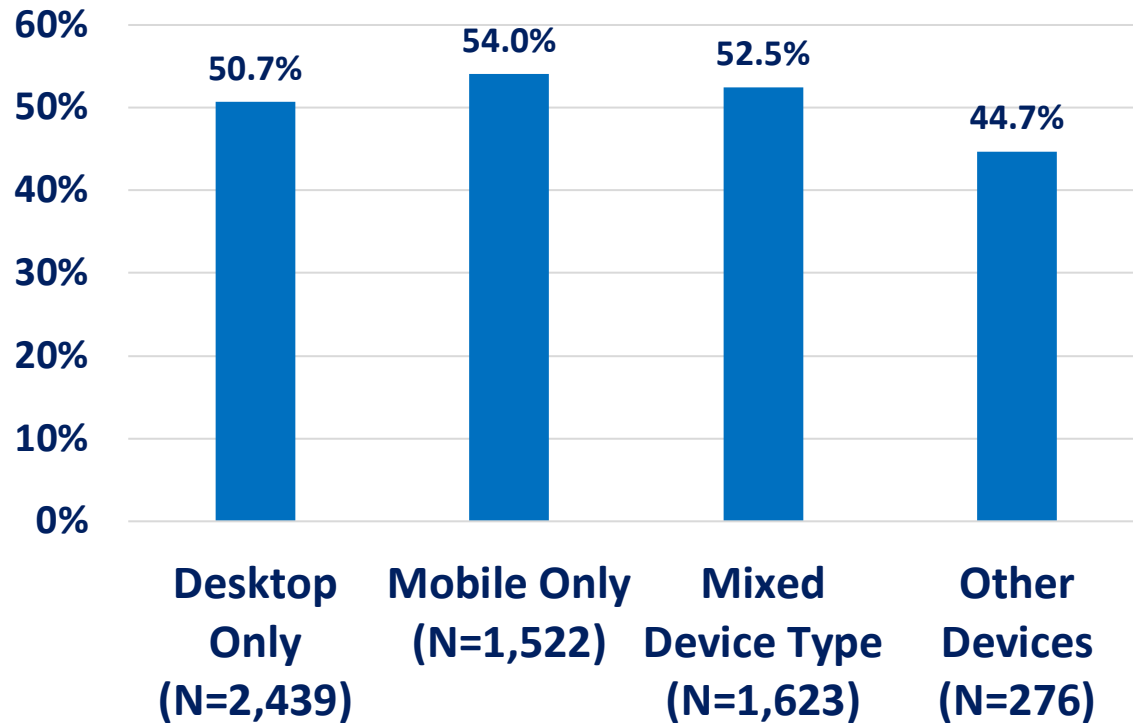


# Percentage of Diary Cases with Any Bundled Expenses by Household Size

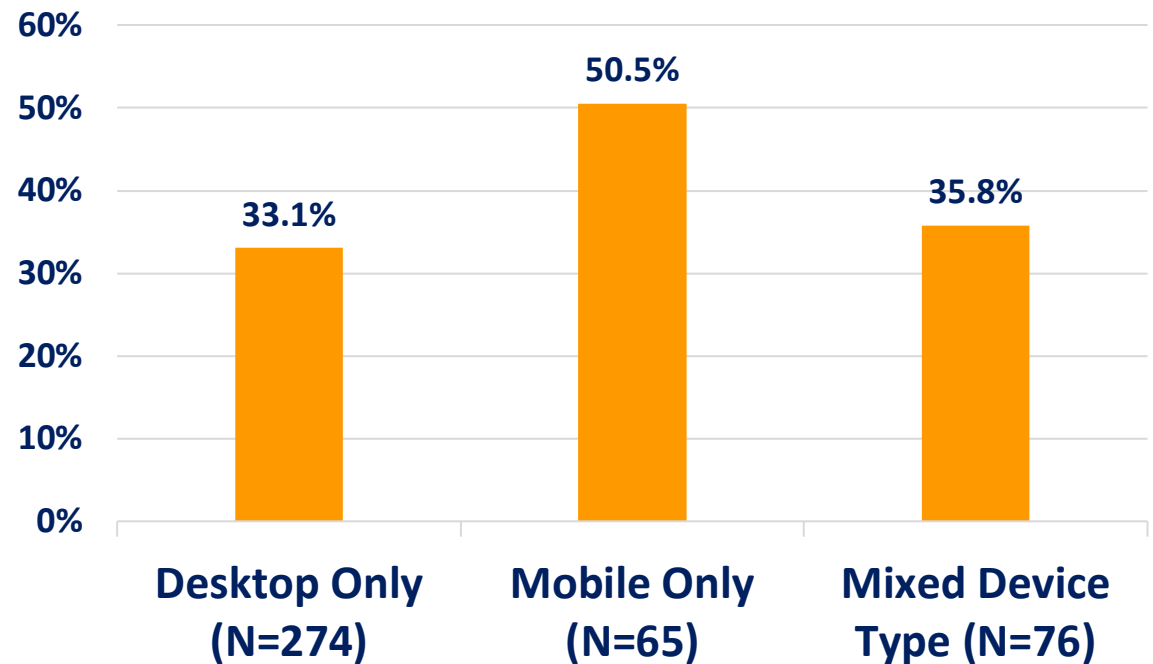


# Differences in Bundling by Device Used

## OPSAD Any Bundled Rate by Device



## CE Online Diary Any Bundled Rate by Device



# Summary of Findings and Recommendations



# Summary of Findings

- The prevalence of bundling was generally higher in the online panel test of a self-administered diary than in CE production.
  - ▶ Potentially due to interviewer intermediation (placement, training, and follow-up).
  - ▶ Bundling was significantly higher in the CE online diary cases than in the CE paper diary cases, but still significantly less than in the OPSAD diaries.
- Item descriptions for food and drink at home purchases are by far the biggest contributor to bundling.
- Some demographic differences (respondent age and household size).
- How bundling is measured matters.

# Recommendations

- Further research into the prevalence of non-itemization in CE online diaries with more robust data.
- Continue analyzing entry counts and non-itemization.
- Examining the relationship between time spent in the diary and non-itemization.
- Analyzing the “Business name” data provided by respondents for meals away from home expenditures.





# Thank you!

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