Modifying income reporting on benefits applications: Evidence from single-income households



Providing applicants with different alternatives to reporting an hourly wage did not increase submission rates for an online application for SNAP benefits

Key findings

Modifying the set of income reporting options available to applicants in a "digital assister" SNAP application did not meaningfully affect application completion rates.¹ Among those who saw the set of all three options for reporting income, roughly half selected the "hourly pay" option, which prompted them to enter their hourly pay and hours worked during the last pay period.

Agency priority

The Supplemental Nutrition Assistance Program (SNAP) is America's largest nutrition program, providing an average of nearly \$200 a month in food assistance to 1 in 8 Americans.² SNAP is a U.S. Department of Agriculture (USDA) program that is administered by state agencies. To receive these benefits, individuals apply on behalf of their household with their local county or state SNAP office. SNAP applications can often be completed online for ease of access, but even online applications can be long and difficult to complete. Administrative burdens experienced by applicants throughout the benefits application process may prevent them from applying — a prerequisite for receiving valuable financial support.³

Eliminating barriers in access to SNAP is a priority of USDA. Reducing burdens in forms and applications is one pathway towards improving the delivery of excellent, equitable, and secure federal services, a core priority of the President's Management Agenda.

Program change description

Code for America (CfA, our collaborator for this work) created a digital assister to help SNAP applicants apply for benefits more easily in one state administering SNAP. In a recent modification to the digital assister, CfA provided additional options to support applicants in reporting their income. Prior research has shown that answering questions about income on forms and applications may be especially difficult.⁴ Allowing applicants to report their income in a way that is consistent with their own pay schedules may make it easier for them to complete the application.^{5,6}

Variation across households in how and when individuals are paid presents a challenge for asking about income among applicants with diverse earning patterns. Providing applicants with multiple options for reporting income may help, but providing too many options can increase complexity for applicants and for the caseworkers who process the forms.⁷

To identify the most effective set of income reporting options, CfA modified the income reporting screens shown to applicants completing their digital assister application for SNAP benefits. Income reporting options across conditions included reporting hourly pay and hours worked, annual salary, or exact amount from a pay stub. Applicants were randomly shown a set that included some or all of these reporting options.

demotivating: Can one desire too much of a good thing?" Journal of Personality and Social Psychology 79, no. 6 (2000): 995 – 1006.

¹ A digital assister is a tool that builds an easier-to-use interface on top of an existing form, somewhat akin to a graphical user interface.

² "Program Data Featured Reports, Fiscal Year 2023" U.S. Department of Agriculture Food and Nutrition Service, accessed July 18, 2024. https://www.fns.usda.gov/pd/overview.

³ Moynihan, Donald, Pamela Herd, and Hope Harvey. "Administrative Burden: Learning, Psychological, and Compliance Costs in Citizen-State Interactions." Journal of Public Administration Research and Theory 25, no. 1 (2015): 43 – 69.

⁴ Moore, Jeffrey C., Linda L. Stinson, and Edward J. Welniak. "Income measurement in surveys: A Review." Journal of Official Statistics 16.4 (2000): 331-362.

 $^{^{\}rm 5}$ De La Rosa, Wendy, Abigail B. Sussman, Eric Giannella, and Maximilian Hell. "Communicating Amounts in Terms of Commonly Used Budgeting Periods Increases Intentions to Claim Government Benefits." Proceedings of the National Academy of Science 119, no. 37 (2022): e2205877119.

⁶ Devoe, Sanford E., Byron Y. Lee, and Jeffrey Pfeffer. "Hourly versus salaried payment and decisions about trading time and money over time." ILR Review 63, no. 4 (2010): 627 - 640. ⁷ Iyengar, Sheena S., and Mark R. Lepper. "When choice is

Evaluation design

CfA designed and implemented the intervention and the evaluation, which was fielded for seven weeks from May 8th – June 23rd, 2023. All SNAP applicants who made it to the income reporting module during the study and met the criteria for inclusion in the evaluation⁸ (*N*=32,879) were randomly assigned to see one of three screens prompting them to select a method for reporting their income.

One-third of eligible applicants were assigned to the **paystub** reporting option set, where they were able to choose between reporting their income via their hourly wage and hours worked or via an exact amount from a recent pay stub. One-third of eligible applicants were assigned to the salaried reporting option set, where they were able to choose between reporting their income via the hourly reporting option or via their annual salary. The final third of eligible applicants were assigned to the combined reporting option set, which contained all options. Applicants in all conditions were also provided an option to "opt out" of these structured reporting options and simply enter in an estimate of their monthly income in an open text box.

Table 1. Summary of intervention arms



\$100

Hourly wage

Exact amount from paystub

The **paystub** reporting option set prompted applicants to report their income by either their hourly wages or an exact amount from a recent pay stub.





The **salaried** reporting option set prompted applicants to report their income by either their hourly wages or their annual salary.



\$100



Hourly wage

Exact amount from paystub

Annual salary

The **combined** reporting option set prompted applicants to report their income by either their hourly wages, the exact amount from a recent pay stub, or their annual salary.

To build generalizable evidence on form completion and federal customer experience, we developed an analysis plan to evaluate whether providing additional income reporting options impacted submission rates, and to learn which income reporting were most used by applicants.

Analysis of existing data

CfA collects all responses to its SNAP digital assister, along with indicators of treatment assignment, which reporting option was selected, time spent on the application, and whether an applicant ultimately submitted their application. The primary outcome of interest was whether the applicant submitted the application.⁹

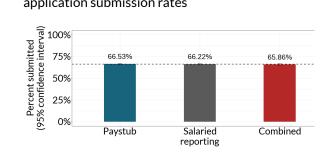
Results

Among applicants who made it to the income reporting module in the application, 66.2% completed and submitted the SNAP application. Providing applicants with different sets of income reporting options did not meaningfully change application submission rates. When jointly testing for differences in application submission rates across the three intervention arms, none of the choice sets affected application submission rates (p = 0.54).

⁸ Applicants were included in the evaluation if they reported having a single job and stable income that did not fluctuate monthly, and if they were not self-employed.

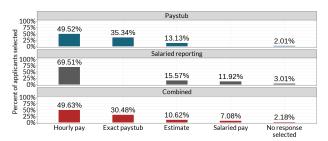
⁹ We evaluated this hypothesis using an F-test of joint significance, as well as pairwise tests of differences in completion rates between pairs of intervention arms.

Figure 1. Changing the reporting options displayed to applicants completing a digital assister application for SNAP benefits did not change application submission rates



We also analyzed which of the offered income reporting options applicants selected most often. Across all the intervention arms, applicants most frequently reported their income via the *hourly wage* reporting option. In the paystub, salaried, and combined conditions, 49.52%, 69.51%, and 49.63% of applicants selected the hourly pay option, respectively.

Figure 2. The option that applicants most frequently selected was the *hourly* reporting option, where applicants reported their income by providing their hourly pay and the number of hours worked



Compared to applicants in the paystub condition, applicants in the salaried reporting condition were 1.4 times more likely to select the *hourly* reporting option, suggesting that applicants were likely to rely on this reporting option when a relatively more popular option (e.g., *exact*) was removed in favor of a less popular option (e.g., *salaried*).

Implications

Our findings suggest that when a form provides at least some relevant options for applicants to report income, small differences in the set of reporting options do not have a meaningful impact on application submission rates among non-self-employed applicants with a single, non-variable source of income.

The digital application also provided an opportunity to learn which reporting option was selected by most applicants. We learned that the *hourly* reporting option was consistently selected by most applicants, regardless of the other options available. Hourly wage reporting, however, will not work for all applicants, as many are not paid hourly and select other reporting options. We note that the sample for the evaluation only included people with a single job and stable income, so other options may be more compatible with people with more complex income.

Agencies looking to modify income questions on application forms may want to consider providing a small number of income reporting options, as opposed to only providing one option. Examples of applicable forms could include applications for means-tested programs, including over 47 programs across at least 10 agencies. Offering applicants a choice between a guided prompt (e.g., reporting hourly wage and hours worked) and a more general format that appeals to a range of wage structures may be especially helpful to applicants.

¹⁰ Applicable forms may be found in applications to means-tested programs, including those on this list, as well as other situations in which the public reports income to the federal government, such as tax forms and associated digital assisters.