

# Behavioral Effects of Sliding Scale Mechanisms on Participation in Assistance Programs

An experimental case in the context of Meals on Wheels

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## Background and Objectives

Sliding scale cost sharing is a common approach among nonprofits and charities to raise revenue without turning people away. Sliding scales are constructed such that clients pay a portion of the cost of the service based on their reported incomes. Oftentimes the lowest earners are not asked to pay anything and receive the service for free. Sliding scales are used frequently in healthcare and for other critical services.

Despite their ubiquity, sliding scales are not well understood from a behavioral perspective and have received little attention in the literature. However, their design and potential to be influenced by behavioral effects make them a ripe area for research.

The overarching goal of the project is to detect behavioral responses to sliding scales and, thus, make recommendations for their design. A theoretical model is developed and then tested with an experimental survey where the service of interest is Meals on Wheels, which provides meal delivery services to homebound seniors and often employs cost sharing to help cover program expenses.

## Relevant Behavioral Concepts

When a client or potential client is given a price based on a sliding scale, often they are told more than just the price they are expected to pay for the service. While different providers present sliding scales in different ways, common approaches lend themselves to the following behavioral phenomena:

- **Framing Effects:** If the provider shows the client the full scale (i.e., how much different clients are expected to pay), the client's income/ability to pay is also implicitly compared to others who have to pay more or less, which may create a framing effect. A framing effect is a cognitive bias whereby an individual's valuation of a choice changes when it is presented as a loss or gain.
- **Price Anchoring:** Some providers tell clients the full cost of the service to the provider. The disclosure of the full cost may create an anchor price that affects the client's behavior (i.e., willingness to participate in the program at the price offered).

The first stage of this study will focus on **framing effects**.

# Research Questions

1. Does a sliding scale decrease participation among potential clients?
2. Does being placed in the lowest level of a sliding scale reduce participation among clients?

# Hypotheses

There has not been much research into the relationship between sliding scales and participation in services, with the major exception being Ku and Coughlin (1999). They found that participation in a healthcare program generally decreased as relative price increased; however, there was a slight increase in participation among the second-to-lowest income groups. Their findings suggest that stigma might be at play among those placed in the lowest group on a sliding scale. Based on their findings, **this study hypothesizes that a sliding scale will decrease participation among those who are placed in the lowest level.**

# Sample

This study will use Qualtrics survey services to conduct an online, experimental survey of 2,000 lower-income and/or resource-limited seniors from across the United States.

# Methods

The survey will be designed with different treatments that provide varying levels of information to potential Meals on Wheels clients. Respondents will be provided with a narrative where they are told to make decisions about enrolling in a Meals on Wheels program. They will be given a description of the service and then offered a price within the context of a random treatment. Participants can accept or reject the price. The first treatment will provide no information other than a stated price for services. The second treatment will ask for the client's income and then present a price for services. The third treatment will ask for the client's income and then present a price for services in the context of a sliding scale where the client has been placed in the lowest income category. And, the fourth treatment will ask for the client's income and present a price for services in the context of a sliding scale where the client has been placed in a middle category. The price will be constant for all clients; only the framing will change. Participation rates will be compared across treatments.

# Practice and Policy Implications

While there is no clear measurement of how common sliding scale fee structures are, a quick Google search reveals their use by a variety of providers from therapists to women's clinics to tattoo artists. Anecdotally, they appear to represent a common strategy for raising revenue without restricting service reach. A better understanding of how clients respond to sliding scales will help improve their design so that these providers can continue to reach their target clients without sacrificing critical funds needed to continue operations. This project focuses specifically on Meals on Wheels, where demand is likely to be relatively elastic compared to healthcare services.

## Reference

Ku, L., Coughlin, T.A., 1999. Sliding-scale premium health insurance programs: Four states' experiences. *Inquiry* 36, 471–480.

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## About the BIS Grant Program

The BIS grant program supports dissertation research by advanced graduate students who are applying a behavioral science lens to specific research questions relevant to social services programs and policies and other issues facing low-income and vulnerable families in the United States. To learn more, visit: [acf.hhs.gov/opre/research/project/behavioral-interventions-scholars-2017-2019-0](https://acf.hhs.gov/opre/research/project/behavioral-interventions-scholars-2017-2019-0)

