

Program Recertification Costs

Evidence from SNAP

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Motivation

- Recertification in government assistance programs is necessary to determine continued eligibility of program recipients and ensure program integrity
 - For example, benefit periods for the Supplemental Nutritional Assistance Program (SNAP) typically last 6 months to a year
- However, onerous application processes may prevent eligible participants from recertifying. This could lead to:
 - Temporary or permanent loss of benefits
 - Administrative costs associated with “churn”
- In this paper, we estimate the impact of one seemingly trivial component of the SNAP recertification process: the recertification interview date

Study Design

- In San Francisco, SNAP (or “CalFresh”) participants must complete an interview with a caseworker within their recertification month
- Importantly, the interview date in the appointment letter is *randomly assigned*
 - Participants may reschedule for any time in the month
- While some participants are assigned an initial interview at the beginning of the recertification month, other are assigned a date in the last week
- We compare recertification outcomes of cases with early vs. late initial interviews to determine the effect of interview assignment on recertification, churn, and long-term discontinuances

Preview of Results

- We find that initial interview assignment has a large and significant effect on recertification outcomes
- A one-day delay in the assigned interview date leads to:
 - Recertification: ↓ 0.30 percentage points
 - 30-Day Churn: ↑ 0.25 percentage points
 - 90+ discontinuance: ↑ 0.06 percentage points
- In other words, participants assigned to interview dates on the 28th vs. the 1st are:
 - 8.4ppt less likely to recertify (15% decrease)
 - 7.0ppt more likely to churn (54% increase)
 - 1.7ppt more likely to be discontinued (6% increase)
- Additionally, larger effects of interview dates on churn for households with children and on long-term discontinuances for the homeless

Literature Review: Churn

- **SNAP Churn:** occurs when a SNAP case exits the program and then re-enters within four months or less
- Study of six states estimates churn rates between 17 and 28% (USDA, 2014)
 - Largely due to procedural issues
- Costs associated with churn:
 - Loss of benefits among eligible households
 - Client time and expense involved in reentering the program
 - Administrative costs

Literature Review: Take-up & Targeting

- **Take-up:** FAFSA Bettinger, Long, Oreopoulos, Sanbonmatsu (2012), WIC Rossin-Slater (2013), 401(k) Madrian & Shea (2001), EITC Bhargava and Manoli (2015)
- **Targeting:**
 - Neoclassical: application costs reduce applications of least needy Nichols and Zeckhauser (1982), Finkelstein & Notowidigdo (2018)
 - Behavioral: application costs reduce applications of *most* needy Mullainathan and Shafir (2013), Deshpande & Li (2018)
- Note: our context is slightly different because about remaining on the program, not initial applications

SNAP Program Details

- **The Supplemental Nutrition Assistance Program:** the largest nutritional assistance program in the US
 - Provides food vouchers to low-income households via EBT cards
 - Serves over 44 million individuals at an annual cost of \$70 billion
 - Average individual benefits of \$125 per month (max of \$194)
 - San Francisco county: over 50,000 “CalFresh” participants
 - CalFresh income eligibility: gross income below 200% FPL

SNAP Recertification Process

- **Annual recertification process**
 - Complete Recertification, Reauthorization, and Renewal (RRR) form
 - Complete caseworker interview
 - Submit income/expenses verification for all household members
- Note: participants must also complete a semi-annual recertification (SAR-7)

SNAP Recertification Process: Example

- **Example:** Consider a case with recertification due in June 2016

NOTICE OF ACTION Food Stamps Termination

COUNTY OF SAN FRANCISCO

STATE OF CALIFORNIA
HEALTH AND HUMAN SERVICES AGENCY
CALIFORNIA DEPARTMENT OF SOCIAL SERVICES

Notice Date : 05/17/2016
Case Name : [REDACTED]
Case Number : [REDACTED]
Worker Name : Food Assistance
Worker Number : VBK
Telephone : (415) 556-1001
Worker Hours : 8:00 AM - 12:00 PM, 12:00 PM - 5:00 PM
24-Hour Information :
Address : 1235 Mission ST
San Francisco CA 94103-2705

[REDACTED]
San Francisco, [REDACTED]

Questions? Ask your Worker.

State Hearing: If you think this action is wrong, you can ask for a state hearing. The back of this page tells how. Your benefits may not be changed if you ask for a hearing before this action takes place.

1. Your CalFresh Certification period will end on 06/30/2016.
2. If you want to keep getting your benefits without a break, you must file an application no later than the 15th day of the last month of the certification period. You must also complete an interview with the county, and turn in any proof of income, expenses, or other information before the end of your certification period listed above.
3. If you have a one-month or two-month certification period, contact your worker for when your application needs to be turned in.
4. You will get a separate letter with an interview appointment date and time. Call your worker right away if you do not get the appointment letter within 10 days of this notice. Your appointment letter will tell you if you have a phone interview or if you have to come into the office for your interview.

Example: Recertification Steps for June 2016 Case

- **Second week of May:** recertification cases are *randomly assigned* an interview date in June 2016
 - Note: while initial interview dates can be assigned as early as June 1st or as late as June 28th, recertification is due on June 30th for all cases

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- **Late submission:** recipients must submit new application; benefits are prorated and will not be received until the subsequent month

Data Description

- Administrative data from the San Francisco CalFresh office
 - Recertifications from November 2014 to November 2016
 - Includes only SNAP-only cases
 - 40,981 recertification cases
- Data includes:
 - Recertification forms: dates RRR packet sent/received
 - Interviews: dates and outcomes of all interview appointments
 - Recertification outcome: approved/discontinued
 - CalFresh Applications: reapplication and churn for 90 days post-recertification

SNAP Recertification: Recertification Application

- **Recertification Application (CF-37):** provide information and verification of income and costs for all household members

7. Do you or anyone you buy and prepare food with get income from a job (earned)? (Please Check One) ☐ Yes ☐ No

If yes, complete the section below and attach proof. List each job for each person who works. If you need more space, attach a separate piece of paper and identify which question you are writing about. Examples include babysitting, salary, self-employment, sick pay, tips, etc.

	Job #1	Job #2	Job #3
Name of Person who gets income:			
Employer Name:	Self-employed, check <input type="checkbox"/>	Self-employed, check <input type="checkbox"/>	Self-employed, check <input type="checkbox"/>
How often paid:	<input type="checkbox"/> Weekly <input type="checkbox"/> Biweekly <input type="checkbox"/> Other <input type="checkbox"/> Monthly <input type="checkbox"/> Twice Monthly	<input type="checkbox"/> Weekly <input type="checkbox"/> Biweekly <input type="checkbox"/> Other <input type="checkbox"/> Monthly <input type="checkbox"/> Twice Monthly	<input type="checkbox"/> Weekly <input type="checkbox"/> Biweekly <input type="checkbox"/> Other <input type="checkbox"/> Monthly <input type="checkbox"/> Twice Monthly
Monthly Gross Amount of Income:	\$	\$	\$
Hours worked per month:			
Will this income continue?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

8. Do you or anyone you buy or prepare food with get income that does not come from a job (unearned)?

(Please Check One) ☐ Yes ☐ No

If yes, complete the section below and **attach proof**. Examples include: Social Security, Unemployment Compensation, Veteran's Benefits, State Disability Insurance (SDI), Child/Spousal Support, Worker's Compensation, Loan/Gifts, Earned/Unearned Housing, Utilities, Food, etc.

Name	Source of Income	One-time or ongoing payment	How much/How often

SNAP Recertification: Interview

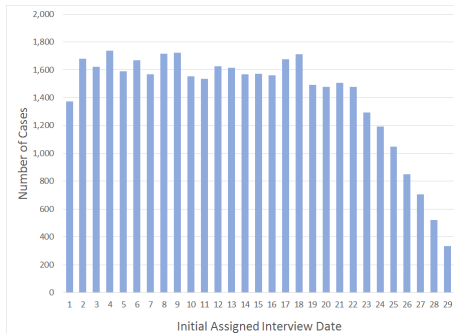
- **Recertification Appointment Letter (CF-29C):** details initial interview with caseworker in-person or via phone
 - May reschedule the assigned appointment at any time
- **Missed interviews:** receive notice of missed interview and voicemail if not completed

Appointment Letter	
STATE OF CALIFORNIA - HEALTH AND HUMAN SERVICES AGENCY CALFRESH RECERTIFICATION APPOINTMENT LETTER	
COUNTY OF SAN FRANCISCO	
Date: 05/19/2016	
Case Number: [REDACTED]	
Case Name: [REDACTED]	
Worker Name: Food Assistance	
Worker Number: VBK	
Worker Telephone: (415) 558-1001	
Address: 1235 Mission ST San Francisco CA 94103-2705	
[REDACTED] San Francisco	
You were notified that your CalFresh certification period ends on: 06/30/2016. You need an interview to keep getting CalFresh benefits. This is your appointment letter for your interview.	
<input checked="" type="checkbox"/> You have a telephone CalFresh recertification interview appointment. If you prefer to be interviewed in person, please call the county at the number above for an appointment.	
APPOINTMENT DATE: 06/01/2016	APPOINTMENT TIME: 9:00 AM - 12:30 PM
YOUR PHONE NUMBER: [REDACTED]	ALTERNATIVE PHONE NUMBER: [REDACTED]
We will call you at the number provided above. If the number is not correct, you must call us and provide a number where you can be reached for your interview. It is very important that we are able to reach you. You must also want to provide an alternative phone number where you can be reached. County phone numbers may be blocked. If your phone does not accept blocked numbers, you may miss the phone call for your telephone interview, and your benefits may be delayed. If you miss your scheduled interview you will have to reschedule your interview. Call the county at the number above or go to the office address listed above to reschedule your interview.	
<input type="checkbox"/> You have a face-to-face CalFresh recertification interview appointment.	
APPOINTMENT DATE: [REDACTED]	APPOINTMENT TIME: [REDACTED]
COUNTY OFFICE NAME: [REDACTED]	CITY: [REDACTED]
COUNTY OFFICE ADDRESS: [REDACTED]	STATE: [REDACTED]
ZIP CODE: [REDACTED]	

Missed Interview Letter	
COUNTY OF SAN FRANCISCO	
STATE OF CALIFORNIA HEALTH AND HUMAN SERVICES AGENCY CALIFORNIA DEPARTMENT OF SOCIAL SERVICES	
Notice Date: 06/01/2016	
Case Name: [REDACTED]	
Case Number: [REDACTED]	
Worker Name: Food Assistance	
Worker Number: VBK	
Telephone: (415) 558-1001	
Worker Hours: 8:00 AM - 12:00 PM, 12:00 PM - 5:00 PM	
24-hour Information: [REDACTED]	
Address: 1235 Mission ST San Francisco CA 94103-2705	
[REDACTED] San Francisco	
Questions? Ask your Worker.	
State Hearing: If you think this action is wrong, you can ask for a hearing. The back of this page tells how. Your benefits may not be changed if you ask for a hearing before this action takes place.	
You were scheduled for an interview on 06/01/2016, but you did not keep this appointment. If you still want CalFresh benefits, please contact your worker to schedule another interview.	
You must complete your interview with us by: 06/30/2016.	
You must be interviewed in order for us to determine your eligibility for CalFresh benefits. If you do not complete an interview, you will not be able to get CalFresh benefits.	
If you have any questions or want more information, please contact your worker.	

Interview Random Assignment Process

- **Initial interview randomization process:**
 - Create list of caseworker appointment availability
 - Recertification cases grouped by case language and type
 - Within group, cases sorted by case ID and date list repeated until all cases are assigned an interview date



Descriptive Statistics

	Full Sample	Early Interview (1st to 13th)	Late Interview (13th to 29th)	prob>F
Head of Household Demographics				
Female	46.2	46.0	46.4	0.335
Age	42.2	42.2	42.2	0.891
US Citizen	75.9	75.5	76.4	0.035
Non-White	78.9	78.9	79.0	0.913
Household Characteristics				
HH Size	1.55	1.55	1.56	0.933
Any Children	32.2	32.4	31.9	0.302
Non-English Speaking	30.8	31.1	30.4	0.172
Homeless	16.7	16.7	16.7	0.898
Max CalFresh Benefits	63.4	63.3	63.4	0.910
N	40,981	20,998	19,983	

Test for equality of means between early and late interview assignment cases.

Recertification Outcome Means

	Full Sample	Phone Interview	In-Person Interview
Number of Recertifications	40,981	32,011	8,970
Number of Case IDs	31,128		
Recertification Process Outcomes (%)			
Interview Complete	73.1	89.2	15.3
RRR Forms Complete	n/a	53.9	n/a
Recertified	54.5	61.7	29.0
Case Outcome within 30 Days of Recertification (%)			
Reapplied	17.8	16.3	23.3
Churned	15.9	14.6	20.6
Case Outcome within 90 Days of Recertification (%)			
Reapplied	22.0	19.8	29.8
Churned	20.3	18.4	27.1
Not on CalFresh	25.2	19.9	43.9

Econometric Model

- We estimate the following model:

$$Y_{it} = \alpha_0 + \alpha_1 \text{InterviewDay}_{it} + \alpha_2 \text{RandGroup}_{it} + \alpha_3 \text{Demographics}_{it} + \gamma_t + \varepsilon_{it}$$

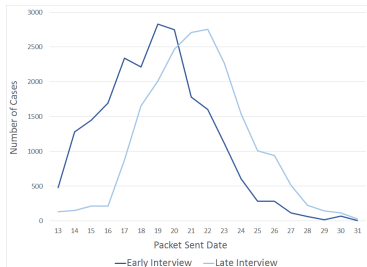
- Y_{it} : recertification outcome for case i in recertification month t
- InterviewDay_{it} : calendar day of randomly-assigned initial interview
- Randomization groups: case language, in-person vs. phone interview
- γ_t : recertification month fixed effects
- Controls: case and head-of-household demographics
 - Case-level: HH size, any children, homeless, first CalFresh
 - Head-of-household: sex, ethnicity, age, citizenship, married

Sent Day

- While interview dates are randomly-assigned, the sent date of RRR packets at the discretion of the assigned caseworker
 - Sent date between 13th and 31st of month prior to recertification
 - 72% of packets sent between the 17th and 23rd

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 - Sent date between 13th and 31st of month prior to recertification
 - 72% of packets sent between the 17th and 23rd
- Correlation between interview date and sent date \Rightarrow additional specification controls for sent date



Outcome: Recertification Approved

- **Result:** cases assigned interviews later in the recertification month are 0.3 percentage points less likely to recertify per day

	Outcome: 0/1 Recertification Approved			
	(1)	(2)	(3)	(4)
Interview Day	-0.0022*** (0.0003)	-0.0034*** (0.0003)	-0.0031*** (0.0003)	-0.0030*** (0.0004)
Sent Day				-0.0006 (0.0010)
RRR Month FE		x	x	x
Case Language/Type		x	x	x
Demographics			x	x
Sent Date				x
DV Mean	0.545	0.545	0.545	0.545
N	40,981	40,981	40,981	40,981

Alternative Specification: Recertification Approved

$$Y_{it} = \alpha + \sum_{w=2}^4 \beta_w \text{InterviewWeek}_{it} + \delta \text{RandGroup}_{it} + \eta \text{Demographics}_{it} + \gamma_t + \varepsilon_{it}$$

	(1)	(2)	(3)	(4)
Interview Week 2	-0.0131** (0.0066)	-0.0212*** (0.0062)	-0.0149** (0.0061)	-0.0135** (0.0062)
Interview Week 3	-0.0372*** (0.0067)	-0.0466*** (0.0063)	-0.0373*** (0.0062)	-0.0344*** (0.0068)
Interview Week 4	-0.0366*** (0.0076)	-0.0677*** (0.0072)	-0.0647*** (0.0071)	-0.0608*** (0.0081)
RRR Month FE		x	x	x
Case Language/Type		x	x	x
Demographics			x	x
Sent Date				x
Week 1 DV Mean	0.566	0.566	0.566	0.566

Intermediate Recertification Steps

- Recall three steps to recertify: (1) complete interview, (2) fill out recertification form, and (3) submit income verification
 - We have data on (1) and (2), but not (3)
 - Also, missing data on (2) if submitted in person \Rightarrow only consider phone interviews for this outcome

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 - Also, missing data on (2) if submitted in person \Rightarrow only consider phone interviews for this outcome
- Result:** interview date impacts likelihood of completing interview, not RRR form completion

	Completed Interview		Submitted Recert Forms	
Interview Day	-0.0023*** (0.0002)	-0.0019*** (0.0002)	0.0026*** (0.0004)	0.0007 (0.0004)
Sent Day		-0.0022*** (0.0007)		0.0093*** (0.0012)
DV Mean	0.731	0.731	0.539	0.539
N	40,981	40,981	32,011	32,011

Reapplications, Churn, and Discontinuances

- Cases that fail recertification may reapply and re-enter the program (“churn”), otherwise benefits discontinued
 - We follow these cases for 90 days post-recertification

Reapplications, Churn, and Discontinuances

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 - We follow these cases for 90 days post-recertification
- **Result:** majority recertification failure caused by late interview date results in churn with a smaller effect on longer-term discontinuances

	Reapplied (30-day)		Churned (30-Day)		Discontinued (90+ Day)	
Interview Day	0.0027*** (0.0003)	0.0026*** (0.0003)	0.0025*** (0.0002)	0.0025*** (0.0003)	0.0006** (0.0003)	0.0005* (0.0003)
Sent Day		0.0002 (0.0009)		0.0003 (0.0008)		0.0004 (0.0009)
DV Mean	0.178	0.178	0.159	0.159	0.252	0.252
N	40,981	40,981	40,981	40,981	40,981	40,981

Costs of Recertification Failure

- **Costs of Churn**

- Administrative costs
- Prorated benefits and delay of receipt
- Emotional stress

- **Costs of Discontinuances**

- Extended loss of benefits
- ...but savings for the program if efficient targeting

Costs of Churn

- **Administrative costs:**

- USDA report estimates costs of \$80/churn
- Churn increases by 0.25ppt per day \Rightarrow \$0.20/case per interview day delay
- Annual cost to CalFresh: \$400,000 per interview day

- **Prorated benefits:**

- \$0.11/case per interview day delay in loss of benefits among churners
- Annual loss for CalFresh recipients: \$225,000 per interview day

	# of Days	\$ Lost
Interview Day	0.0119** (0.0046)	0.1120*** (0.0411)
DV Mean	2.630	20.180
N	40,981	40,975

- We obtain data from the Employment Development Department (EDD) to estimate eligibility of each recertification case
 - Quarterly wage data for all individuals associated with a case
 - Determine eligibility from these earnings and household size based on CalFresh income requirements
- Limitations to eligibility estimation
 - Timing: quarterly vs. monthly data
 - Only includes wage data
 - Misses updates to household composition since semi-annual recertification

Recertification and Eligibility

- Targeting: application costs may increase or decrease targeting efficiency
- Only 6% of cases appear to be ineligible \Rightarrow main results unchanged when conditioning on eligibility, small decrease in type II error

	Type 1 Error: Eligible but...		Type 2 Error: Ineligible but...	
	Failed Recert	Discontinued	Recertified	Not Discontinued
Interview Day	0.0032*** (0.0003)	0.0007*** (0.0003)	-0.0003*** (0.0001)	-0.0003** (0.0001)
DV Mean	0.412	0.217	0.018	0.026
N	40,981	40,981	40,981	40,981

Targeting: Recertification Success by Subgroup

- **Subgroup analyses:** recertification for cases with children more likely to be affected by interview date assignment

	<u>Outcome: 0/1 Recertified</u>			
	Homeless	Any Children	ESL	Max Benefit
	(1)	(2)	(3)	(4)
Interview Day	-0.0032*** (0.0003)	-0.0026*** (0.0004)	-0.0028*** (0.0004)	-0.0031*** (0.0005)
DayXSubgroup	0.0003 (0.0007)	-0.0017*** (0.0006)	-0.0009 (0.0006)	-0.0000 (0.0006)
N	40,981	40,981	40,981	40,981

Targeting: Churn/Discontinuance by Subgroup

- While homeless households equally likely to recertify, more likely to be discontinued rather than churn
 - Consistent with a behavioral model of targeting efficiency in which application costs screen out *more* needy households

	Homeless	Any Children	ESL	Max Benefit
Outcome: 0/1 Churned				
Interview Day	0.0029*** (0.0003)	0.0022*** (0.0003)	0.0022*** (0.0003)	0.0027*** (0.0004)
DayXSubgroup	-0.0021*** (0.0007)	0.0011** (0.0005)	0.0012** (0.0005)	-0.0003 (0.0005)
Outcome: 0/1 Discontinued				
Interview Day	0.0004 (0.0003)	0.0006* (0.0003)	0.0008** (0.0003)	0.0003 (0.0004)
DayXSubgroup	0.0014* (0.0008)	0.0001 (0.0005)	-0.0005 (0.0005)	0.0005 (0.0005)
N	40,981	40,981	40,981	40,981

Summary

- This paper finds that application costs associated with recertification lead to large reductions in successful recertification that result in both program churn and long-term discontinuances
- Application costs have higher impact on needier households
 - Higher churn for households with children
 - Higher discontinuances for homeless cases
- Suggests trade-off between program integrity and targeting efficiency

Policy Implications

- **Policy implication:** shift recertification interview process earlier
- Estimates suggest starting CalFresh interviews two weeks earlier leads to:
 - Decrease of 70,000 churners
 - \$5.5 million decrease in administrative costs of churn
 - \$3.2 million decrease in loss of benefits for churners
 - Decrease of 17,000 discontinuances