

# Cost Sharing Subsidies and the Choice of Marketplace Health Plans

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# Disclaimer

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This work does not necessarily represent the views or opinions of ASPE or HHS.

# Outline

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- Overview of ACA subsidies for low-income families
- Research question
- Data and Methods
- Results
- Discussion

# ACA Marketplaces

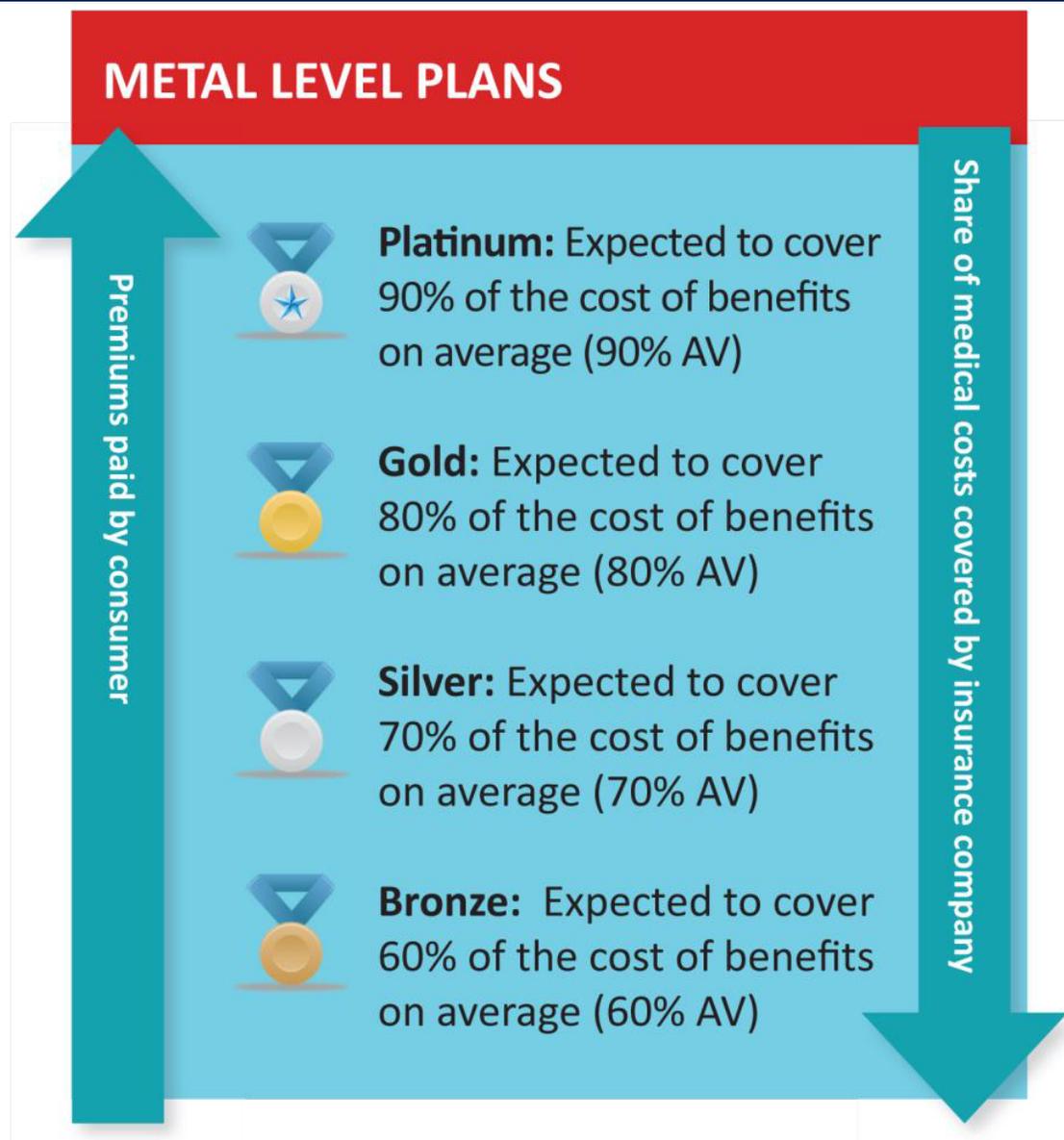
- The Affordable Care Act created “Marketplaces” in which consumers can shop for health insurance
- Low-income individuals without access to “affordable” ESI or other public insurance can obtain premium and cost-sharing subsidies
- Cost-sharing subsidies help ensure that low-income consumers are not solely choosing low AV plans, which might lead them to forgo needed care

# Advanced Premium Tax Credit

- May be available to individuals with family incomes between 100 and 400% of FPL
- APTC is a fixed tax credit which is calculated as the difference between a family's "expected contribution" and the premium cost of the 2nd lowest cost Silver Plan available to an individual
- Can be used to purchase Bronze, Silver, Gold, or Platinum plans
- The APTC is paid directly from CMS to issuers; any differences between the APTC and the tax credit that should have been received is reconciled on the individual's tax return

# ACA Marketplaces

- Plans are in one of five tiers (metal levels):
- Premiums constant within geographic regions called “rating areas” but vary with age and smoking



# Advanced Premium Tax Credit

Income as a % of FPL	Expected Family Contribution		
	as a percentage of family income	in dollars (for family size 1)	APTC (assuming a \$300 B-mark premium)
100-133%	2%	\$19-\$25	\$275-\$281
133-150	3%-4%	\$38-\$57	\$243-\$262
150-200	4%-6.3%	\$57-\$121	\$179-\$243
200-250	6.3%-8.05%	\$121-\$193	\$107-\$179
250-300	8.05%-9.5%	\$193-\$273	\$27-\$107
300-400	9.5%	\$273-\$364	\$0-\$27
400	9.5%	\$364	\$0

Source: IRS Instructions for Form 8962. Note, the expected family contributions as a percentage of family income increased slightly in 2016.

# Cost Sharing Reductions (CSRs)

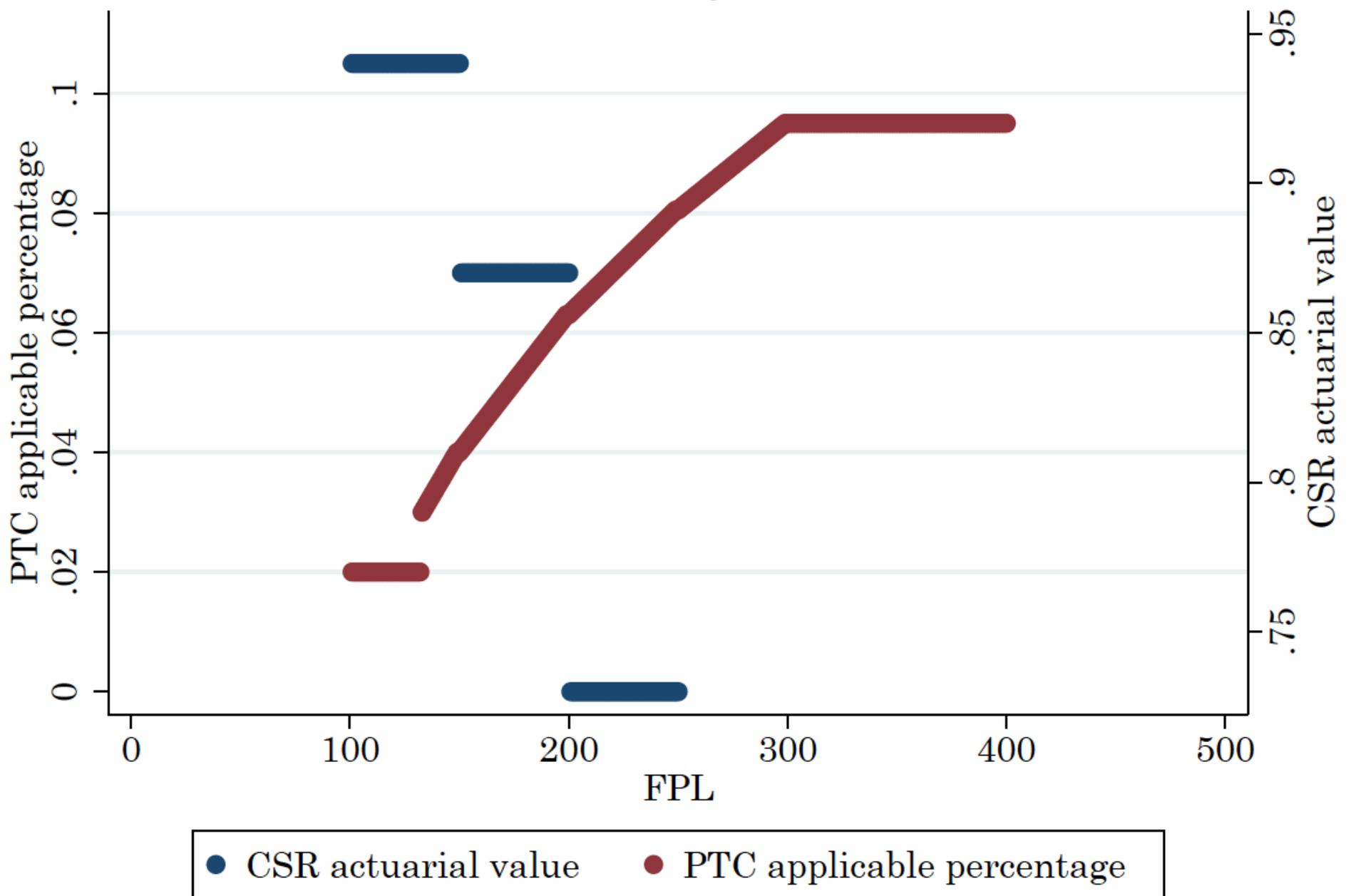
Individuals are eligible to receive CSRs only if they choose a silver plan

\*(except AINAs)

## Determination of Cost-Sharing Reductions in 2014 and 2015

Income as a % of FPL	Actuarial Value of a Silver Plan
100-150	94%
150-200	87%
200-250	73%
>250	70%

# PTC and CSR Subsidy Schedules (2014)



# Cost Sharing Reductions (CSRs)

- All issuers that offer a Silver plan in an area are required to offer 3 additional versions of that plan in that area
- These versions will have lower cost-sharing so as to achieve either a 94%, 87% or 73% AV
- All 4 versions have the same premium and must include the same benefits and the same networks (differing only in cost-sharing)
- The direct cost of the CSR is paid to issuers by CMS

# Unity Health Insurance · Unity Prime Bronze HSA

Compare

**Bronze | HMO**  
Plan ID: 37833WI0540003

ESTIMATED MONTHLY PREMIUM

**\$218**

ESTIMATED DEDUCTIBLE

**\$5,400**

Estimated individual total

ESTIMATED OUT-OF-POCKET MAXIMUM

**\$6,400**

Estimated individual total

## COPAYMENTS / COINSURANCE

Primary doctor:  
**50% Coinsurance after deductible**

Specialist doctor:  
**50% Coinsurance after deductible**

Emergency room care:  
**50% Coinsurance after deductible**

Generic drugs:  
**50% Coinsurance after deductible**

## PEOPLE COVERED

 1 (Age 46): Covered

## MORE INFORMATION

-  [Summary of Benefits](#)
-  [Plan brochure](#)
-  [Provider directory](#)
-  [List of covered drugs](#)

[LEARN MORE ABOUT THIS PLAN](#)

# Unity Health Insurance · Unity Prime Silver Maintenance 30/70

Compare

Silver | HMO  
Plan ID: 37833WI0510031

**ESTIMATED MONTHLY PREMIUM**  
**\$298**

**ESTIMATED DEDUCTIBLE**  
**\$3,200**  
Estimated individual total

**ESTIMATED OUT-OF-POCKET  
MAXIMUM**  
**\$6,600**  
Estimated individual total

## COPAYMENTS / COINSURANCE

Primary doctor:  
**\$30**  
Specialist doctor:  
**\$70**  
Emergency room care:  
**\$500**  
Generic drugs:  
**\$5**

## PEOPLE COVERED

 1 (Age 46): Covered

## MORE INFORMATION

-  [Summary of Benefits](#)
-  [Plan brochure](#)
-  [Provider directory](#)
-  [List of covered drugs](#)

**LEARN MORE ABOUT THIS PLAN**

# Group Health Cooperative- SCW · Gold 1,000 Deductible

Compare

Gold | HMO

Plan ID: 94529WI0210019

## ESTIMATED MONTHLY PREMIUM

**\$470**

## ESTIMATED DEDUCTIBLE

**\$1,000**

Estimated individual total

## ESTIMATED OUT-OF-POCKET MAXIMUM

**\$3,000**

Estimated individual total

## COPAYMENTS / COINSURANCE

Primary doctor:

**\$30**

Specialist doctor:

**\$30**

Emergency room care:

**\$250**

Generic drugs:

**\$20**

## PEOPLE COVERED

 1 (Age 46): Covered

## MORE INFORMATION

-  [Summary of Benefits](#)
-  [Plan brochure](#)
-  [Provider directory](#)
-  [List of covered drugs](#)

**LEARN MORE ABOUT THIS PLAN**

# Unity Health Insurance · Unity Prime Bronze HSA

Compare

**Bronze** | HMO

Plan ID: 37833WI0540003

## ESTIMATED MONTHLY PREMIUM

**\$0**

Premium before tax credit: \$218

## ESTIMATED DEDUCTIBLE

**\$5,400**

Estimated individual total

## ESTIMATED OUT-OF-POCKET MAXIMUM

**\$6,400**

Estimated individual total

## COPAYMENTS / COINSURANCE

Primary doctor:

**50% Coinsurance after deductible**

Specialist doctor:

**50% Coinsurance after deductible**

Emergency room care:

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Generic drugs:

**50% Coinsurance after deductible**

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-  [Plan brochure](#)
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-  [List of covered drugs](#)

**LEARN MORE ABOUT THIS PLAN**

# Unity Health Insurance · Unity Prime Silver Maintenance 30/70

Compare

Silver | HMO

Plan ID: 37833WI0510031

## ESTIMATED MONTHLY PREMIUM

**\$43**

Premium before tax credit: \$298

## ESTIMATED DEDUCTIBLE

**\$0**

Estimated individual total

## ESTIMATED OUT-OF-POCKET MAXIMUM

**\$675**

Estimated individual total

## COPAYMENTS / COINSURANCE

Primary doctor:

**No charge**

Specialist doctor:

**\$10**

Emergency room care:

**\$60**

Generic drugs:

**No charge**

## PEOPLE COVERED

 1 (Age 46): Covered

## MORE INFORMATION

-  [Summary of Benefits](#)
-  [Plan brochure](#)
-  [Provider directory](#)
-  [List of covered drugs](#)

[LEARN MORE ABOUT THIS PLAN](#)

# Group Health Cooperative- SCW · Gold 1,000 Deductible

Compare

Gold | HMO

Plan ID: 94529WI0210019

## ESTIMATED MONTHLY PREMIUM

**\$216**

Premium before tax credit: \$470

## ESTIMATED DEDUCTIBLE

**\$1,000**

Estimated individual total

## ESTIMATED OUT-OF-POCKET MAXIMUM

**\$3,000**

Estimated individual total

## COPAYMENTS / COINSURANCE

Primary doctor:

**\$30**

Specialist doctor:

**\$30**

Emergency room care:

**\$250**

Generic drugs:

**\$20**

## PEOPLE COVERED

 1 (Age 46): Covered

## MORE INFORMATION

-  [Summary of Benefits](#)
-  [Plan brochure](#)
-  [Provider directory](#)
-  [List of covered drugs](#)

[LEARN MORE ABOUT THIS PLAN](#)

# Research Questions

1. Are consumers sensitive to the degree of cost-sharing when selecting health plans?
2. Do Marketplace consumers behave in a way that suggests they are aware of and value CSRs?
  - Do consumers are mistakenly forgoing CSRs and instead purchase dominated plans?
  - Do CSRs “crowd-out” the voluntary purchase of Gold or Platinum plans or “crowd-in” the purchase of Bronze plans?

# Approach: Regression Discontinuity

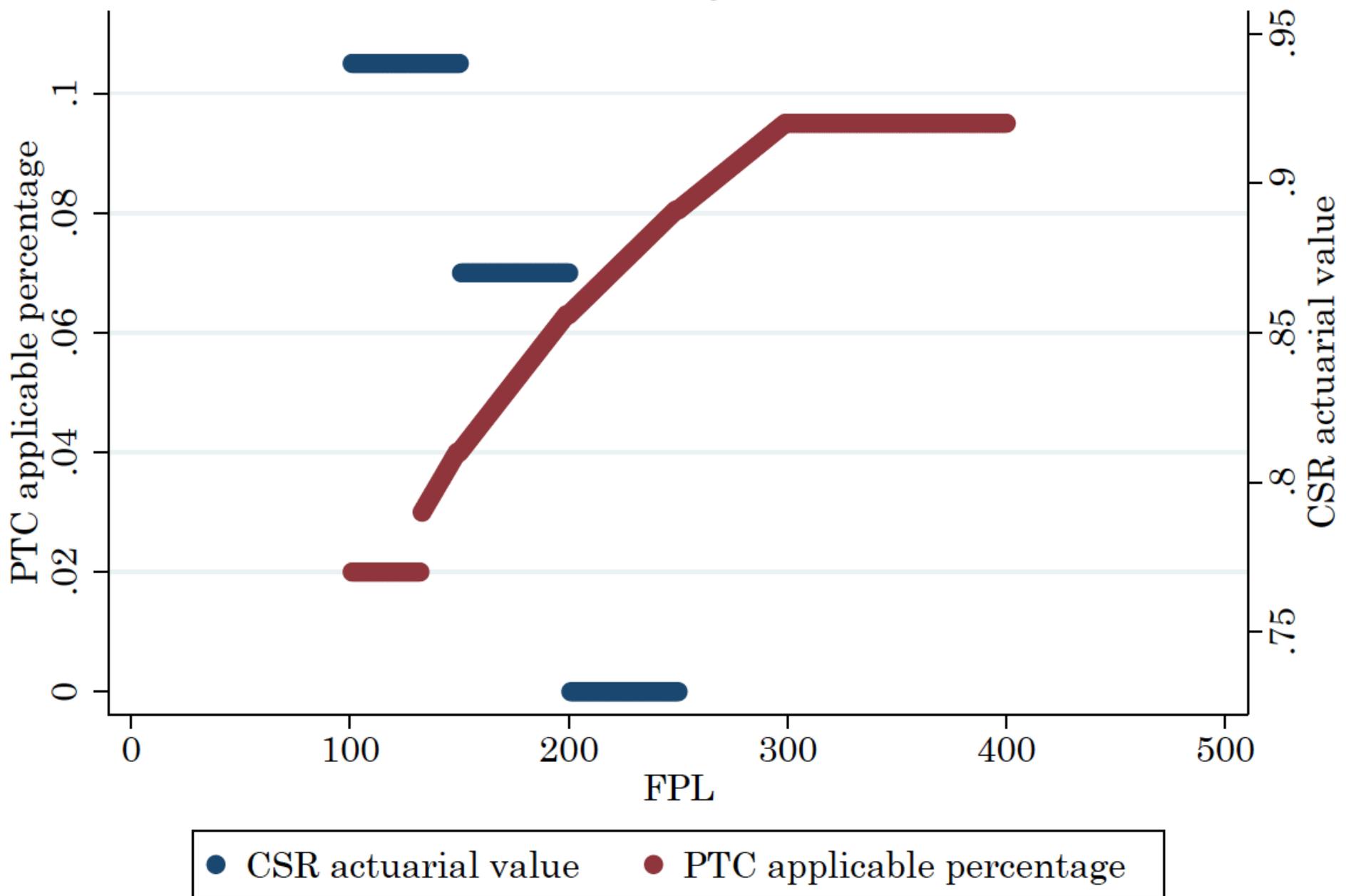
- Sharp RD: Local linear regression

$$Y_i = \alpha + \beta(FPL_i - FPL_0) + \tau W_i + \gamma(FPL_i - FPL_0)W_i + \varepsilon_i$$

with a triangular kernel and bandwidth  $h$  (in FPL points).

- Discontinuities at 150, 200, and 250% FPL

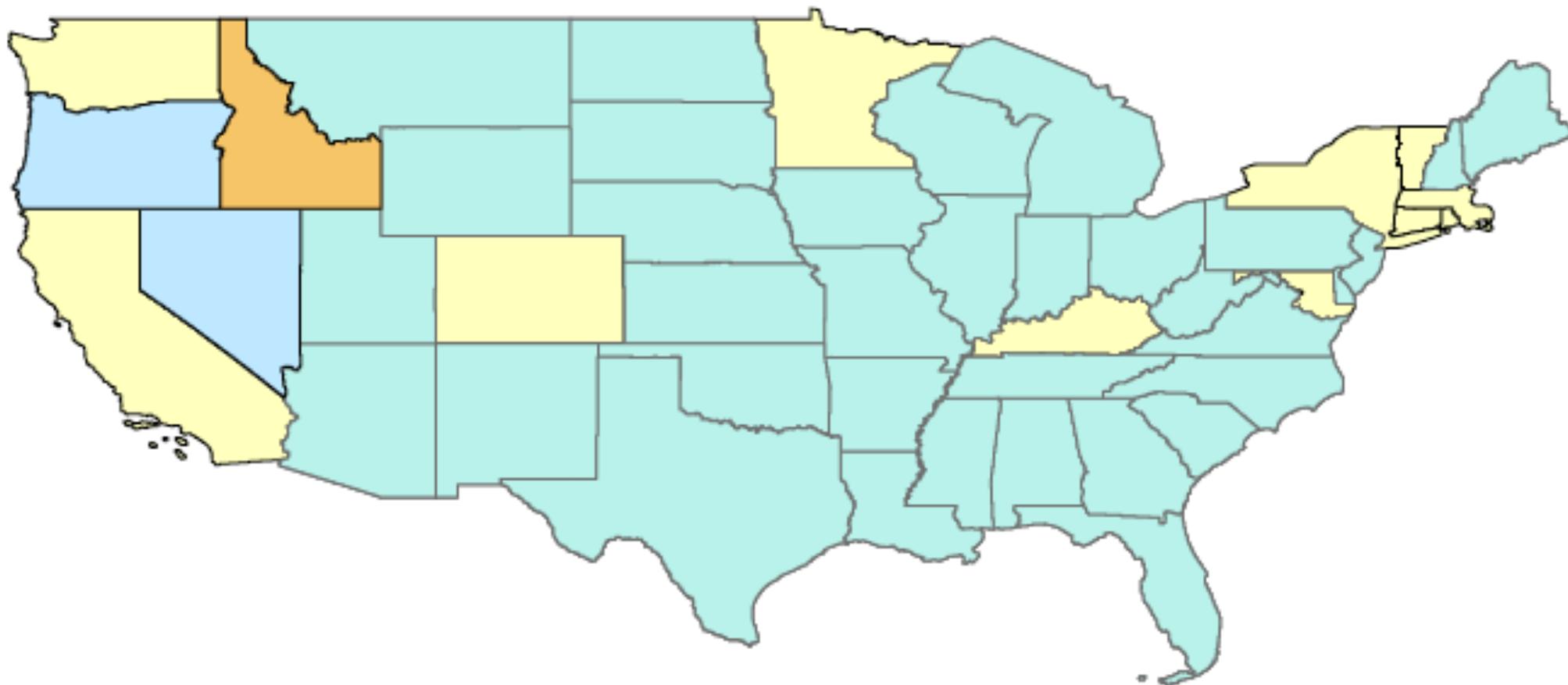
# PTC and CSR Subsidy Schedules (2014)



# Data

- Administrative data from CMS on the roughly 24 million plan selections of enrollees in 2014, 2015, and 2016 in the 37 states using the [healthcare.gov](https://healthcare.gov) enrollment platform
- Information from the application:
  - Plan selection, income, income as a percent of FPL, age, county of residence, and basic demographic information

# States Using healthcare.gov Platform

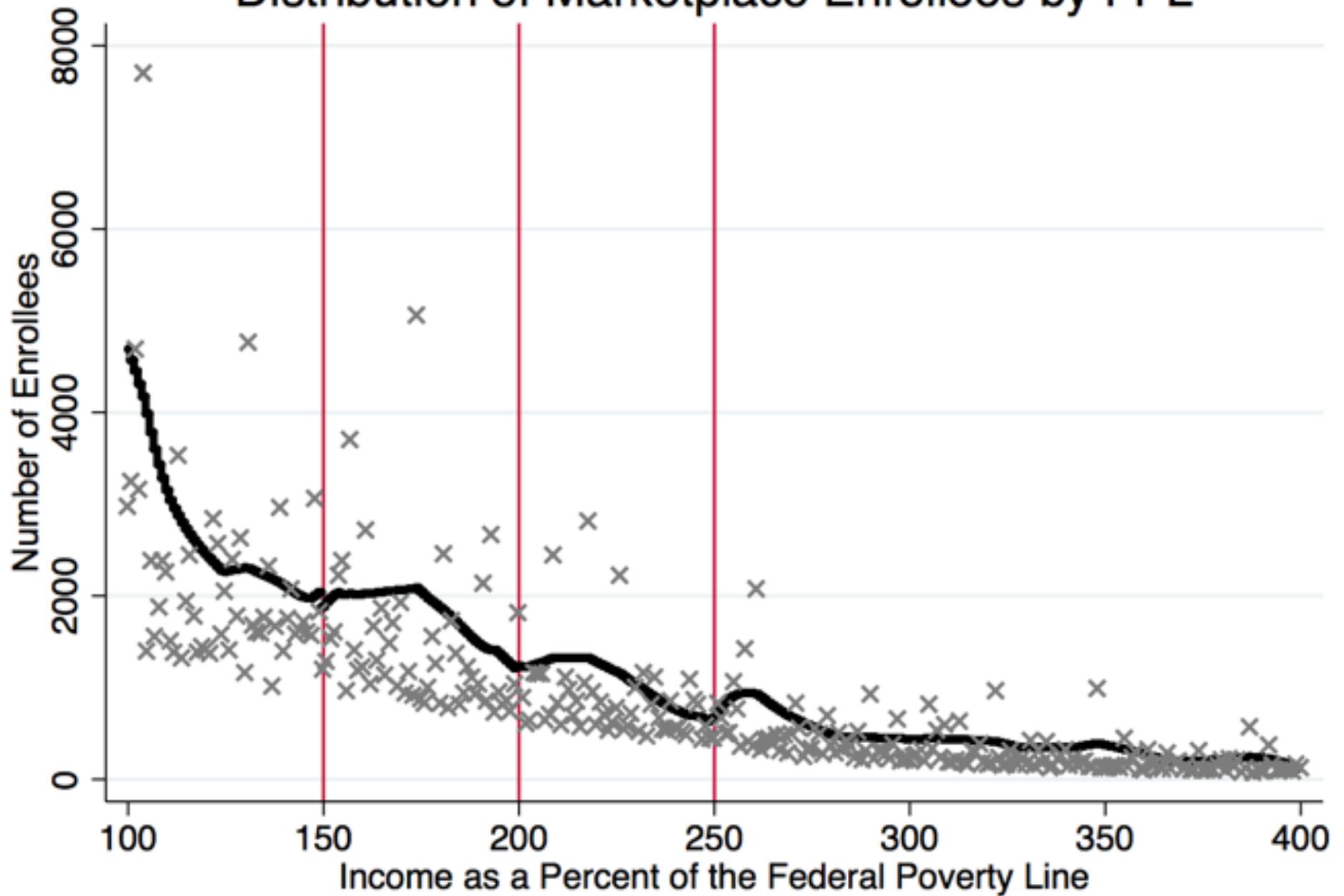


# Distribution of Metal Levels Selected

	2014	2015	2016
Catastrophic	1.4%	0.7%	0.9%
Bronze	16.0%	20.4%	20.5%
Silver	71.1%	71.0%	73.4%
Gold	7.9%	5.7%	4.7%
Platinum	3.6%	2.2%	0.6%

# Density Tests

# Distribution of Marketplace Enrollees by FPL

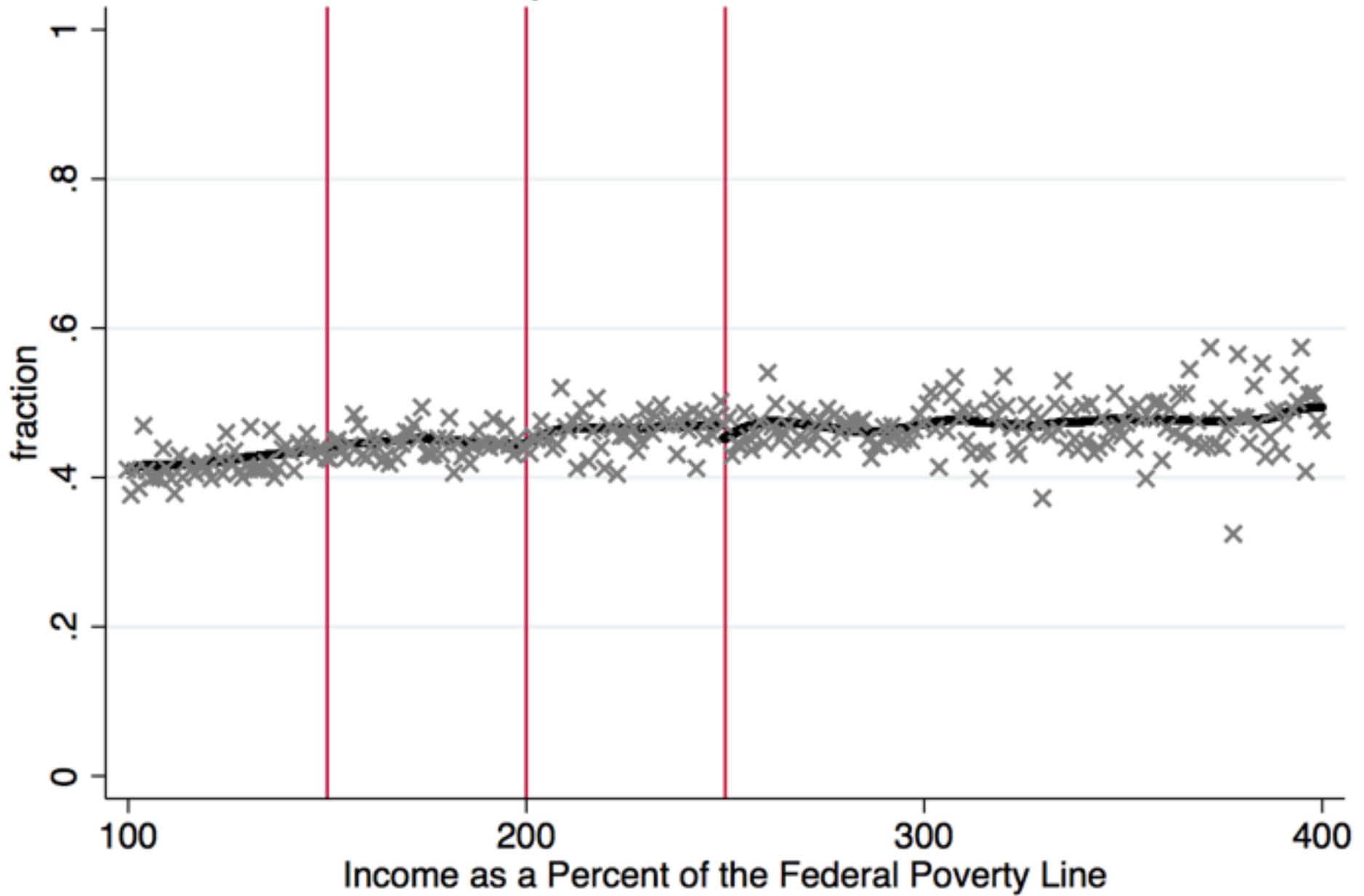


# Covariate Tests

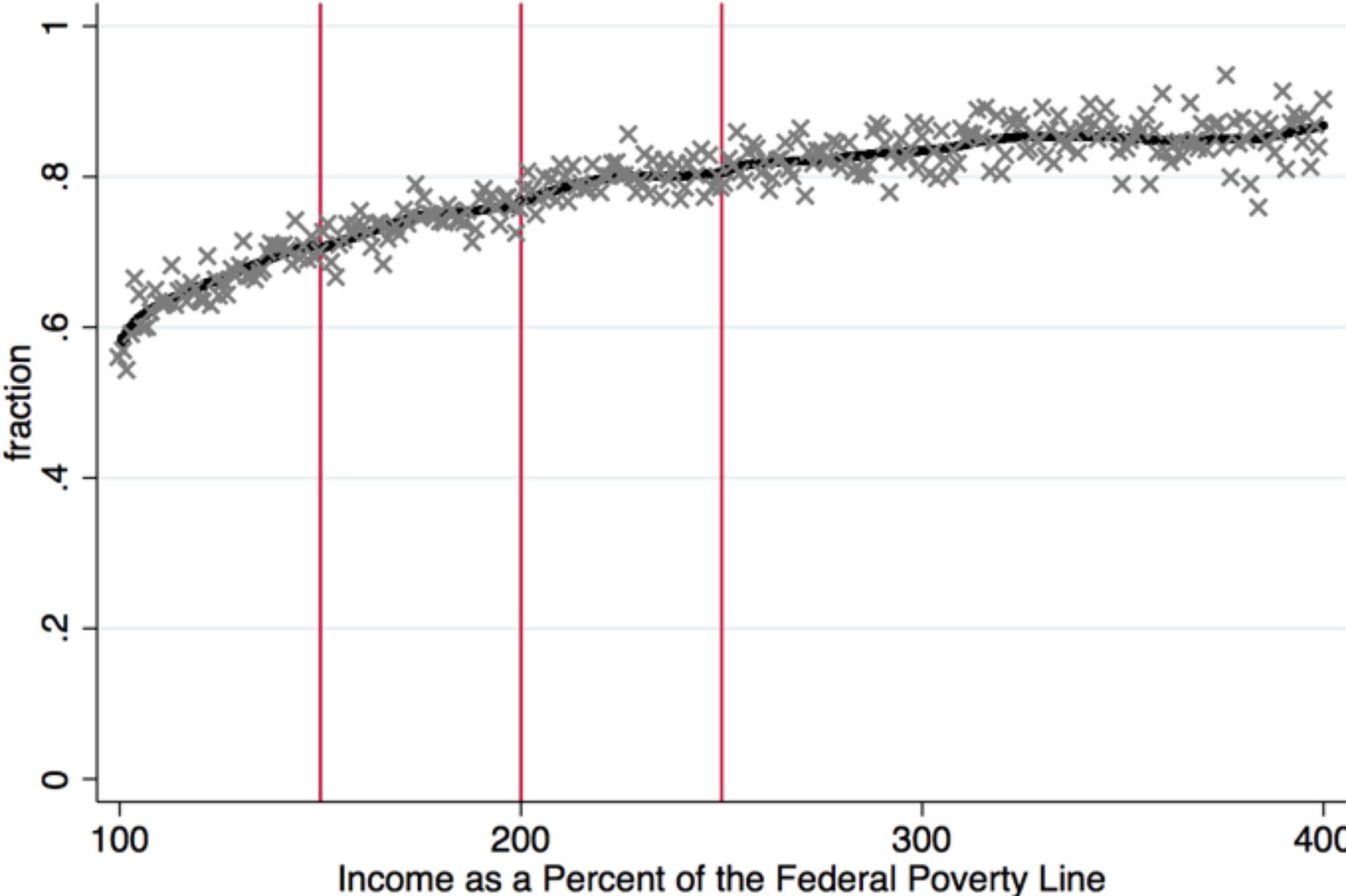
# Age of Marketplace Enrollees, 2014



# Fraction of Marketplace Enrollment that is Male, 2014



# Fraction of Marketplace Enrollment that is White, 2014



# Fraction of Marketplace Enrollment that is Black, 2014



# Fraction of Marketplace Enrollment that is Asian, 2014



# Covariate Tests, 2014

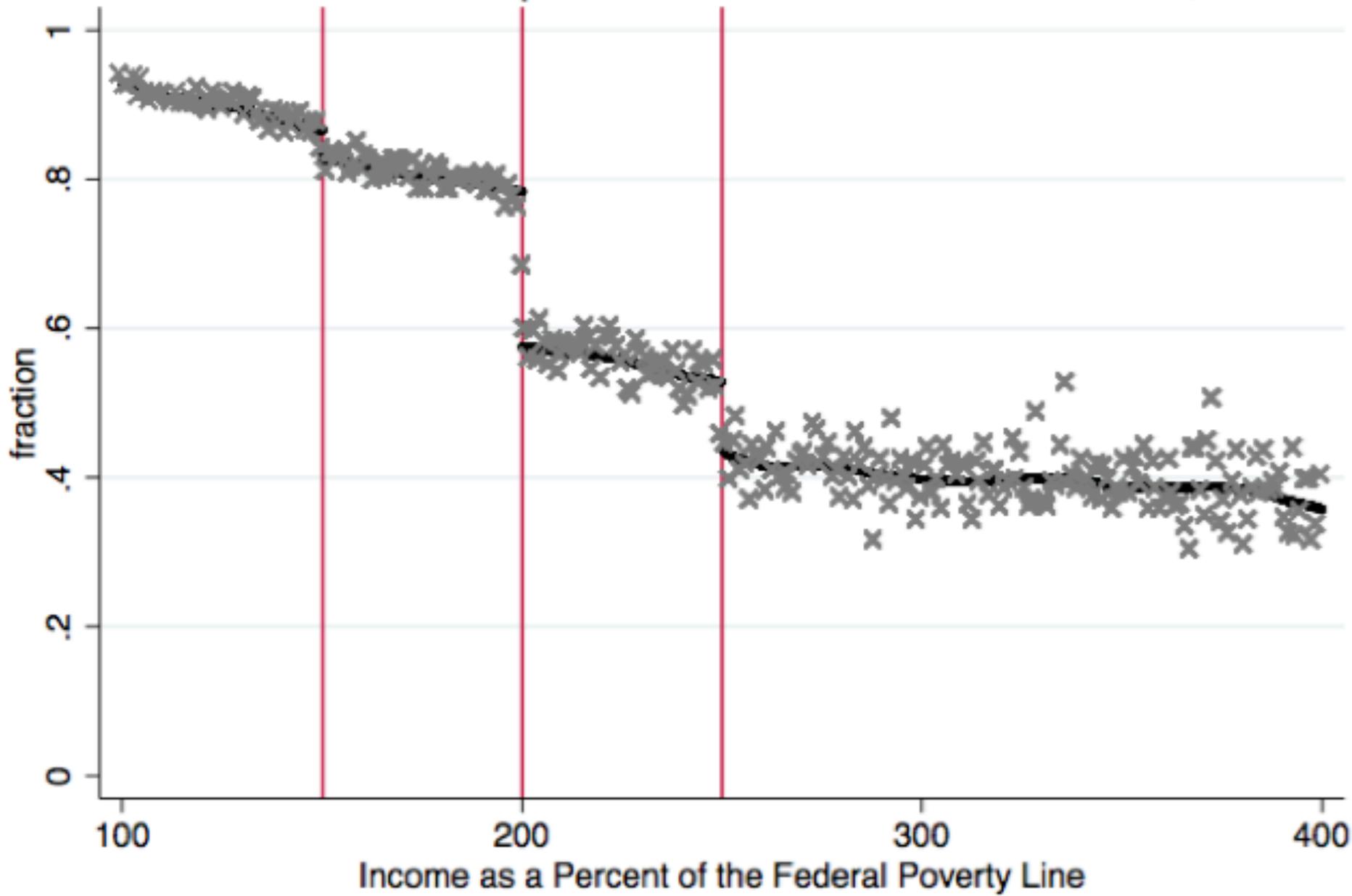
	Age	Male	White	Black	Asian
<i>2014 Marketplace Enrollees</i>					
> 150% FPL	-0.220	0.003	-0.006	-0.012	0.016
	(0.056)	(0.002)	(0.002)	(0.002)	(0.001)
	1,438,099	1,438,082	890,567	890,567	890,567
> 200% FPL	-0.130	-0.005	-0.004	0.010	-0.007
	(0.077)	(0.002)	(0.003)	(0.002)	(0.002)
	901,652	901,643	581,530	581,530	581,530
> 250% FPL	-1.995	-0.002	-0.002	-0.003	0.006
	(0.116)	(0.003)	(0.003)	(0.002)	(0.002)
	522,119	522,108	345,161	345,161	345,161

# Covariate Tests, 2014

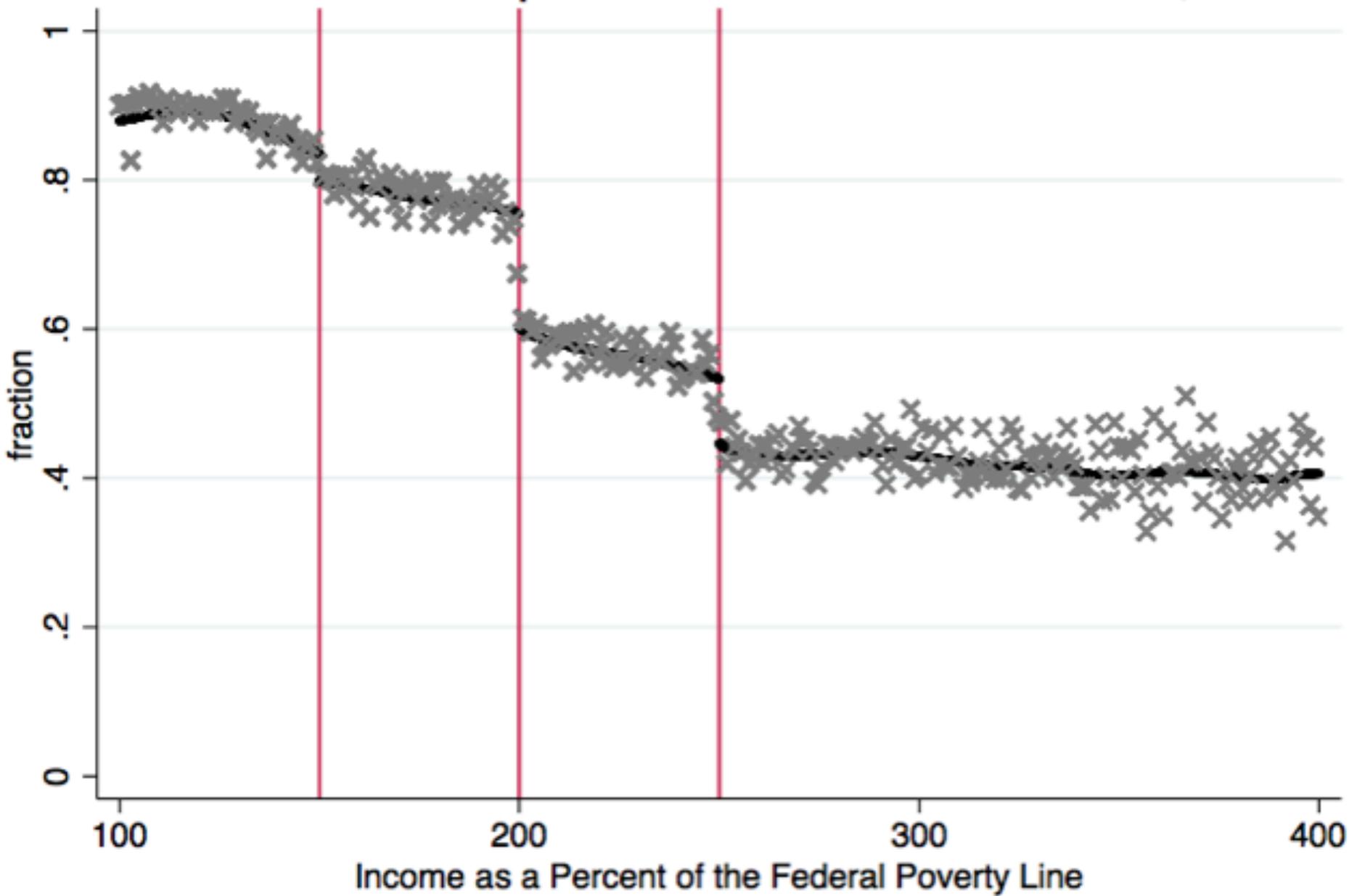
	Age	Male	White	Black	Asian
<i>2014 Marketplace Enrollees</i>					
> 150% FPL	-0.220	0.003	-0.006	-0.012	0.016
	(0.056)	(0.002)	(0.002)	(0.002)	(0.001)
	1,438,099	1,438,082	890,567	890,567	890,567
> 200% FPL	-0.130	-0.005	-0.004	0.010	-0.007
	(0.077)	(0.002)	(0.003)	(0.002)	(0.002)
	901,652	901,643	581,530	581,530	581,530
> 250% FPL	-1.995	-0.002	-0.002	-0.003	0.006
	(0.116)	(0.003)	(0.003)	(0.002)	(0.002)
	522,119	522,108	345,161	345,161	345,161

# Results

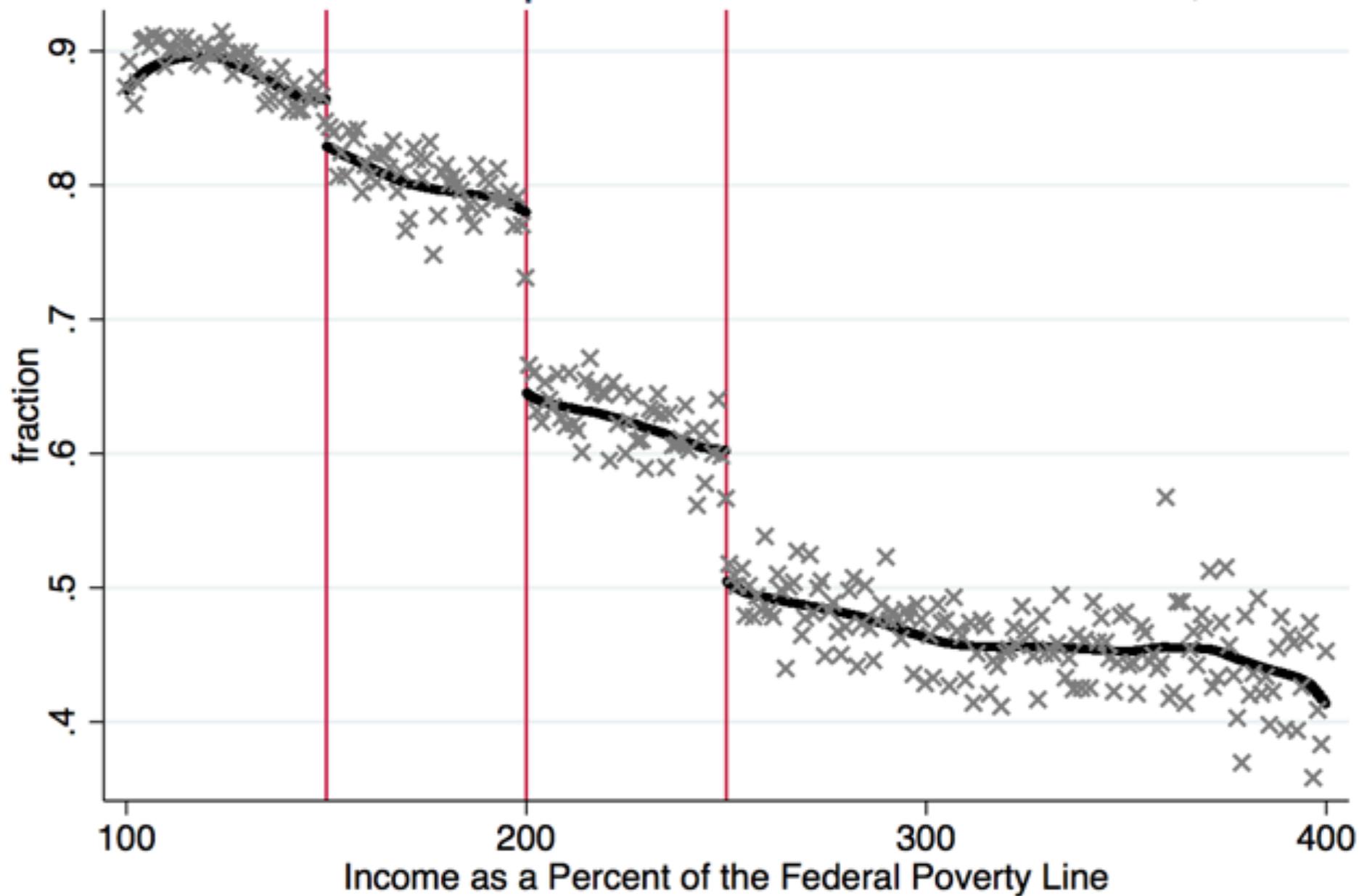
# Fraction of Marketplace Enrollees in Silver Plans, 2014



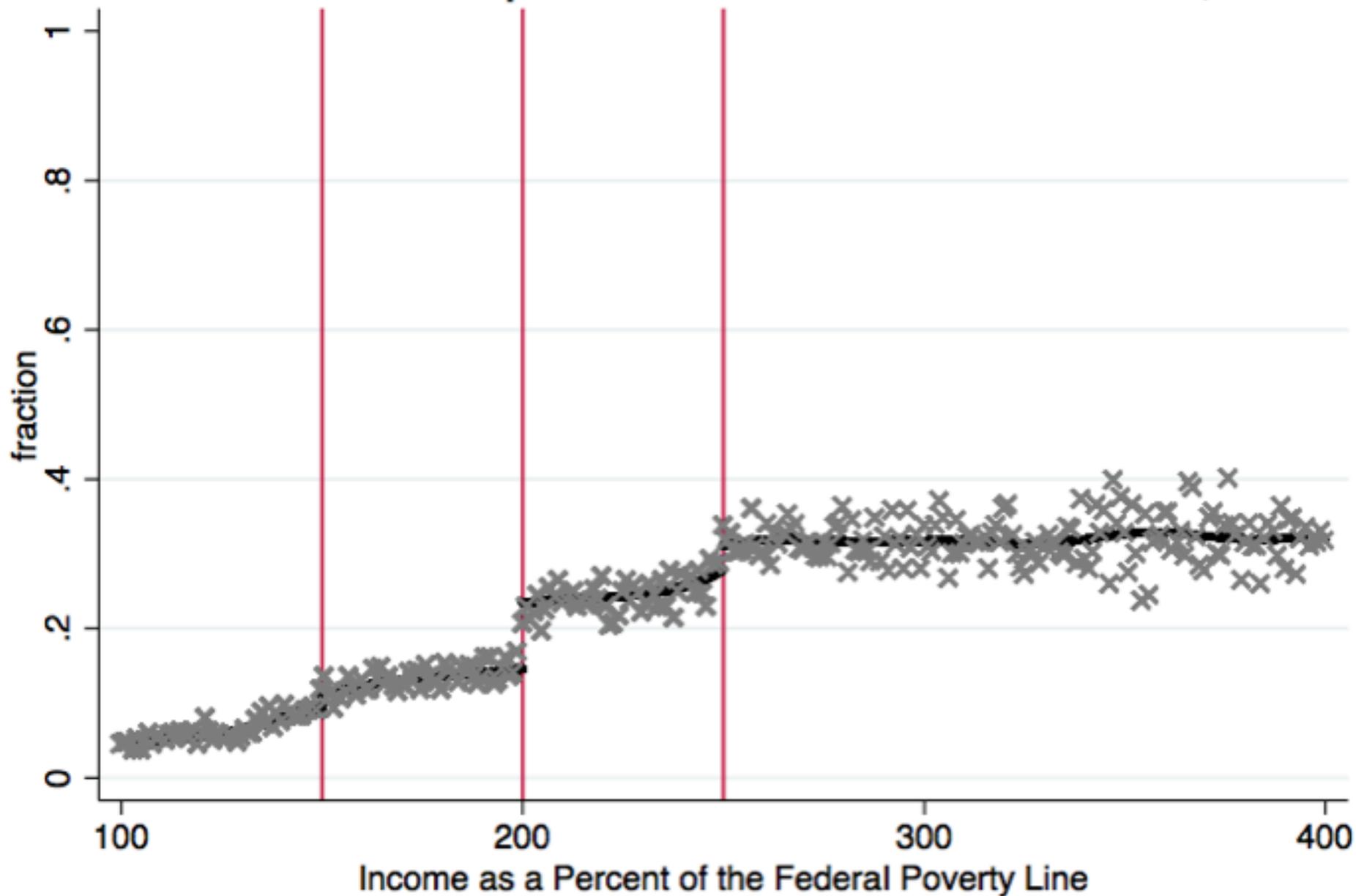
# Fraction of Marketplace Enrollees in Silver Plans, 2015



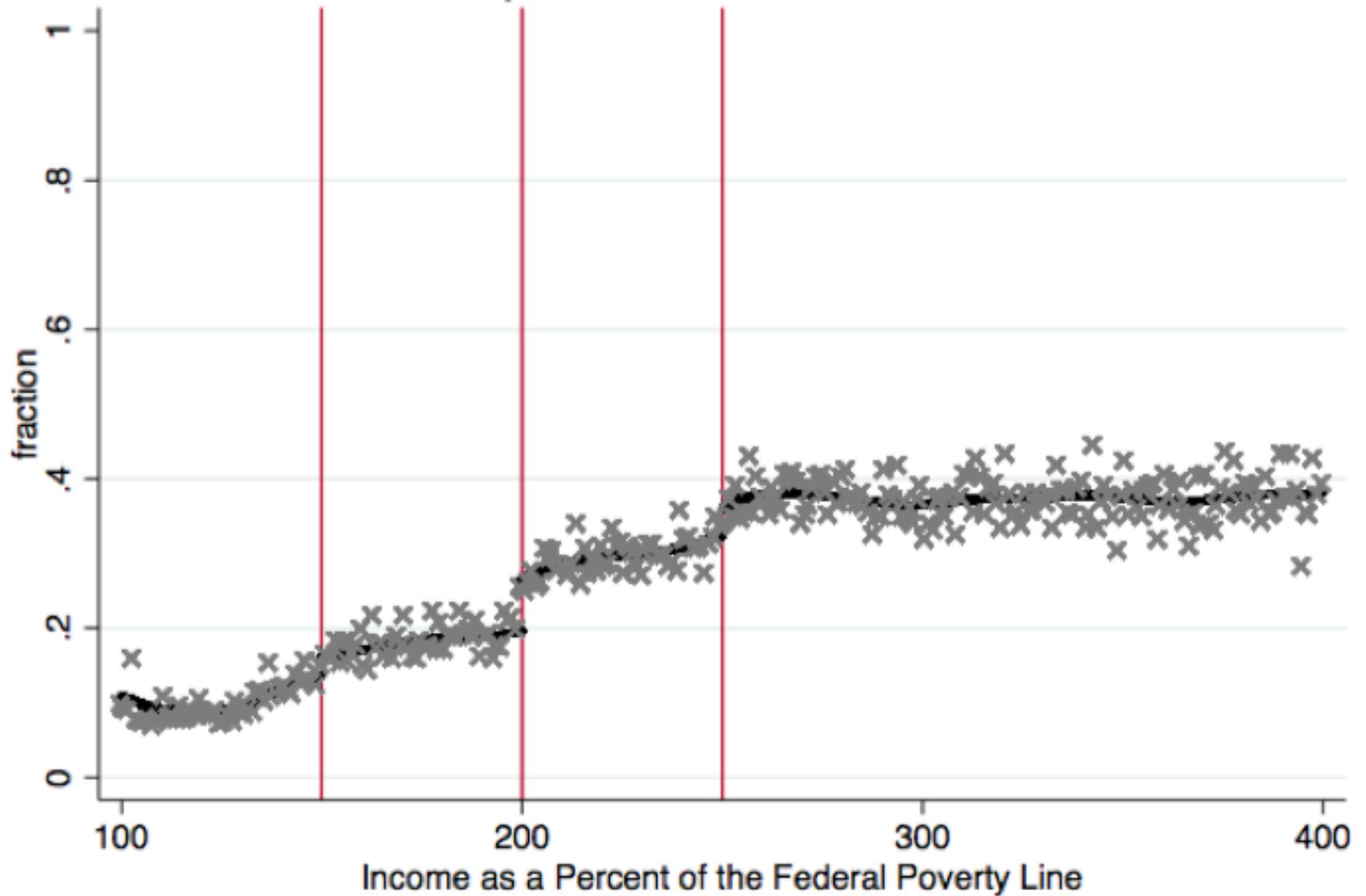
# Fraction of Marketplace Enrollees in Silver Plans, 2016



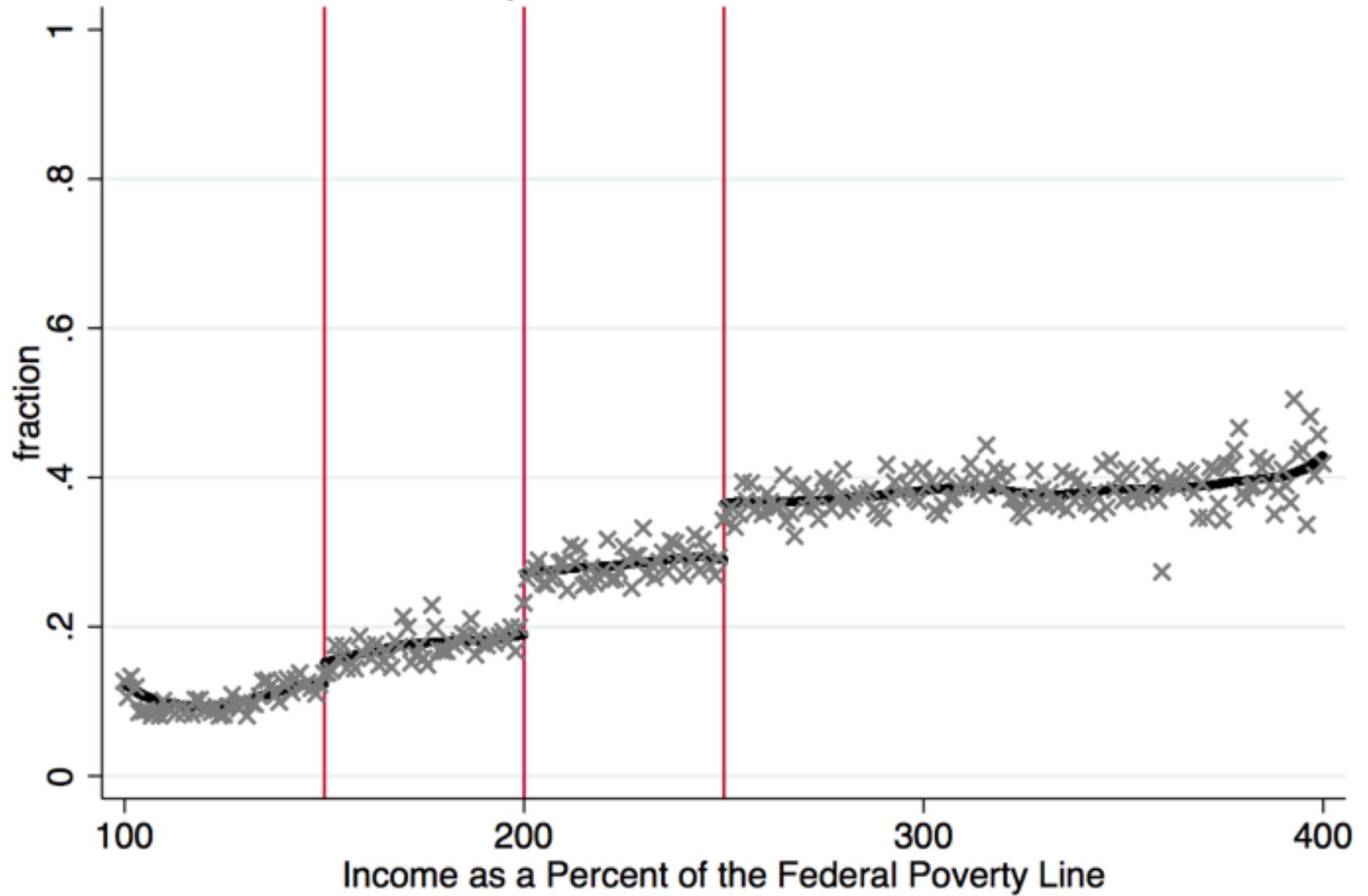
# Fraction of Marketplace Enrollees in Bronze Plans, 2014



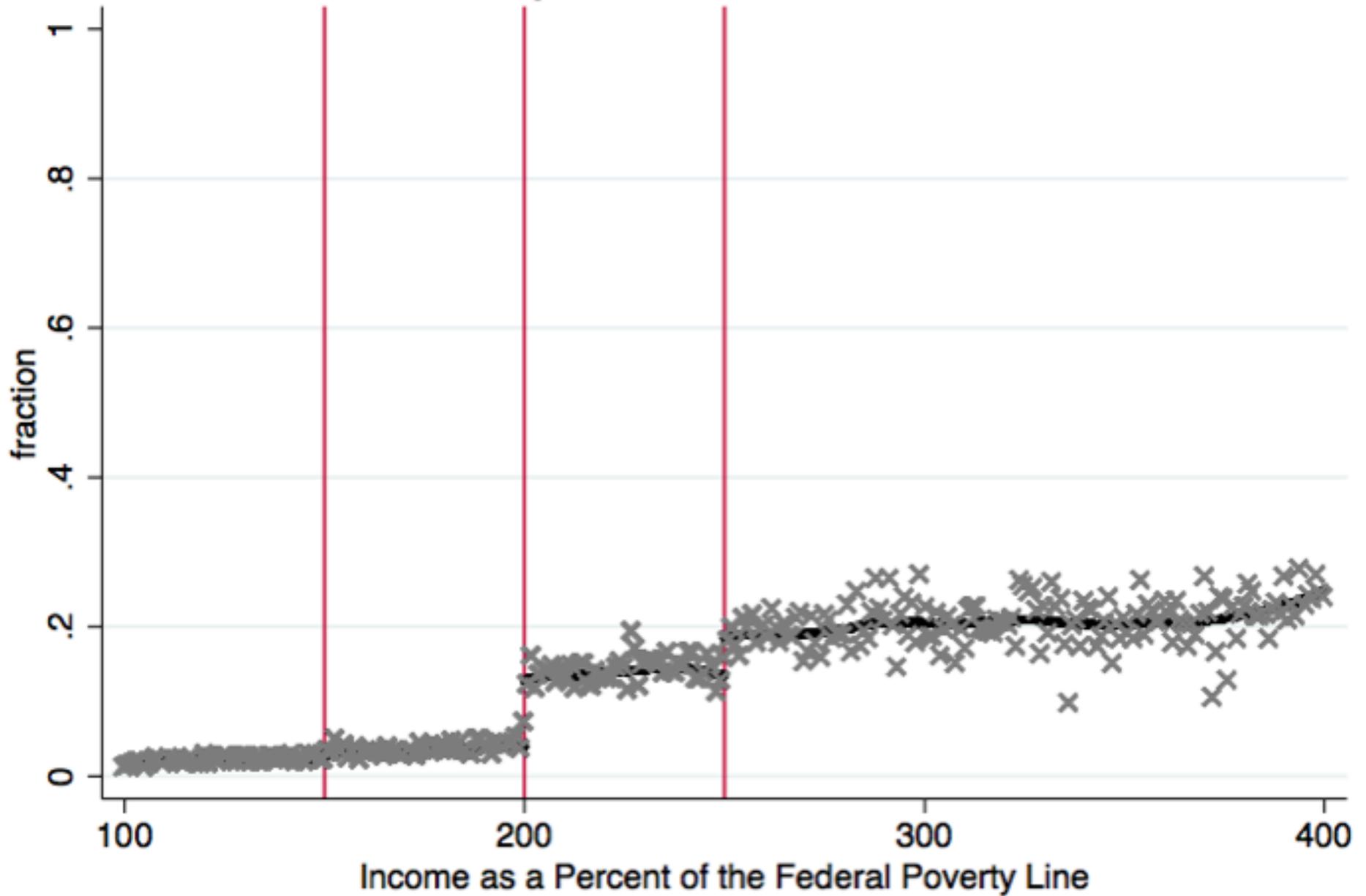
# Fraction of Marketplace Enrollees in Bronze Plans, 2015



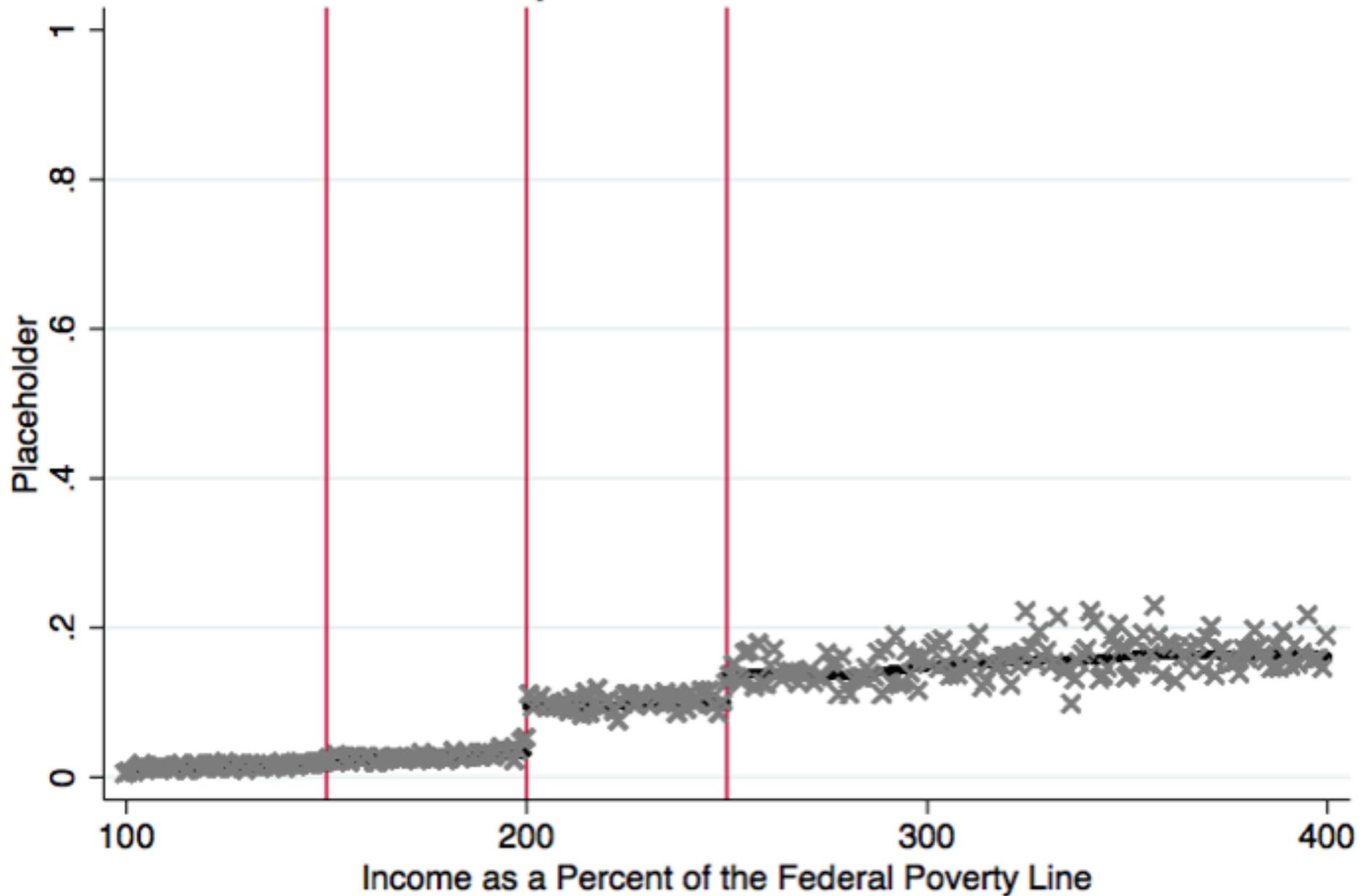
# Fraction of Marketplace Enrollees in Bronze Plans, 2016



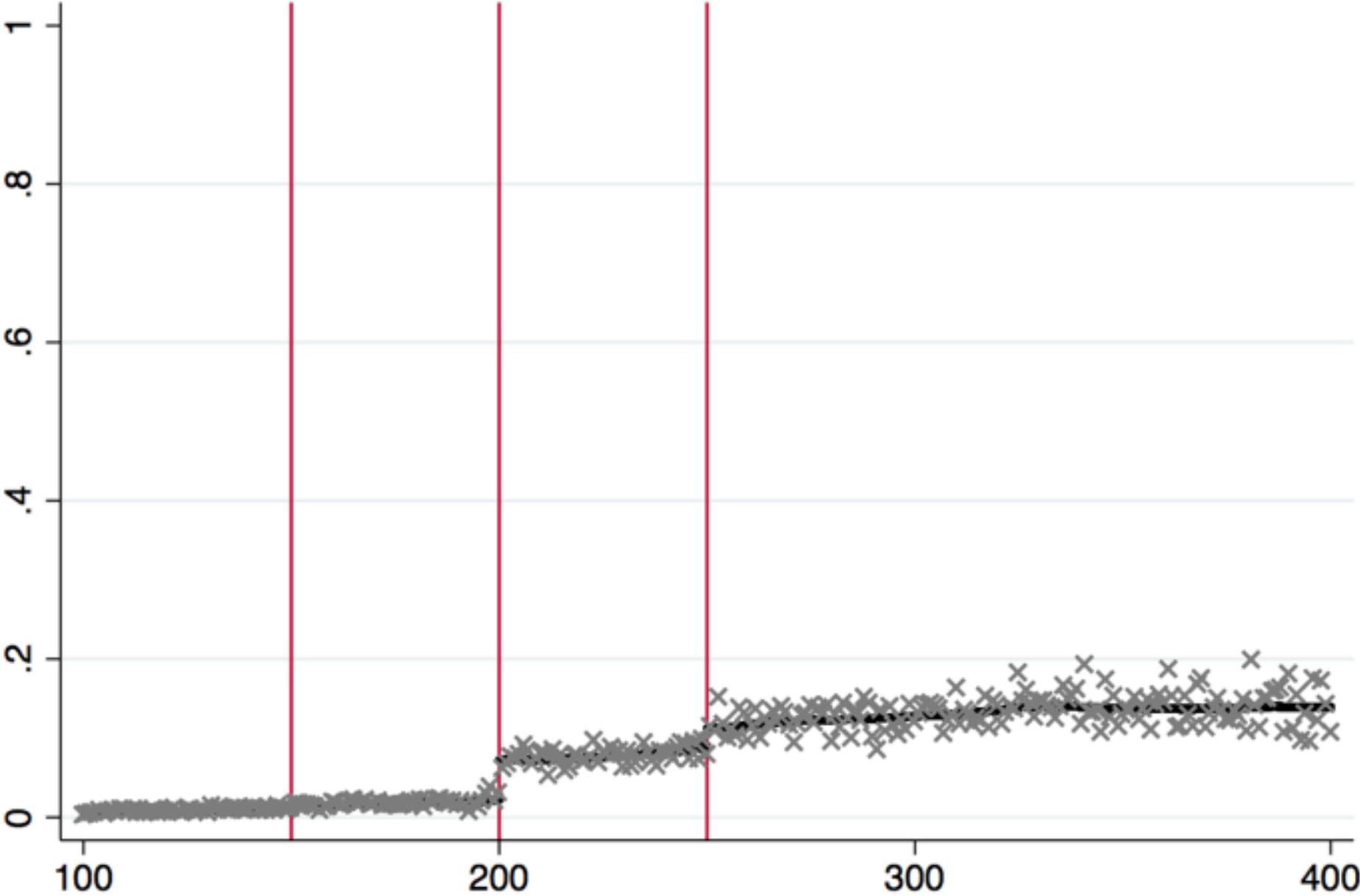
# Fraction of Marketplace Enrollees in Gold Plans, 2014



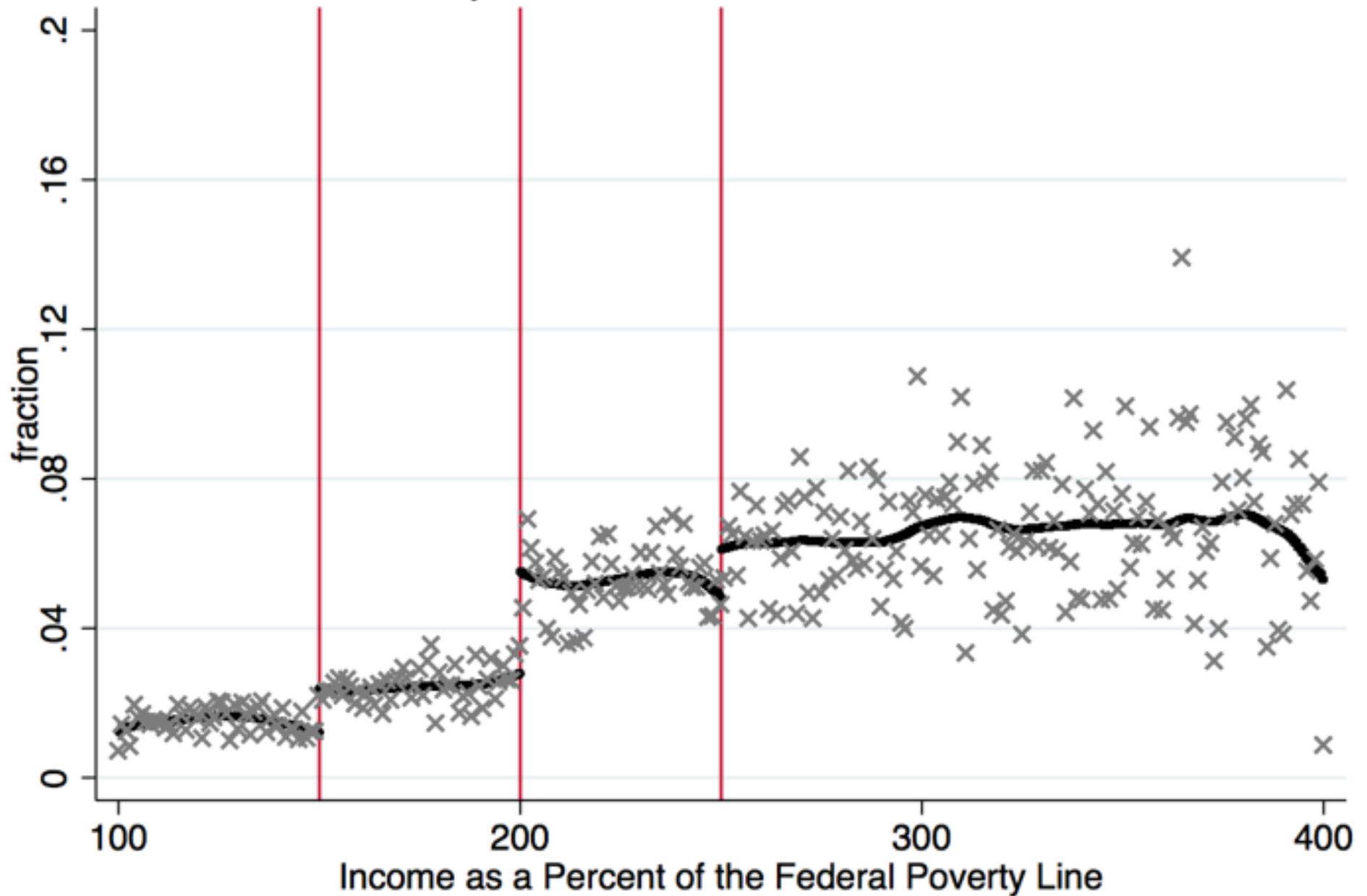
# Fraction of Marketplace Enrollees in Gold Plans, 2015



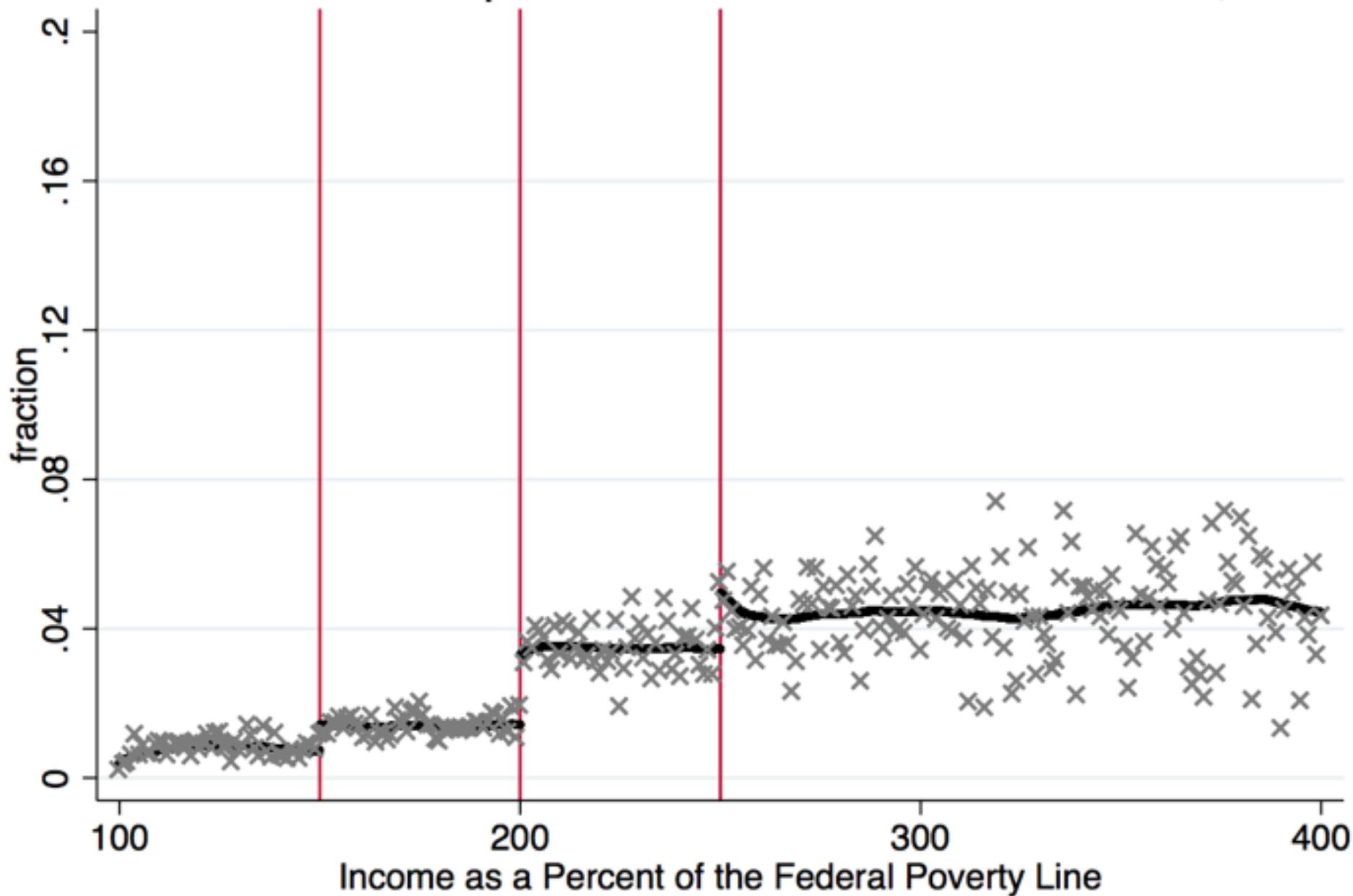
# Fraction of Marketplace Enrollees in Gold Plans, 2016



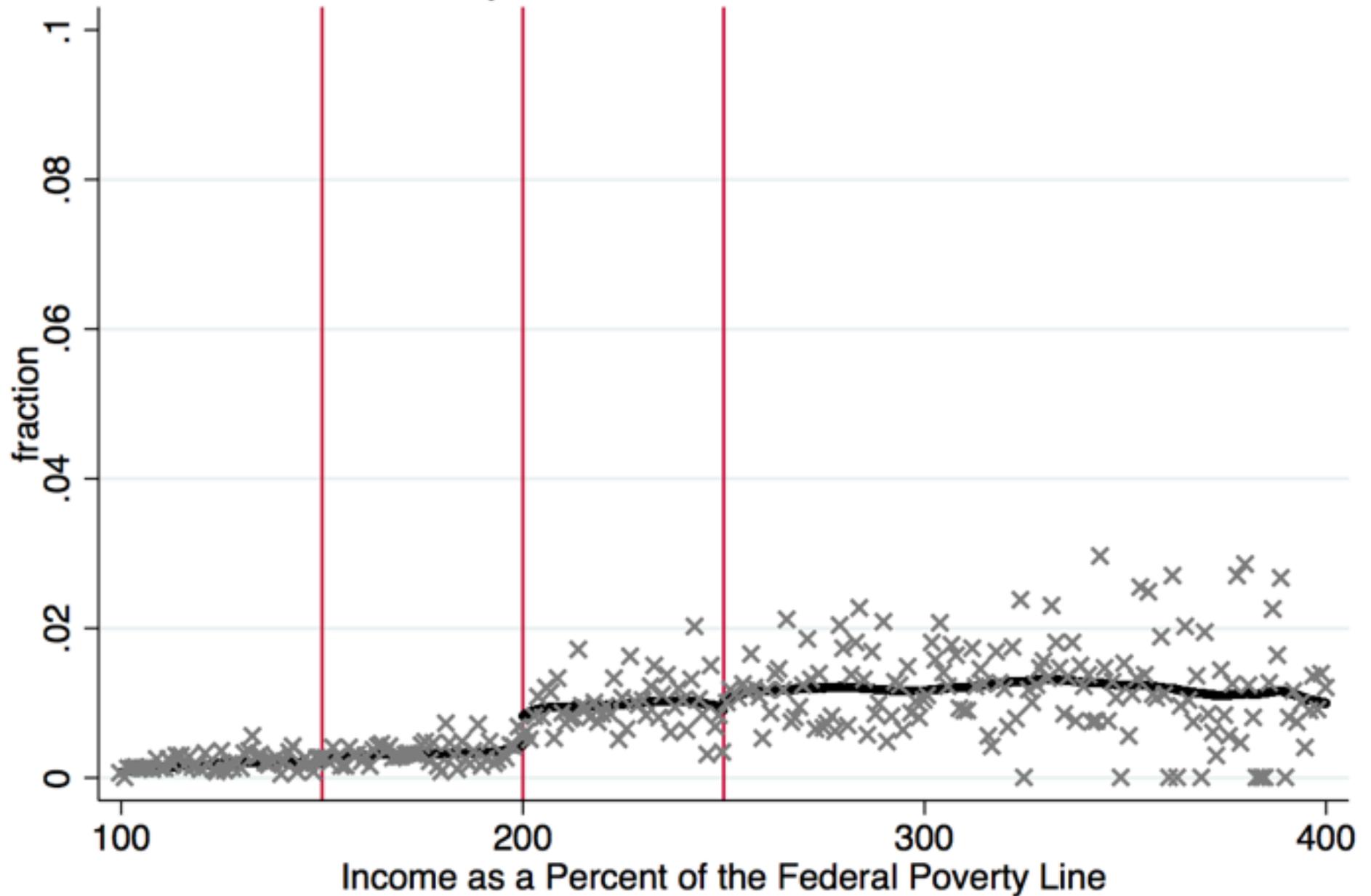
# Fraction of Marketplace Enrollment in Platinum Plans, 2014



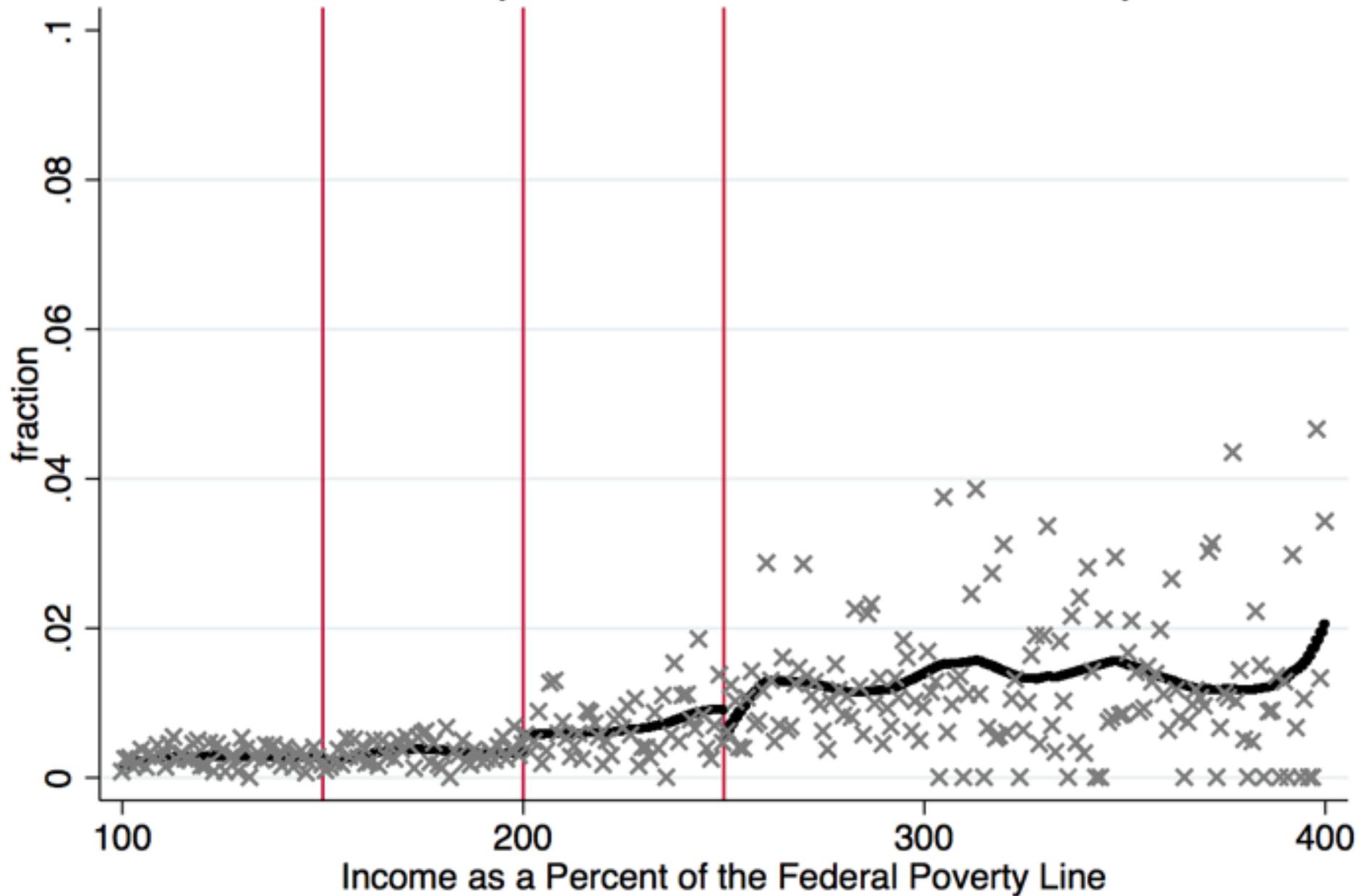
# Fraction of Marketplace Enrollees in Platinum Plans, 2015



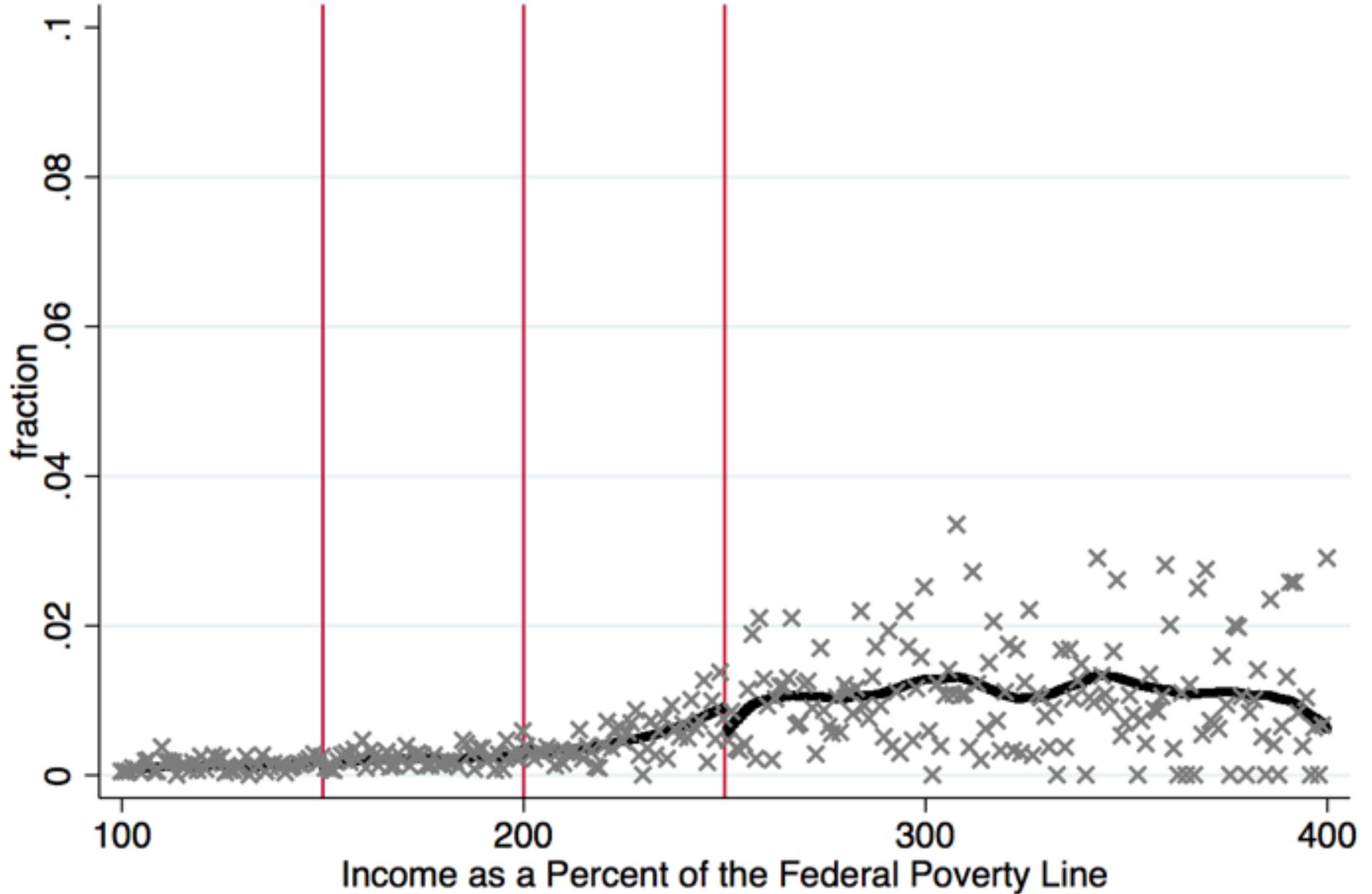
# Fraction of Marketplace Enrollees in Platinum Plans, 2016



# Fraction of Marketplace Enrollment in Catastrophic, 2014



# Fraction of Marketplace Enrollment in Catastrophic, 2015



# Fraction of Enrollees in Catastrophic Plans, 2016



# Summary of RD Results, 2014

	Silver	Bronze	Gold	Platinum	Catastrophic
<i>2014 Marketplace Enrollees</i>					
Over 150% FPL (94 v. 87) N=1,438,100	-0.032 (0.001)	0.012 (0.001)	0.009 (0.001)	0.011 (0.001)	-0.0002 (0.0002)
Over 200% FPL (87 v. 73) N=901,655	-0.201 (0.002)	0.086 (0.002)	0.085 (0.001)	0.029 (0.001)	0.002 (0.0003)
Over 250% FPL (73 v. 70) N=522,119	-0.109 (0.003)	0.051 (0.003)	0.051 (0.002)	0.009 (0.001)	-0.002 (0.001)

# Summary of RD Results, 2015

	Silver	Bronze	Gold	Platinum	Catastrophic
<i>2015 Marketplace Enrollees</i>					
Over 150% FPL (94 v. 87) N=1,999,852	-0.030 (0.001)	0.019 (0.001)	0.006 (0.0004)	0.005 (0.0003)	-0.0002 (0.0001)
Over 200% FPL (87 v. 73) N=1,265,148	-0.162 (0.002)	0.082 (0.002)	0.060 (0.001)	0.019 (0.001)	0.0005 (0.0002)
Over 250% FPL (73 v. 70) N=765,813	-0.092 (0.002)	0.045 (0.002)	0.042 (0.002)	0.011 (0.001)	-0.0045 (0.0004)

# Summary of RD Results, 2016

	Silver	Bronze	Gold	Platinum	Catastrophic
<i>2016 Marketplace Enrollees</i>					
Over 150% FPL (94 v. 87)	-0.0355 (0.005)	0.0292 (0.004)	0.00471 (0.001)	0.000675 (0.001)	0.000828 (0.001)
Over 200% FPL (87 v. 73)	-0.135 (0.008)	0.0811 (0.007)	0.0494 (0.004)	0.0039 (0.001)	0.000468 (0.001)
Over 250% FPL (73 v. 70)	-0.0977 (0.010)	0.0748 (0.009)	0.022 (0.006)	0.00126 (0.002)	-0.000396 (0.002)

# Research Questions

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1. Are consumers sensitive to the degree of cost-sharing when selecting health plans?

Answer: Yes

2. Do Marketplace consumers behave in a way that suggests they are aware of and value CSRs?

Answer: Yes

# Additional Analyses

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- Alternative bandwidths
- Is consumer sensitivity related to the use or availability of assisters or navigators?
- Falsification test: members of Federally recognized tribes and native Alaskans

# Sensitivity: Navigators

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- Are consumers actually aware, or do they merely get help from Navigators/Assisters?

# American Indians / Native Alaskans

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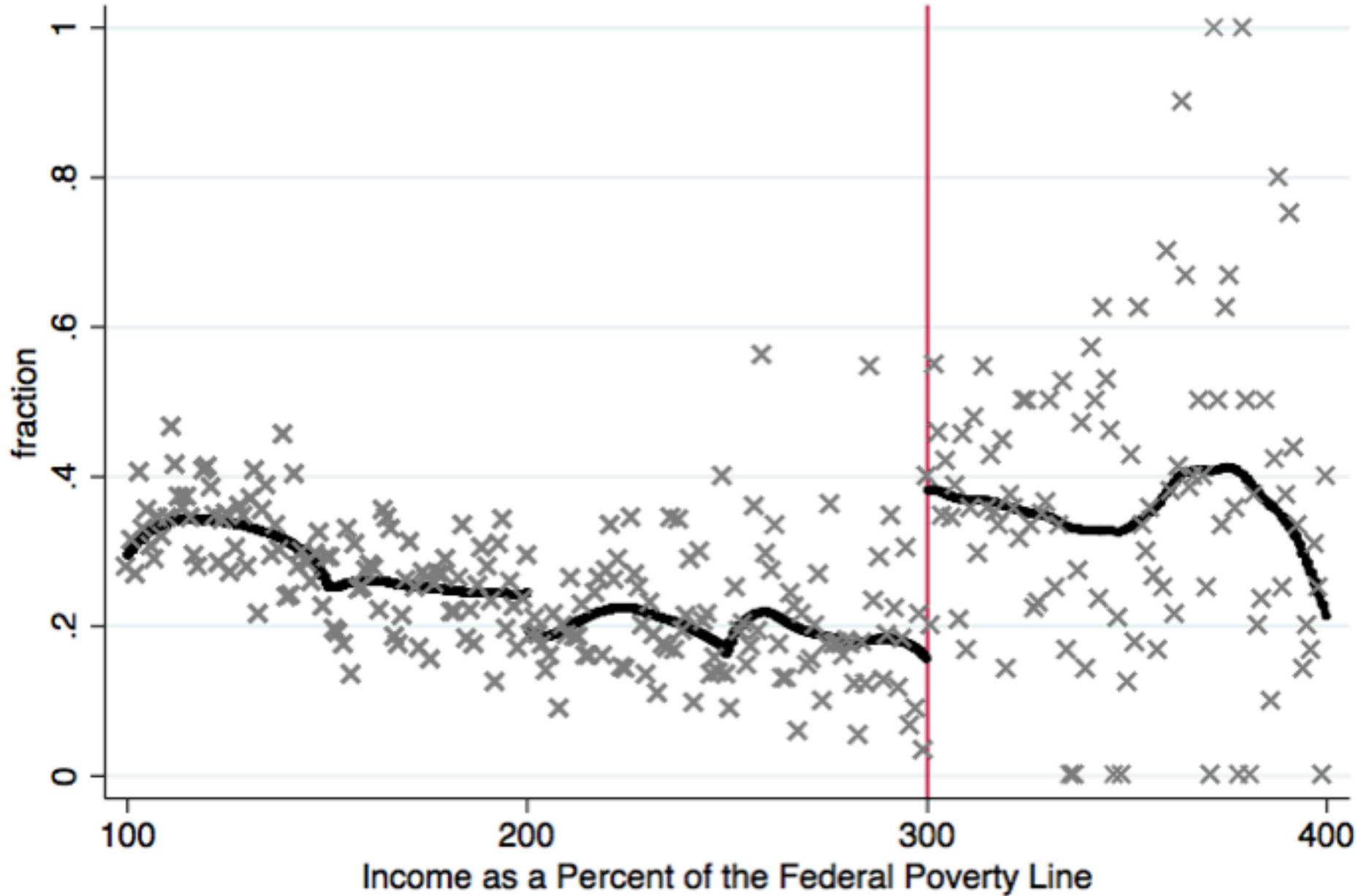
Members of federally recognized tribes and Native Alaskans are eligible for zero cost sharing plans or limited cost sharing plans

Zero cost sharing if income is between 100% and 300% FPL

Limited cost sharing if income is above 300% FPL

These plans are available at any metal level on the Marketplace

# Fraction of AINA Enrollees in Silver Plans, 2014



# Fraction of AINA Enrollees in Bronze Plans, 2014



# Additional Analyses – Results

- Is consumer sensitivity related to the use or availability of assisters or navigators?
  - No
- Falsification test: members of Federally recognized tribes and native Alaskans
  - AINAs respond differently and consistently with different program criteria

# Additional Research Questions

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- A. Do consumers are mistakenly forgoing CSRs and instead purchase dominated plans?
- B. Do CSRs “crowd-out” the voluntary purchase of Gold or Platinum plans or “crowd-in” the purchase of Bronze plans?

# Few Enrollees Choose Dominated Plans

## 2014 Marketplace Enrollees

	Number	% Choose Platinum	% Choose Gold	% Choose Dominated Plan
AV 94 eligible	2,188,597	1.6%	2.1%	3.6%
AV 87 eligible	1,447,203	2.4%	3.5%	3.5%
AV 73 eligible	849,280	5.3%	13.6%	0.0%
Not CSR Eligible	913,212	6.6%	19.8%	0.0%
All Enrollees	5,398,371	3.2%	7.3%	2.4%

# Few Enrollees Choose Dominated Plans

## 2015 Marketplace Enrollees

	Number	% Choose Platinum	% Choose Gold	% Choose Dominated Plan
AV 94 eligible	3,252,423	0.8%	1.2%	2.0%
AV 87 eligible	2,103,663	1.4%	2.5%	2.5%
AV 73 eligible	1,232,640	3.4%	9.8%	0.0%
Not CSR Eligible	1,385,749	4.4%	14.8%	0.0%
All Enrollees	7,974,586	2.0%	5.2%	1.5%

# Few Enrollees Choose Dominated Plans

## 2016 Marketplace Enrollees

	Number	% Choose Platinum	% Choose Gold	% Choose Dominated Plan
AV 94 eligible	3,413,360	0.2%	0.8%	0.9%
AV 87 eligible	2,181,343	0.3%	1.7%	1.7%
AV 73 eligible	1,324,879	0.9%	7.7%	0.0%
Not CSR Eligible	1,494,531	1.2%	12.6%	0.0%
All Enrollees	8,877,869	0.6%	4.7%	0.8%

# Research Questions

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Do are mistakenly forgoing CSRs and instead purchase dominated plans?

- Yes, but a very small percentage

# Conclusions

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- Consumers are sensitive to the degree of cost-sharing subsidy when choosing plans
  - Direct evidence from RD analysis
  - Implied own-price elasticity of about -1
- Relatively few consumers appear to be forgoing CSRs in favor of “dominated” metal levels
- More crowd-in than crowd-out

# Conclusions

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- These findings suggest that consumers understand and are aware of cost-sharing reductions and value lower cost-sharing when choosing plans
- Caveat: cannot rule out that consumers would make improved decisions if they had greater financial literacy or access to even better tools