



Measuring Health Insurance in the American Community Survey: Assessing the New Premium and Subsidy Items

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Content of ACS Health Insurance Questions

Are you currently covered by plan from:

1. employer or union?
2. purchased directly from an insurance company?
3. Medicare (for 65+ and certain disabilities)?
4. Medicaid, Medical Assistance (for low income)?
5. TRICARE/military?
6. VA, Indian Health Service, any other plan?



Basic Health Coverage Categories for Typical Analyses

1. Private

- a. Employer-sponsored insurance (ESI)
- b. Non-group purchased on the individual market

2. Public

- a. Medicaid (for low income)
- b. Medicare (for 65+)



Affordable Care Act and the New Marketplace

- In 2010 the ACA (aka Obamacare) was passed
- Created the new “marketplace” to be rolled out in 2014
- Marketplace would add a new sub-type of coverage:
 1. Private
 - a. Employer-sponsored insurance (ESI)
 - b. Non-group purchased on the individual market
 - i. Outside the marketplace
 - ii. From the marketplace (aka Obamacare)
 2. Public
 - a. Medicaid (for low income)
 - b. Medicare (for 65+)



Affordable Care Act and the New Marketplace

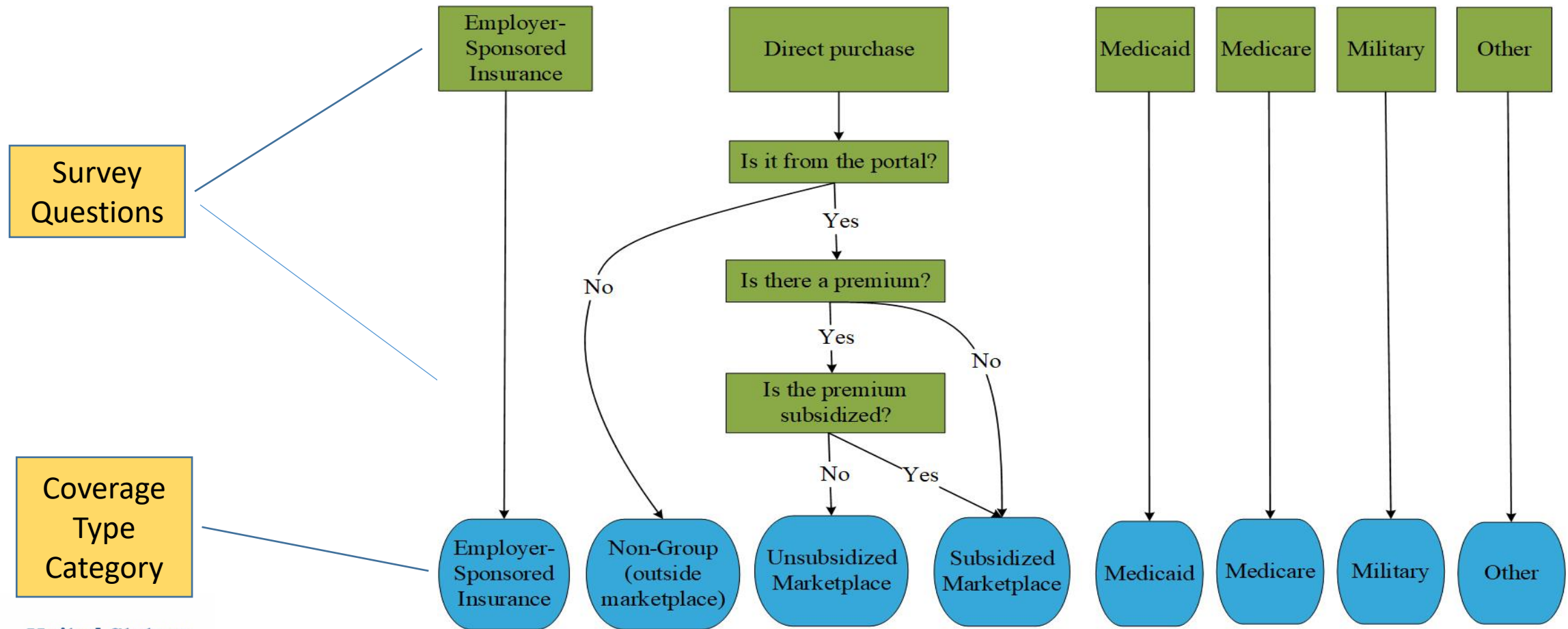
- In 2010 the ACA (aka Obamacare) was passed
- Roll-out of new marketplace in 2014 would add a sub-type of coverage:
 1. Private
 - a. Employer-sponsored insurance (ESI)
 - b. Non-group purchased on the individual market
 - i. Outside the marketplace
 - ii. From the marketplace (aka Obamacare)
 2. Public
 - a. Medicaid (for low income)
 - b. Medicare (for 65+)
 - c. Military



Research in 2011 with Marketplace-Type Enrollees in Massachusetts

- In 2006 Massachusetts passed state-based health reform on which federal ACA was modeled
- Qualitative research with marketplace and Medicaid enrollees in Massachusetts to explore how to adapt ACS and CPS surveys post-ACA
- Results:
 - Maintain same basic health insurance module
 - Add three new questions on features of coverage:
 - Was it obtained on the portal (healthcare.gov)?
 - Is there a premium?
 - Is there a subsidy?
 - ➔ Combining answers to basic module with these additional datapoints should enable categorization of marketplace coverage

Hypothetical Algorithm to Categorize Coverage Type post-ACA from an Adapted ACS Health Module





CHIME: Linked Survey-Record Study Methods

- “CHIME” experimental survey conducted by Census Bureau in spring 2015
- Sample: phone numbers of enrollees from US-based mid-western private health insurance company records; random sample drawn from multiple strata:
 - Employer-sponsored insurance (ESI)
 - Non-group (direct purchase/outside marketplace)
 - Marketplace (unsubsidized and subsidized)
 - Medicaid
 - MinnesotaCare (public coverage with sliding scale premium)
- 15-minute telephone survey including ACS (and CPS) health insurance module
- Content: topics drawn from ACS/CPS (demos, labor force, program participation) for context
- Data collected on all household members
- Response rate = 22%
- Health plan enrollment file sent post-data collection
- Records matched to survey at person-level; final matched file n ~ 2,000
- Weighted data to health plan population totals

Research Questions

1. How do survey responses compare to enrollment records on:
 - Basic coverage type (employer-sponsored, Medicaid, etc.)
 - New ACA-specific questions:
 - Portal
 - Premium
 - Subsidy
2. How should answer to basic coverage type be combined with answers to portal/premium/subsidy in order to best categorize coverage type?



Evaluation Metrics

- Among enrollees in Coverage Type X (according to records):
 - For basic coverage type question (e.g., employer-sponsored, Medicaid)
 - How often was correct (aka “target”) coverage type reported?
 - If target coverage type was not, what was prevalence and pattern of mis-reports?
 - For portal, premium and subsidy questions:
 - How often was correct answer reported?
 - What were levels of missing data?
- “Correct” versus “Congruent”
 - Enrollment records could have their own errors
 - Health plan informatics staff worked with us to deduplicate, chase up data anomalies

Results: Coverage Type Reporting Among Known Enrollees

Coverage Type Reported	Coverage Type According to Enrollment Records								
	ESI	NonGroup/Marketplace					Public		
		NonGrp/ Mkt	Non- Group	Marketplace			All	Mcaid	MnCare
				All	Unsubs	Subs			
ESI	94.8	6.7	6.7	6.9	20.8	0.8	4.3	3.8	6.9
Dir Purchase	0.9	84.2	84.7	78.2	60.9	85.7	6.4	3.5	21.4
Public	0.6	5.7	5.6	7.1	6.3	7.5	79.4	84.5	52.5
Other	0.9	1.6	1.3	5.2	7.0	4.4	4.6	3.4	11.6
Uninsured	2.7	1.8	1.7	2.6	4.9	1.6	5.4	4.9	7.6
TOTAL	100	100	100	100	100	100	100	100	100

Results: ESI

Coverage Type Reported	Coverage Type According to Enrollment Records								
	ESI	NonGroup/Marketplace					Public		
		NonGrp/ Mkt	Non- Group	Marketplace			All	Mcaid	MnCare
				All	Unsubs	Subs			
ESI	94.8	6.7	6.7	6.9	20.8	0.8	4.3	3.8	6.9
Dir Purchase	0.9	84.2	84.7	78.2	60.9	85.7	6.4	3.5	21.4
Public	0.6	5.7	5.6	7.1	6.3	7.5	79.4	84.5	52.5
Other	0.9	1.6	1.3	5.2	7.0	4.4	4.6	3.4	11.6
Uninsured	2.7	1.8	1.7	2.6	4.9	1.6	5.4	4.9	7.6
TOTAL	100	100	100	100	100	100	100	100	100

Results: Non-group/Marketplace; Medicaid

Coverage Type Reported	Coverage Type According to Enrollment Records								
	ESI	NonGroup/Marketplace					Public		
		NonGrp/Mkt	Non-Group	Marketplace			All	Mcaid	MnCare
				All	Unsubs	Subs			
ESI	94.8	6.7	6.7	6.9	20.8	0.8	4.3	3.8	6.9
Dir Purchase	0.9	84.2	84.7	78.2	60.9	85.7	6.4	3.5	21.4
Public	0.6	5.7	5.6	7.1	6.3	7.5	79.4	84.5	52.5
Other	0.9	1.6	1.3	5.2	7.0	4.4	4.6	3.4	11.6
Uninsured	2.7	1.8	1.7	2.6	4.9	1.6	5.4	4.9	7.6
TOTAL	100	100	100	100	100	100	100	100	100

Results: Unsubsidized Marketplace; MinnesotaCare

Coverage Type Reported	Coverage Type According to Enrollment Records								
	ESI	NonGroup/Marketplace					Public		
		NonGrp/Mkt	Non-Group	Marketplace			All	Mcaid	MnCare
				All	Unsubs	Subs			
ESI	94.8	6.7	6.7	6.9	20.8	0.8	4.3	3.8	6.9
Dir Purchase	0.9	84.2	84.7	78.2	60.9	85.7	6.4	3.5	21.4
Public	0.6	5.7	5.6	7.1	6.3	7.5	79.4	84.5	52.5
Other	0.9	1.6	1.3	5.2	7.0	4.4	4.6	3.4	11.6
Uninsured	2.7	1.8	1.7	2.6	4.9	1.6	5.4	4.9	7.6
TOTAL	100	100	100	100	100	100	100	100	100

Results: Portal/Premium/Subsidy Reporting

QUESTION		NonGroup /Mkt	Non-group	Marketplace			Public	
				All	Unsubs	Subs	Medicaid	MnCare
Portal	Yes	22.9	17.4	79.9	76.0	81.3	44.1	73.1
	No	73.7	79.3	15.8	18.4	14.9	48.0	24.6
	D/R	3.5	3.4	4.3	5.6	3.8	8.0	2.3
	Total	100	100	100	100	100	100	100
Premium	Yes	95.7	95.3	100	100	100	24.4	77.4
	No	4.3	4.7	0	0	0	74.6	22.6
	D/R	0	0	0	0	0	0.9	0
	Total	100	100	100	100	100	100	100
Subsidy	Yes	11.0	6.2	58.9	19.1	72.4	21.2	21.5
	No	88.1	93.0	39.7	80.9	25.7	77.0	69.5
	D/R	0.8	0.8	1.4	0	1.9	1.7	9.0
	Total	100	100	100	100	100	100	100

Results: Portal Reporting

QUESTION		NonGroup /Mkt	Non-group	Marketplace			Public	
				All	Unsubs	Subs	Medicaid	MnCare
Portal	Yes	22.9	17.4	79.9	76.0	81.3	44.1	73.1
	No	73.7	79.3	15.8	18.4	14.9	48.0	24.6
	D/R	3.5	3.4	4.3	5.6	3.8	8.0	2.3
	Total	100	100	100	100	100	100	100
Premium	Yes	95.7	95.3	100	100	100	24.4	77.4
	No	4.3	4.7	0	0	0	74.6	22.6
	D/R	0	0	0	0	0	0.9	0
	Total	100	100	100	100	100	100	100
Subsidy	Yes	11.0	6.2	58.9	19.1	72.4	21.2	21.5
	No	88.1	93.0	39.7	80.9	25.7	77.0	69.5
	D/R	0.8	0.8	1.4	0	1.9	1.7	9.0
	Total	100	100	100	100	100	100	100

Results: Premium Reporting

QUESTION		NonGroup /Mkt	Non-group	Marketplace			Public	
				All	Unsubs	Subs	Medicaid	MnCare
Portal	Yes	22.9	17.4	79.9	76.0	81.3	44.1	73.1
	No	73.7	79.3	15.8	18.4	14.9	48.0	24.6
	D/R	3.5	3.4	4.3	5.6	3.8	8.0	2.3
	Total	100	100	100	100	100	100	100
Premium	Yes	95.7	95.3	100	100	100	24.4	77.4
	No	4.3	4.7	0	0	0	74.6	22.6
	D/R	0	0	0	0	0	0.9	0
	Total	100	100	100	100	100	100	100
Subsidy	Yes	11.0	6.2	58.9	19.1	72.4	21.2	21.5
	No	88.1	93.0	39.7	80.9	25.7	77.0	69.5
	D/R	0.8	0.8	1.4	0	1.9	1.7	9.0
	Total	100	100	100	100	100	100	100

Results: Subsidy Reporting

QUESTION		NonGroup /Mkt	Non-group	Marketplace			Public	
				All	Unsubs	Subs	Medicaid	MnCare
Portal	Yes	22.9	17.4	79.9	76.0	81.3	44.1	73.1
	No	73.7	79.3	15.8	18.4	14.9	48.0	24.6
	D/R	3.5	3.4	4.3	5.6	3.8	8.0	2.3
	Total	100	100	100	100	100	100	100
Premium	Yes	95.7	95.3	100	100	100	24.4	77.4
	No	4.3	4.7	0	0	0	74.6	22.6
	D/R	0	0	0	0	0	0.9	0
	Total	100	100	100	100	100	100	100
Subsidy	Yes	11.0	6.2	58.9	19.1	72.4	21.2	21.5
	No	88.1	93.0	39.7	80.9	25.7	77.0	69.5
	D/R	0.8	0.8	1.4	0	1.9	1.7	9.0
	Total	100	100	100	100	100	100	100

Limitations

- Data collection from only one state
- Response rate is 22%
- Results reflect contribution of only one design feature: questionnaire
- Mode effects not assessed

Summary

- Basic coverage type questions:
 - Reporting accuracy is ~ 85-95% for most types
 - Unsubsidized marketplace and MinnesotaCare is ~ 53-61%
- Portal/Premium/Subsidy questions: 75-100%
 - Portal: 80% for non-group outside marketplace
 - Premium:
 - ~95-100% across private coverage types
 - 75% for Medicaid
 - Subsidy: ranges from 72-93%

Next Steps

- Explore algorithms to categorize coverage type using new premium, subsidy (and portal?) items
- Reporting accuracy metrics:
 - Sensitivity (under-reporting)
 - Predictive power (over-reporting)
 - Prevalence (administrative records versus survey estimate)
- Individual and aggregated coverage type categories:
 - Private
 - ESI
 - Nongroup/Marketplace
 - Nongroup (outside marketplace)
 - Marketplace
 - Subsidized
 - Unsubsidized
 - Public
 - Medicaid
 - MinnesotaCare

THANK YOU

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ACS Health Insurance Module in 2014

- Deferred modifications to questions in 2014 pending more testing
- Expectation: marketplace enrollees would report “direct purchase”
 - Are you currently covered by:
 - health insurance through a current or former employer or union?
 - **health insurance purchased directly from an insurance company?**
 - Medicare, for people age 65 or older or people with certain disabilities?
 - Medicaid, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability?
 - TRICARE or other military health care?
 - through the VA, Indian Health Service or any other plan?
- Same basic health coverage categories for typical analyses produced, but data did not enable estimates of marketplace coverage

ACS Health Insurance Module in 2019

- Added 2 questions to basic health insurance module:
 1. Is there a premium for this plan?
 2. Does this person or another family member receive a tax credit or subsidy based on family income to help pay the premium?
- Enables categorization of subsidized marketplace (but cannot distinguish non-group on/off marketplace)

American Community Survey

- Development began in 1990s
- Purpose: a “rolling census”
 - provide a broad range of demographic and socioeconomic characteristics on an annual basis
 - rather than having to wait 10 years for the decennial census
- Fully implemented in 2005
- Candidates for new content periodically tested; some implemented
- In 2008 health insurance module added
- In 2019 new items added on premiums and subsidies