

Coverage of Children in Administrative Records and the 2010 Census

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Research Questions

- How does coverage of 2010 Census data by administrative records vary by age group?
- How does Medicaid and Supplemental Nutrition Assistance Program (SNAP) data improve coverage by age group?
- Do Medicaid and SNAP data contribute additional records to improve coverage of different demographic groups and response modes?

Previous Research

- The Census Bureau is investigating the strategic reuse of administrative records
- Counts of children in administrative records lower than in Census 2000 (Farber and Leggieri, 2002)
- Coverage rates of the 2010 Census and the 2010 American Community Survey by administrative records is lowest for children (Rastogi and O'Hara, 2012; Luque and Bhaskar, 2014)

Data

- Person-Place Administrative Records Composite (PPARC)
- 2010 Center for Medicare and Medicaid Services Medicaid Statistical Information System
- 2010 New York State Supplemental Nutrition Assistance Program Participation (NY SNAP)
- 2010 Census

PPARC Data Sources

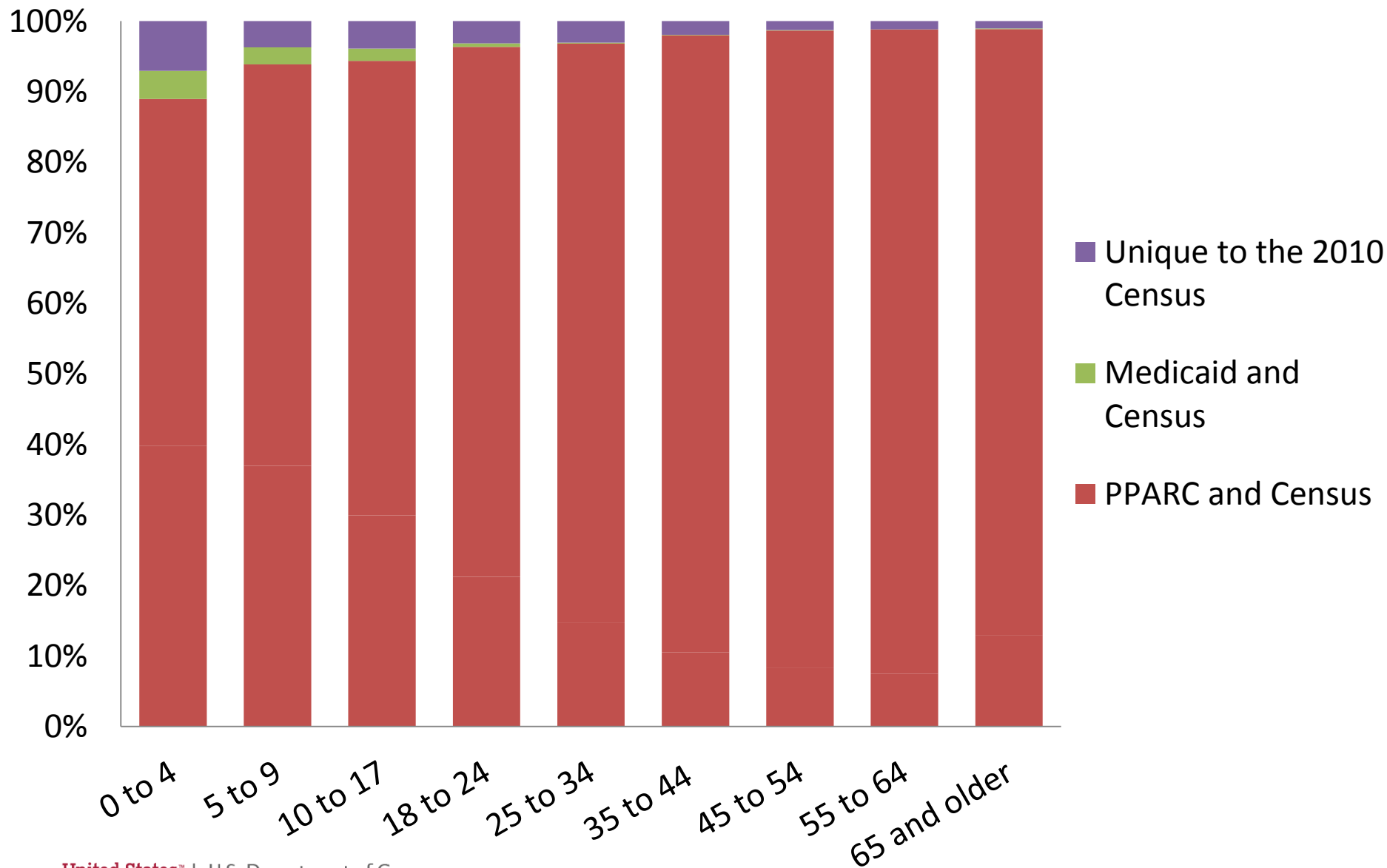
- Internal Revenue Service
- Department of Housing and Urban Development
- Social Security Administration
- Center for Medicare and Medicaid Services
- Selective Service System
- Indian Health Service patient registration system from the Department of Health and Human Services
- National Change of Address
- Temporary Assistance for Needy Families
- Third Party data

Methodology

- Merge PPARC, Medicaid, and NY SNAP to 2010 Census using Protected Identification Keys (PIK)
- PIKs assigned by the Person Identification Validation System (PVS)
- PIKs uniquely identify person-records
- Coverage rate calculated as

$$\frac{\textit{Administrative Records} \cap \textit{2010 Census}}{\textit{2010 Census}}$$

Coverage of Medicaid and PPARC

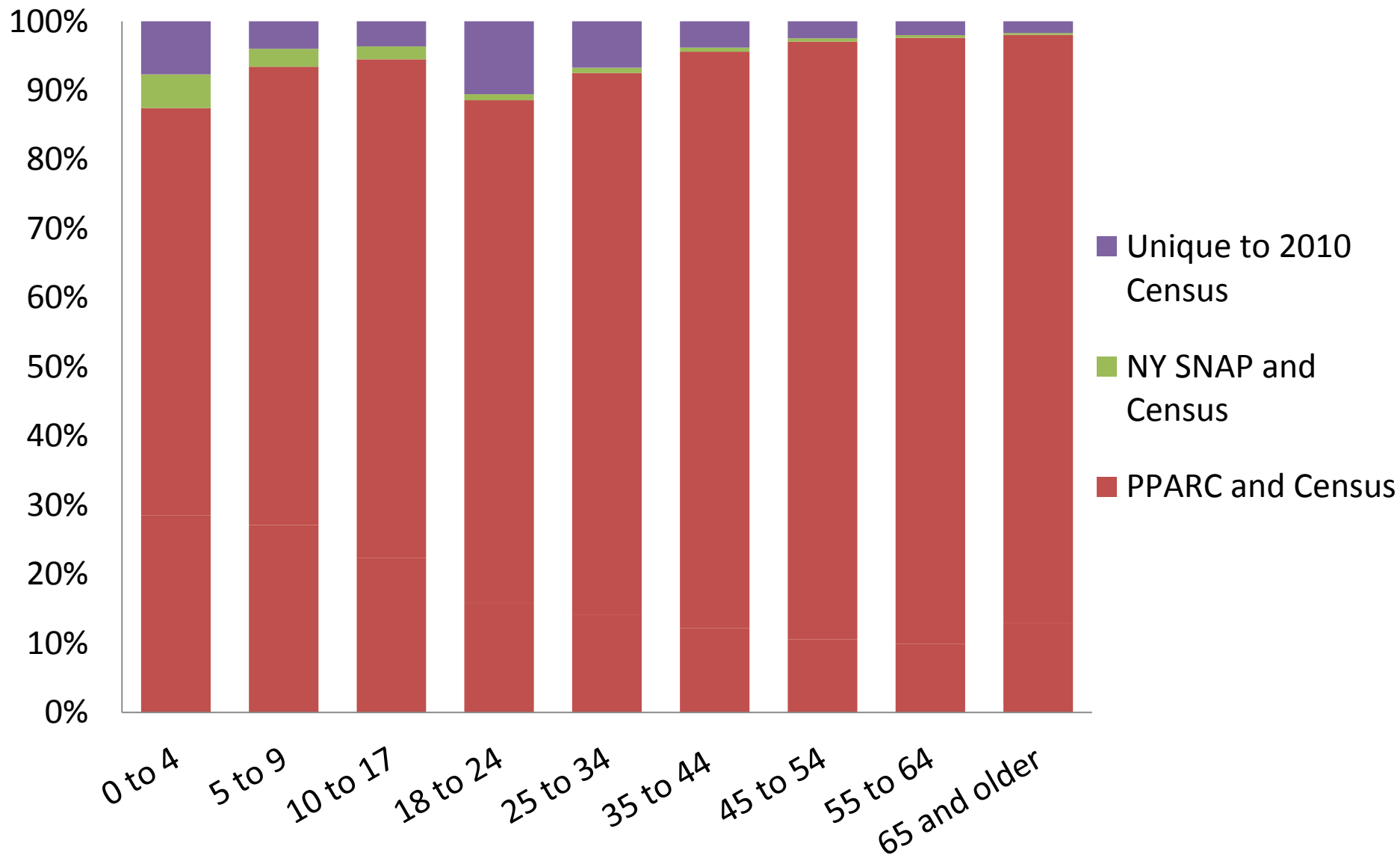


Coverage of Medicaid and PPARC

2010 Census Variables	PPARC		Coverage with PPARC and Medicaid		Change in Coverage from Medicaid	
	N	%	N	%	N	% point change
0 to 4	15,643,654	89.0%	16,349,913	93.0%	706,259	4.0%
5 to 9	16,734,558	93.9%	17,163,528	96.3%	428,970	2.4%
10 to 17	27,907,781	94.4%	28,420,908	96.1%	513,127	1.7%
18 to 24	23,924,369	96.3%	24,045,261	96.8%	120,892	0.5%
25 to 34	33,451,149	96.8%	3,503,722	97.0%	52,573	0.2%
35 to 44	35,273,694	98.0%	35,296,241	98.1%	22,547	0.1%
45 to 54	39,717,304	98.7%	39,737,092	98.7%	19,788	0.0%
55 to 64	32,451,755	98.8%	32,466,066	98.8%	14,311	0.0%
65 +	35,211,511	98.9%	35,237,770	99.0%	26,259	0.1%
Total	264,199,058	96.8%	266,114,328	97.5%	1,915,270	0.7%

Source: 2010 Census, Person-Place Administrative Records Composite, Medicaid Statistical Information System

Coverage of NY SNAP and NY PPARC



Coverage of NY SNAP and NY PPARC

2010 Census Variables	NY PPARC		Coverage with NY PPARC and NY SNAP		Change in Coverage from NY PPARC	
	N	%	N	%	N	% Point Change
0 to 4	847,584	87.4%	894,863	92.3%	47,279	4.9%
5 to 9	923,207	93.4%	948,952	96.0%	25,745	2.6%
10 to 17	1,609,763	94.5%	1,641,767	96.4%	32,004	1.9%
18 to 24	1,363,088	88.6%	1,376,499	89.5%	13,411	0.9%
25 to 34	1,929,147	92.5%	1,944,839	93.3%	15,692	0.8%
35 to 44	2,062,966	95.6%	2,075,189	96.2%	12,223	0.6%
45 to 54	2,386,175	97.1%	2,398,182	97.6%	12,007	0.5%
55 to 64	1,939,398	97.6%	1,946,884	98.0%	7,486	0.4%
65 +	2,170,647	98.0%	2,177,300	98.3%	6,653	0.3%
Total	15,489,536	94.6%	15,664,745	95.7%	175,209	1.1%

Source: 2010 Census, Person-Place Administrative Records Composite, Supplemental Nutrition Assistance Program

Summary of Findings

- Coverage by PPARC is generally high across all age groups, but lowest for children
- Medicaid improves coverage of children in the 2010 Census
- NY SNAP also improves coverage of children in the 2010 Census (restricted to New York State)

Coverage Rates of Children by Demographic Characteristics

PPARC and Medicaid

Coverage: PPARC and Medicaid

2010 Census Variables	Age 0-4		Age 5-9		Age 10-17	
	PPARC	PPARC and Medicaid	PPARC	PPARC and Medicaid	PPARC	PPARC and Medicaid
Race						
White Alone	90.3%	93.8%	94.8%	97.0%	95.7%	97.3%
Black Alone	92.8%	96.0%	96.3%	98.2%	96.2%	97.9%
American Indian or Alaska Native Alone	92.4%	96.6%	96.7%	98.9%	97.2%	98.8%
Asian Alone	91.3%	93.5%	95.9%	97.2%	95.9%	97.1%
Native Hawaiian or Other Pacific Islander Alone	90.3%	95.0%	93.9%	96.8%	94.1%	96.5%
Some Other Race Alone	87.5%	95.7%	92.8%	98.3%	94.1%	97.9%
Two or More Races	90.3%	94.4%	94.7%	97.3%	95.0%	97.1%
Hispanic or Latino Origin						
Hispanic	88.5%	95.3%	93.6%	98.1%	94.6%	97.7%
Non Hispanic	91.1%	94.0%	95.3%	97.1%	95.9%	97.4%
Mode						
Nonresponse Follow-up	89.9%	94.7%	93.7%	97.0%	94.1%	96.7%
Mailout/Mailback	90.7%	94.2%	95.3%	97.4%	96.1%	97.6%
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Not by Proxy	89.7%	94.7%	93.6%	96.9%	94.1%	96.6%
By Proxy	93.3%	96.6%	95.4%	97.7%	95.2%	97.4%
Quarter Type						
Not Group Quarters	90.5%	94.3%	94.9%	97.3%	95.7%	97.4%
Group Quarters	84.9%	95.0%	89.5%	98.0%	87.5%	97.3%

Source: 2010 Census, Person-Place Administrative Records Composite, Medicaid Statistical Information System

Coverage: PPARC and Medicaid

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Coverage Rates of Children by Demographic Characteristics

NY PPARC and NY SNAP

Coverage of PPARC and NY SNAP

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	PPARC	PPARC and NY SNAP	PPARC	PPARC and NY SNAP	PPARC	PPARC and NY SNAP
2010 Census Variables						
Race						
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Source: 2010 Census, Person-Place Administrative Records Composite, Supplemental Nutrition Assistance Program

Coverage of PPARC and NY SNAP

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Findings

- Coverage by PPARC is generally high across all age groups, but lowest for children
- Medicaid improves coverage of children in the 2010 Census
- NY SNAP also improves coverage of children in the 2010 Census (restricted to New York State)
- Medicaid substantially improves coverage of children who are Some Other Race alone, Hispanic, and living in Group Quarters
- NY SNAP substantially improves coverage of children who are AIAN alone, NHPI alone, Some Other Race Alone, Hispanic, and living in group quarters
- Medicaid and NY SNAP substantially improve coverage of Nonresponse Follow-Up for the 0-4 age group
- NY SNAP results for person-address pairs exhibit similar patterns

Thank you!

Catherine.G.Massey@Census.gov