

# Assimilation and Coverage of the Foreign-Born Population in Administrative Records

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# Background

- Administrative records are used for statistical purposes in many countries
- U.S. Census Bureau uses administrative records in many programs
- Motivation: Understand administrative records coverage of the foreign-born population

# Research Questions

- To what extent do administrative records provide data on the foreign born?
  - Assignment of unique identifiers
  - Match to administrative records
  
- What characteristics are associated with the assignment of unique identifiers and administrative records coverage of the foreign born?

# Assimilation

- Processes through which immigrants and their offspring adapt and integrate into their host society
- We hypothesize that factors related to assimilation are tied to whether the foreign born are assigned unique identifiers and are present in administrative records

# Indicators of the Assimilation Process

- Length of time in the country, citizenship, language proficiency
  - Attachment to labor force, eligibility and ability to navigate programs
  
- Socioeconomic status
  - Education, Income, and Employment

# Administrative Records Data

- Medicare Enrollment Database
- Three files from Housing and Urban Development (HUD)
- Indian Health Service Patient Registration File
- Internal Revenue Service (IRS) Individual Income Returns 1040 and IRS Information Returns 1099/W2s
- Selective Service System Registration File
- Supplemental Security Income Record
- Temporary Assistance for Needy Families (TANF)
- Third party data (5 vendors)

# Survey Data

- 2006-2010 ACS data
  - Unweighted and Weighted data
  - Foreign born with non-imputed citizenship response
  - Characteristics analysis restricted to persons age 25 and older

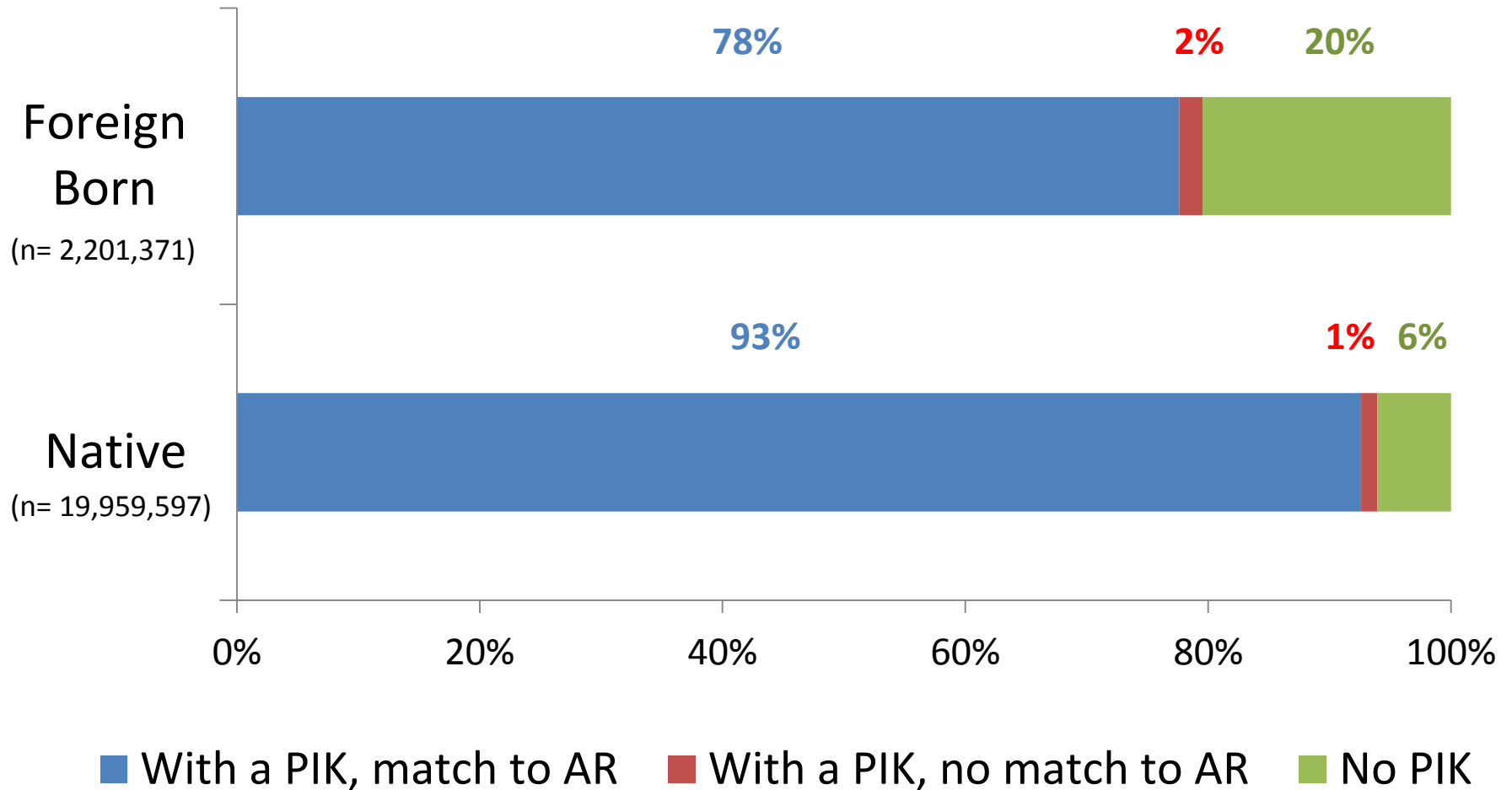
# Methodology

- Unique identifiers called Protected Identification Keys (PIKs) are used to link persons in administrative records to their 2006-2010 ACS responses
- Evaluate PIK assignment and for those with PIKs match rates to administrative records
- Descriptive and multinomial regression analyses to model characteristics associated with being assigned a PIK and matching to administrative records



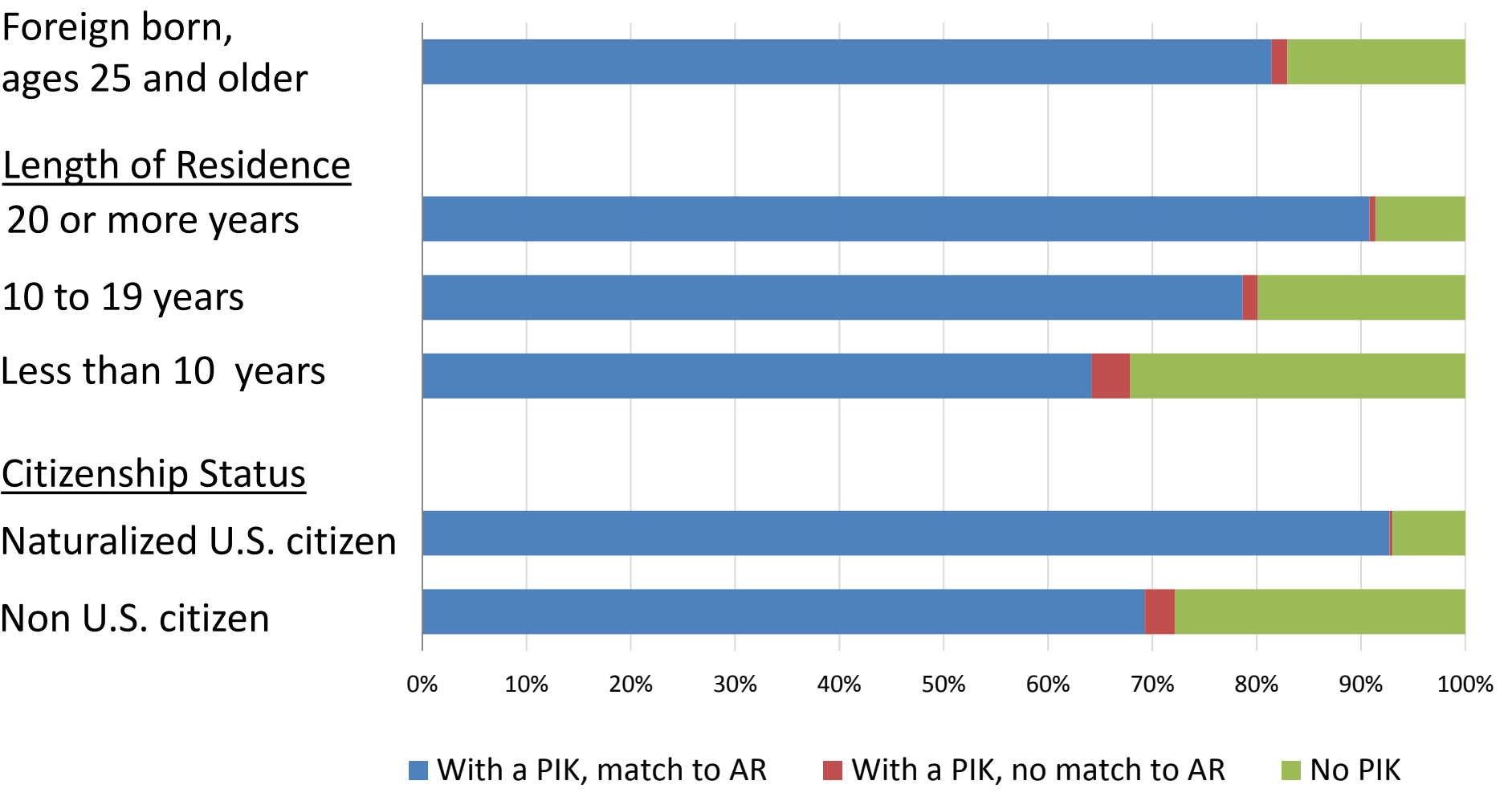
To what extent do the administrative records in our study provide data on the foreign born?

# Coverage by Nativity

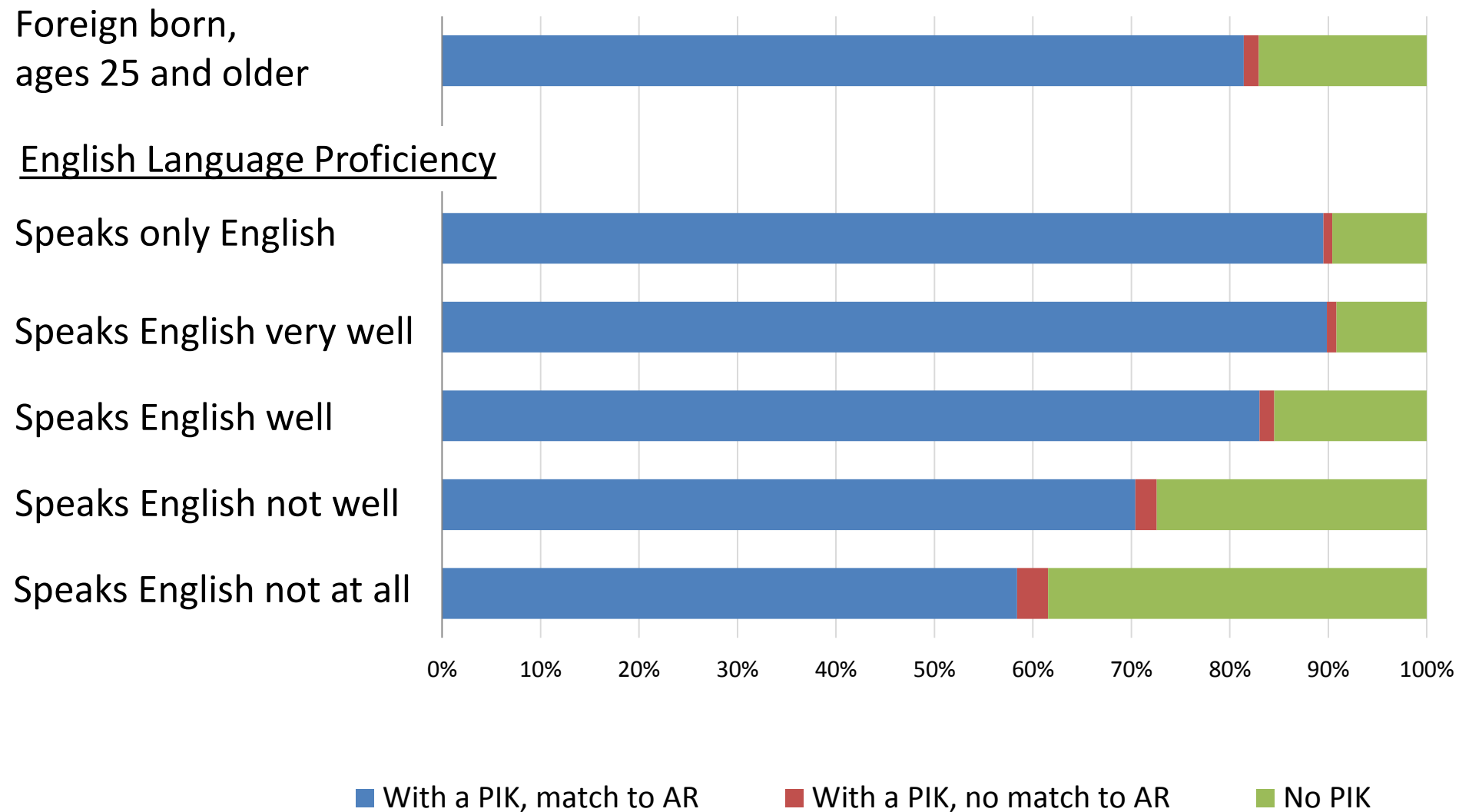


What characteristics are associated with the assignment of unique identifiers and administrative records coverage of the foreign born?

# PIK Assignment and Matching to Administrative Records by: Length of Residence and Citizenship Status



# PIK Assignment and Matching to Administrative Records by: English Language Proficiency



# Regression Analysis

- Dependent variable:
  - a) With a PIK, matches to administrative records [reference]
  - b) With a PIK, no match to administrative records
  - c) No PIK

# Regression Analysis

## Independent and Control Variables

Demographic	Socioeconomic	Contextual/Household
<ul style="list-style-type: none"><li>- Citizenship</li><li>- Year of entry</li><li>- English language proficiency</li><li>- Age</li><li>- Sex</li><li>- Race and Hispanic origin</li><li>- Marital Status</li></ul>	<ul style="list-style-type: none"><li>- Educational attainment</li><li>- Labor force participation</li><li>- Occupation</li><li>- Income</li><li>- Median income of tract</li></ul>	<ul style="list-style-type: none"><li>- Percent of Census tract that is foreign born</li><li>- Number of people in household</li><li>- Type of living quarter</li><li>- County population</li></ul>

# Multinomial Regression Results

## Reference category: With a PIK, matches to AR

Variable [reference]	No PIK	With a PIK, no match to AR
<i>Length of Residence in the U.S. [20+ years]</i>		
10 to 19 years	1.65 ***	1.94 ***
Less than 10 years	2.85 ***	4.28 ***
<i>English Language Ability [Speaks only English at home]</i>		
Speaks English Very Well	0.74 ***	1.01
Speaks English Well	0.94 ***	1.24 ***
Speaks English Not Well	1.33 ***	1.40 ***
Speaks English Not at All	1.70 ***	1.51 ***
<i>Citizenship [Naturalized U.S. Citizen]</i>		
Not a U.S. Citizen	1.89 ***	5.51 ***

\* p <=0.05; \*\* p<=0.01; \*\*\* p<=0.001

Source: 2006-2010 American Community Survey and Administrative Records Data



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# Multinomial Regression Results

## Reference category: With a PIK, matches to AR

Variable [reference]	No PIK	With a PIK, no match to AR
<i>Educational Attainment [No High School Degree]</i>		
High School Degree	1.05 ***	0.95 **
Some College	0.78 ***	0.77 ***
Bachelors Degree or Higher	0.81 ***	0.96
<i>Type of Employment [Full time worker]</i>		
Part time worker	0.88 ***	1.37 ***
Did not work last year	1.13 ***	2.01 ***
<i>Log of personal income</i>	0.93 ***	0.93 ***

\* p <=0.05; \*\* p<=0.01; \*\*\* p<=0.001

Source: 2006-2010 American Community Survey and Administrative Records Data

# Conclusion

- Administrative records provide high coverage of foreign born in ACS 2006-2010 with PIKs
- PIK assignment varies by characteristics
- Confirm that assimilation factors are associated with being assigned a PIK and being in administrative records

# Conclusion

- How can the Census Bureau improve coverage?
  - Improvements to record linkage
  - Acquisition of new administrative records
- Keep in mind characteristics associated with lower PIK assignment and lower match rates to administrative records

# Thank you!

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