

Bias Reduction through Rural Coverage for the AmeriSpeak Panel

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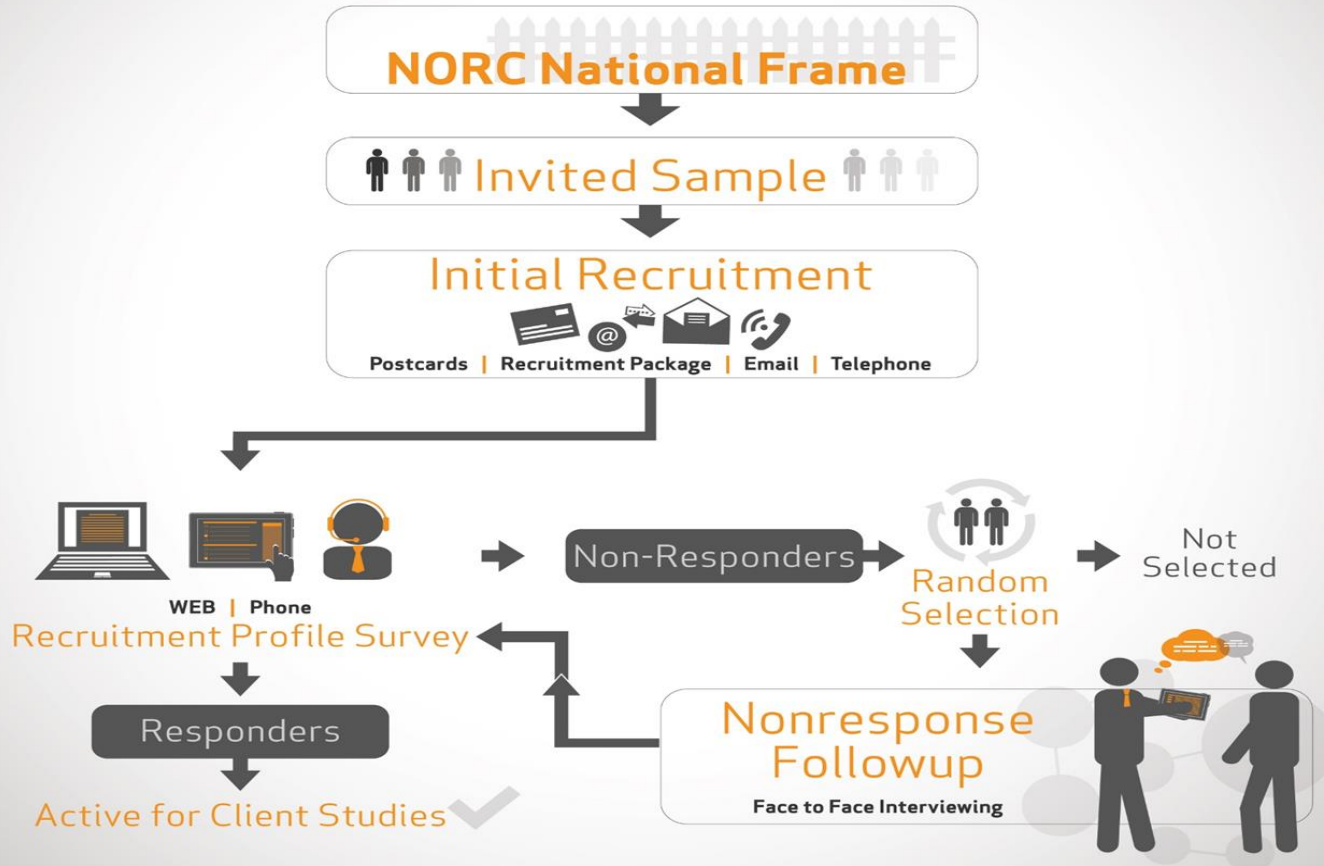
What is AmeriSpeak?



- NORC's AmeriSpeak is a household, multi-client panel
- Households selected from NORC's National Probability Frame are invited to join AmeriSpeak by telephone or web

- Other Web Panels Recruit with...
 - Address-Based Sampling (ABS) using USPS postal database
 - Random-Digit Dialing
 - Non-probability online sources
 - List samples of customers, employees, members, etc.
- NORC's AmeriSpeak Panel Recruits from...
 - NORC's National Frame, A Full Area-Probability Sample
 - General Social Survey (GSS)
 - Survey of Consumer Finances (SCF)
 - All other national in-person studies at NORC

AmeriSpeak Recruitment Methodology



1. Higher Coverage

- Higher than ABS using only USPS DSF (in-person)
- Higher than Phone Surveys, even those with Cell coverage
- Higher even than mail surveys that mail to P.O. Boxes and other non-city-style addresses

2. Higher Response Rate

- In-Person NRFU determines response rate
 - If not selected for NRFU, zero weight
 - In-Person interviewing mode has highest response rate
- Only cases outside NRFU sampling are hard appointments and hostile refusals

3. More Representative Sample

- Higher response rates mean less self-selection bias

- DSF is a frame for all U.S. addresses
- Some addresses not locatable/geocodeable
 - Rural Route addresses
 - Post Office addresses
 - These are NOT “city-style” addresses
- These addresses mailable, but
 - Can’t be matched to phone numbers
 - Can’t be visited in-person
 - Can’t be tracked in a multi-mode survey

- First stage sampling units are National Frame Areas (NFAs)
 - Entire Metropolitan Area (one or more counties)
 - One or more counties (single counties unless < 10,000 population)
- Three types of NFAs
 - Certainty Metropolitan areas contain 56% U.S. population/8% area
 - Other “Urban” areas well covered by USPS DSF (30% U.S. pop)
 - “Rural” areas NOT well covered by USPS DSF (14% U.S. pop)
- Second stage sampling units are...
 - Census Tracts in areas well covered by USPS DSF
 - Block Groups in “Rural” areas NOT well covered by USPS DSF
- Total of 1,514 segments (second-stage sampling units)

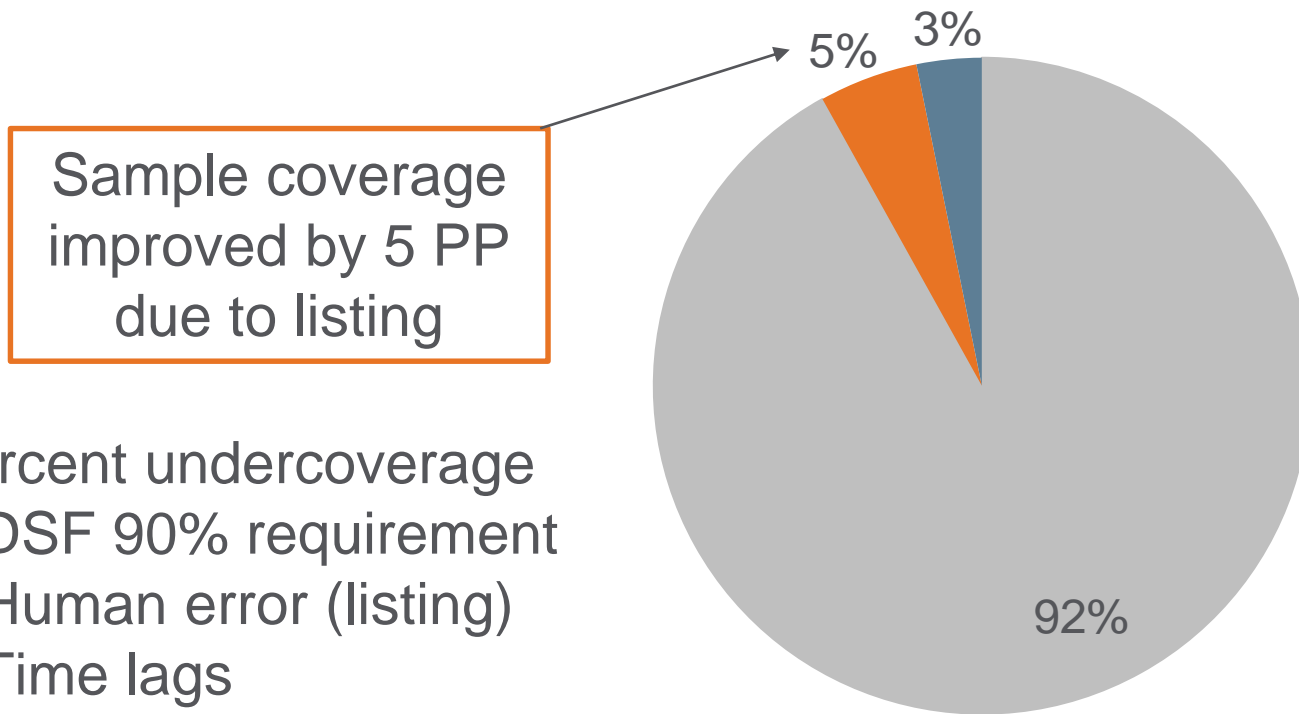
Where is In-Person Listing Needed?



- Determined for all 1,514 segments
- We compare
 - USPS DSF city-style address counts WITH
 - 2010 Decennial Census counts
- If less than 90% coverage, in-person listing
- If at least 90% coverage, use DSF
- If Census tracts < 90% coverage, one block group selected PPS and re-evaluated
- 121 out of 1,514 (8%) segments required in-person listing

Coverage in NORC's National Frame

■ DSF coverage ■ Added by Listing ■ Undercoverage





Sample coverage improved by 5 PP due to listing

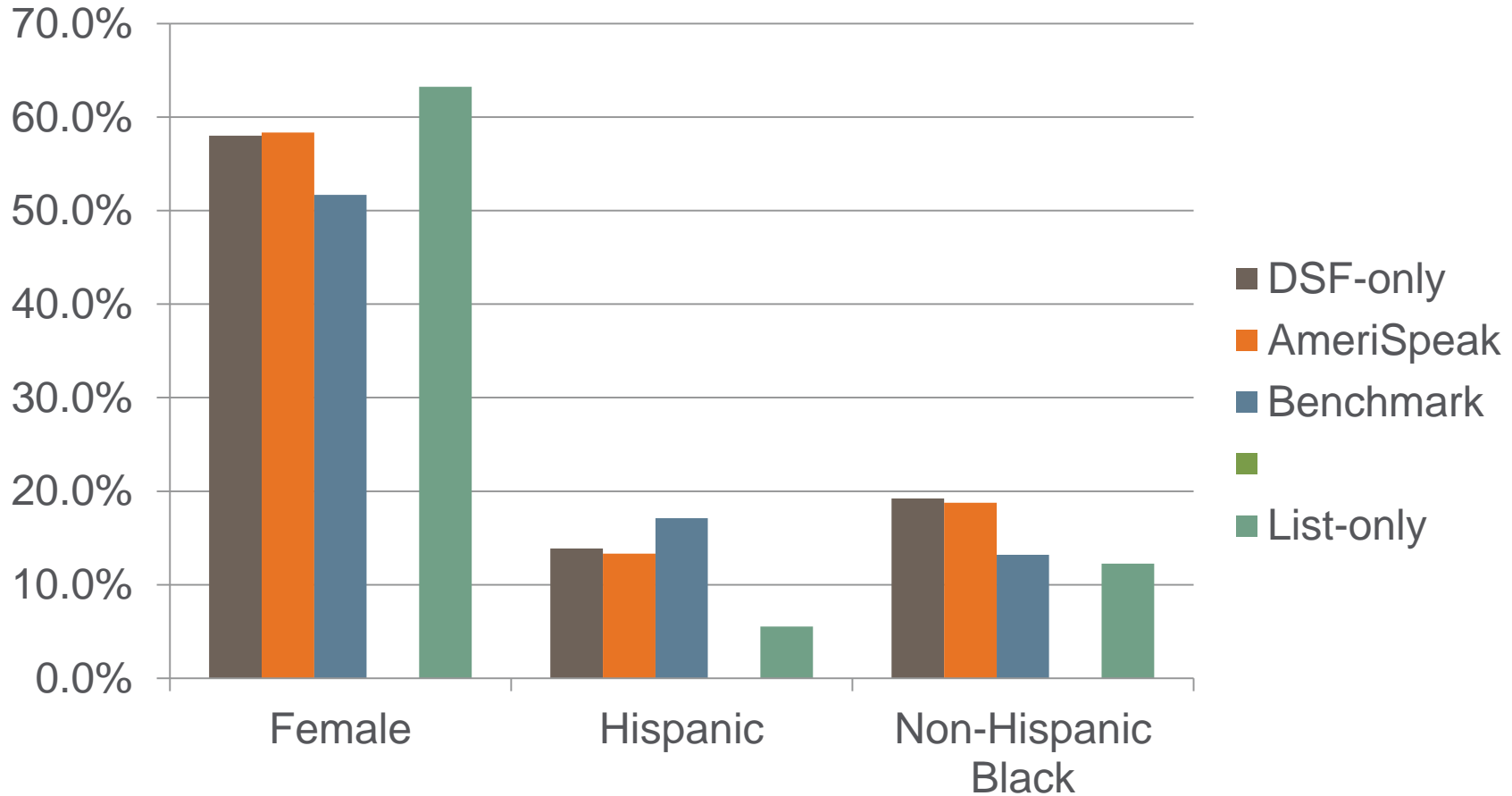
- 3 percent undercoverage
 - DSF 90% requirement
 - Human error (listing)
 - Time lags
 - New construction

- Cumulatively through 2015: 36.6% AAPOR RR3 Weighted
 - This is the full AmeriSpeak panel available now
 - Includes 2015 recruitment and two pilots (one with no NRFU)
- For 2016, AmeriSpeak is targeting a 30% AAPOR RR3 Weighted
 - Reducing the share of NRFU-sourced recruits from approximately 50% in 2015 to 25% for 2016
 - Testing alternative NRFU recruitment methodologies in 2016 (phone-based follow-up versus in-person follow-up)

AmeriSpeak growing to 20K general population U.S. adult households in 2016, 30K in 2017

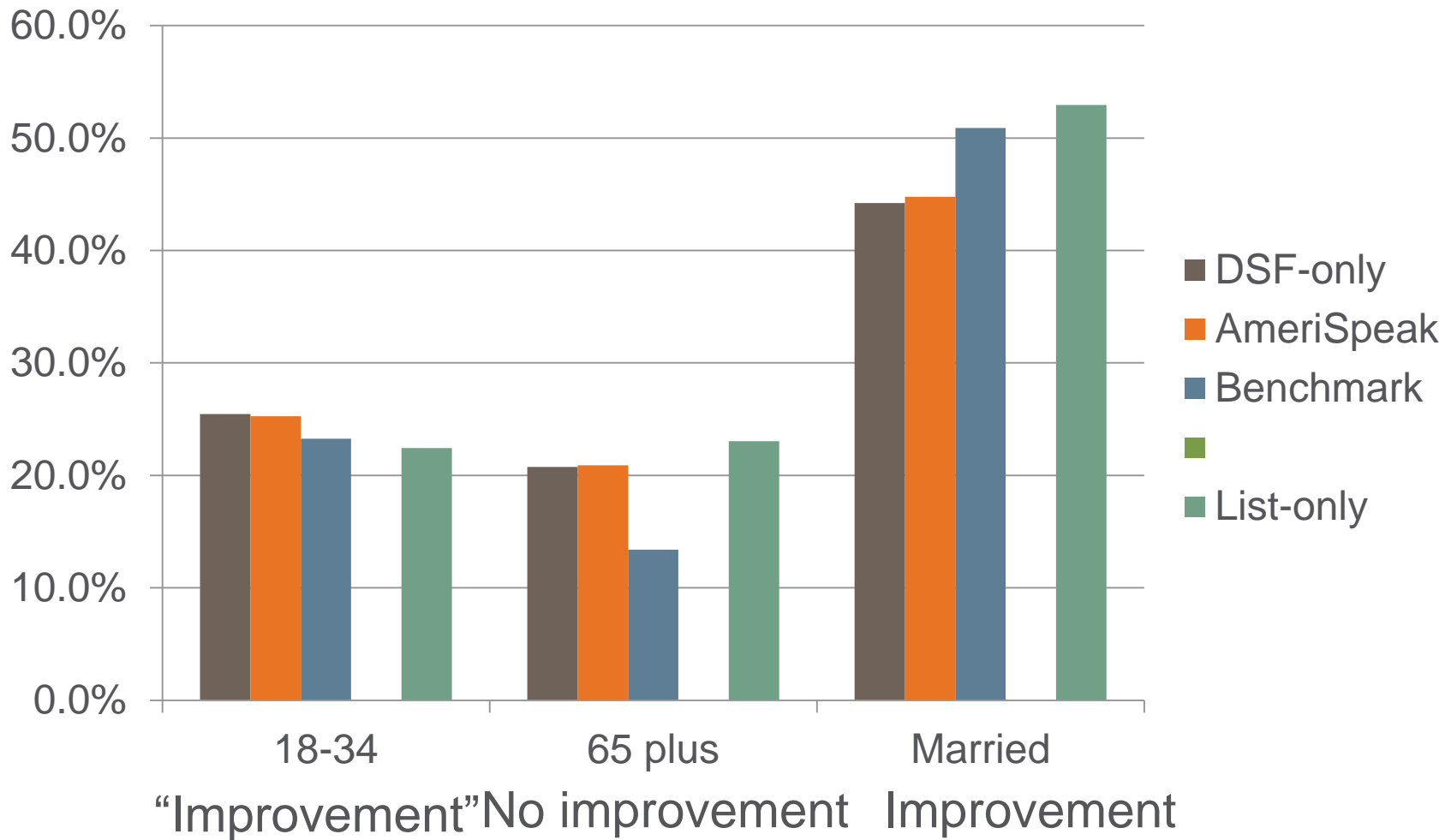
- Does the rural portion increase representativeness?
- AmeriSpeak (All Cases), as well as its two components
 - DSF-only and List-only
- VERSUS Benchmarks for several variables
- Order is
 - DSF-only, AmeriSpeak, Benchmark, List-only
- Focus on the left three bars
- If they are monotonic,  or  then rural coverage improves representativeness

More Representative? Demographics 1 of 2



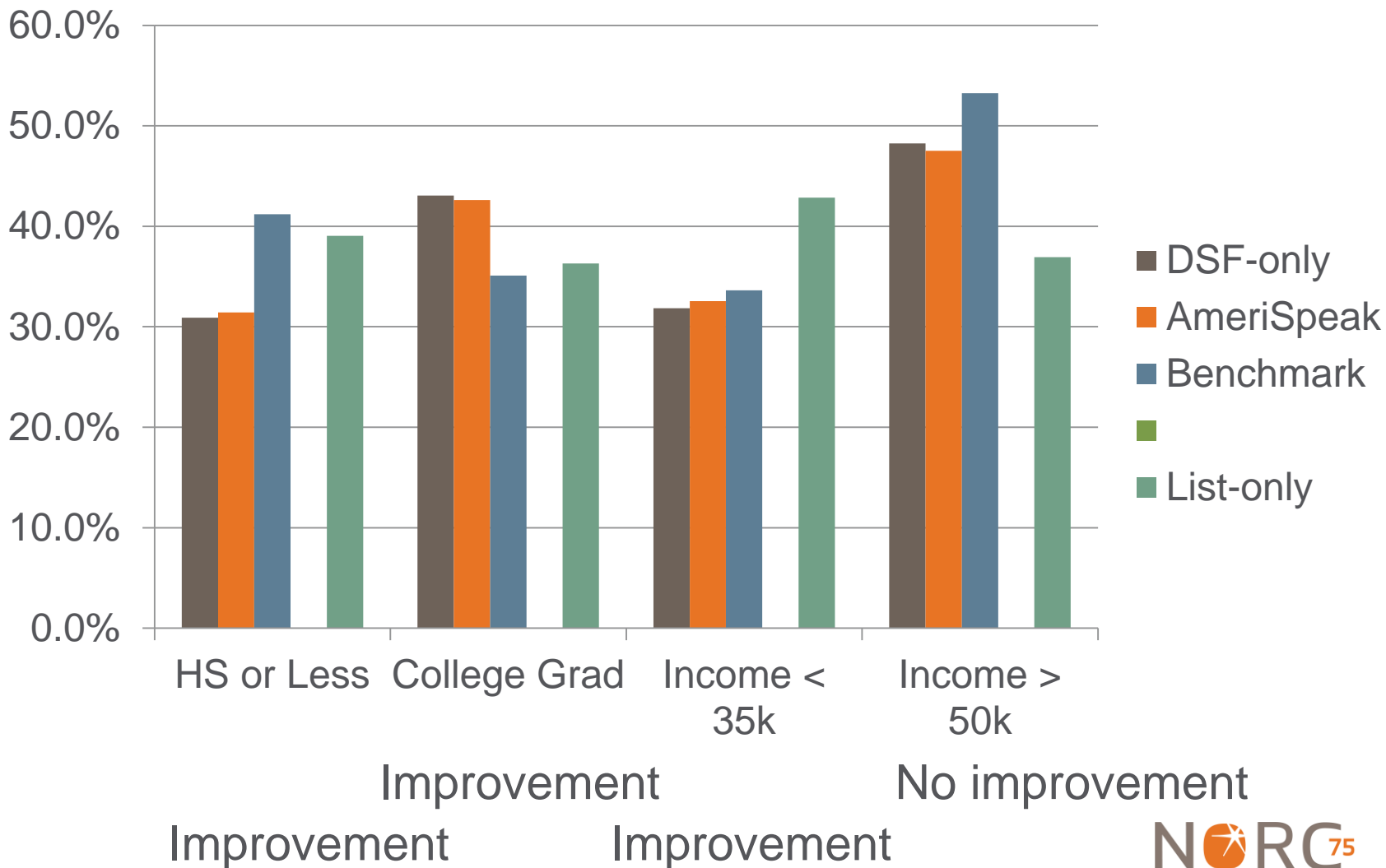
No improvement No improvement “Improvement”

More Representative? Demographics 2 of 2

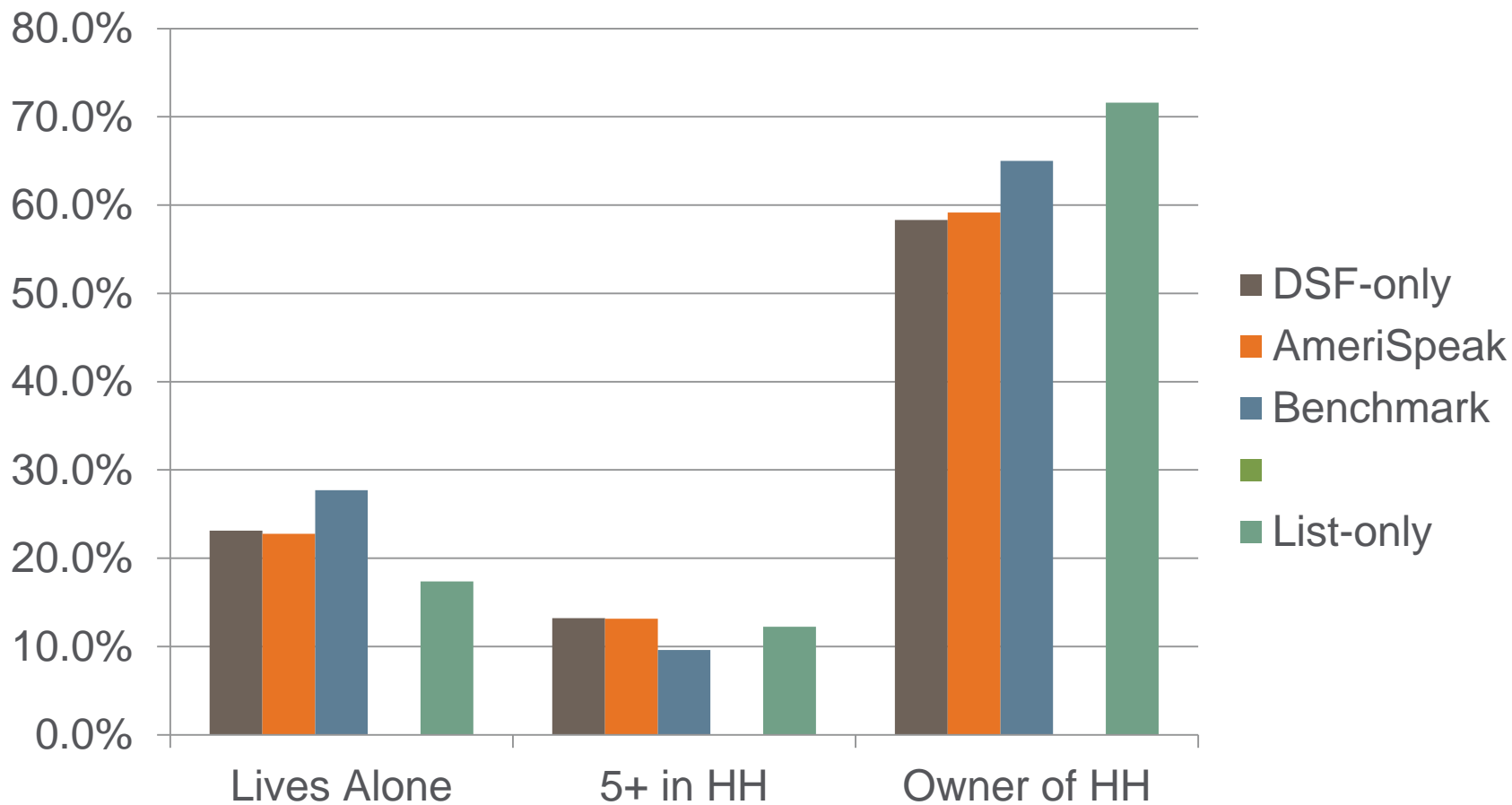


“Improvement” No improvement Improvement

More Representative? Education and Income

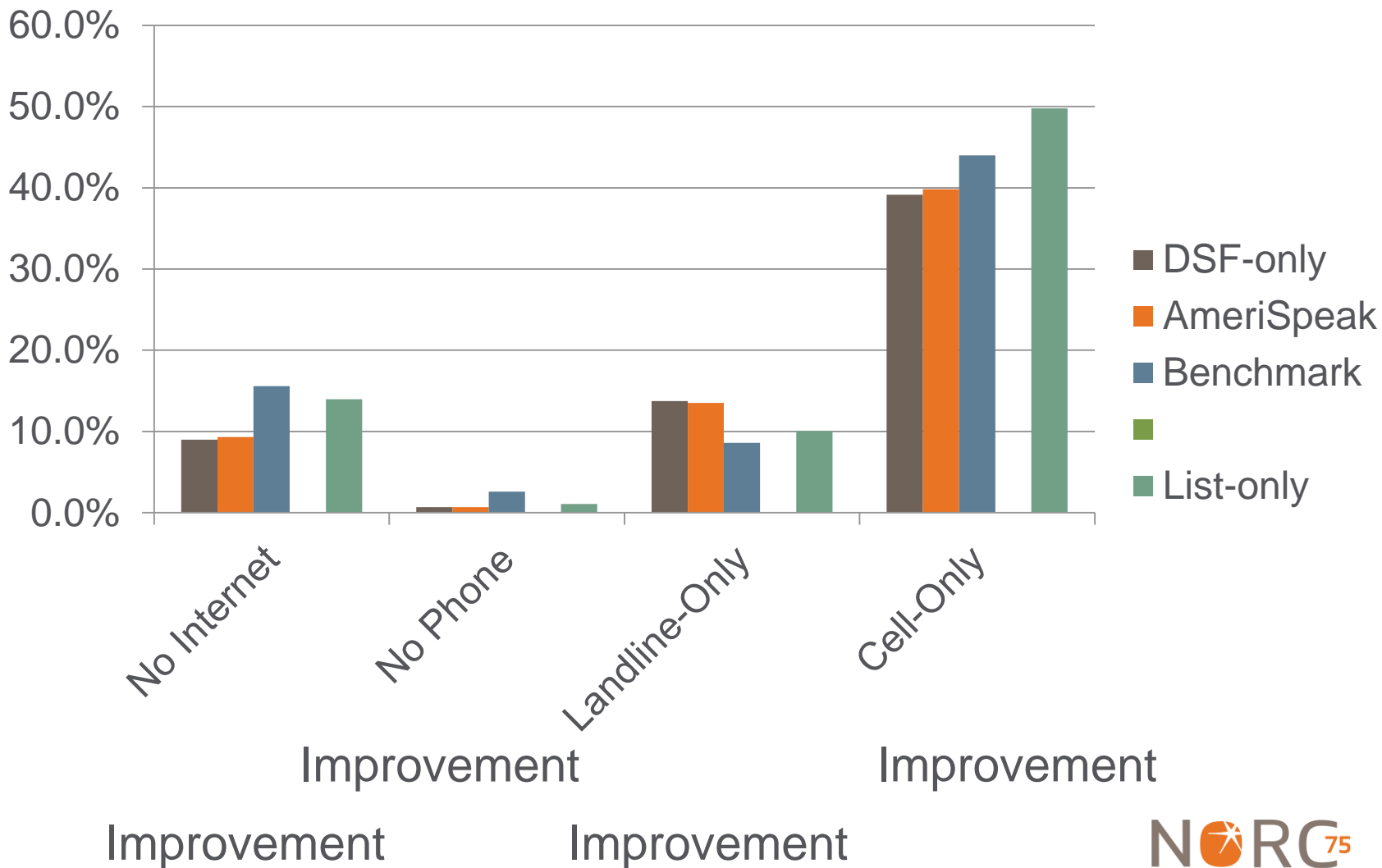


More Representative? Household Characteristics

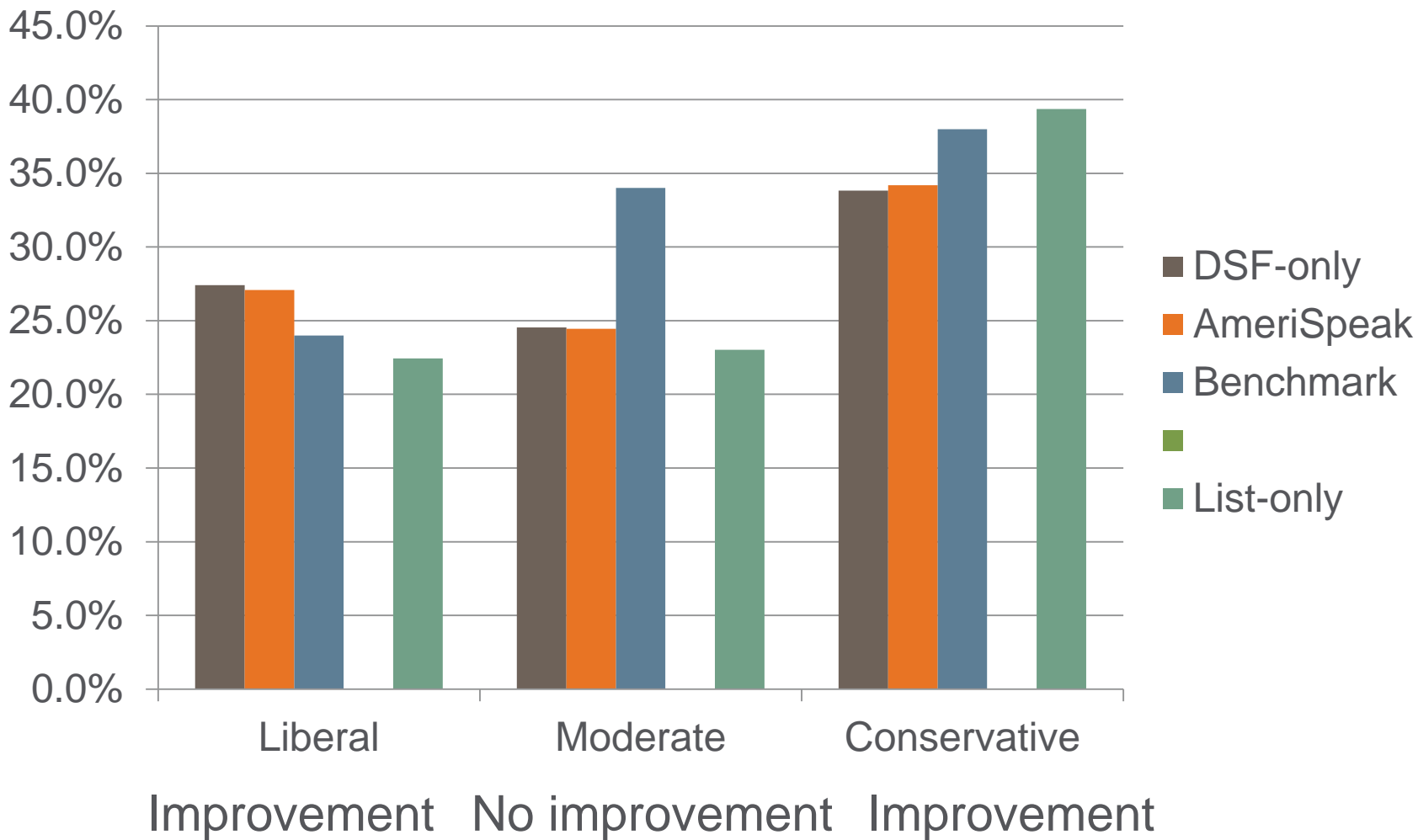


No improvement Improvement? Improvement

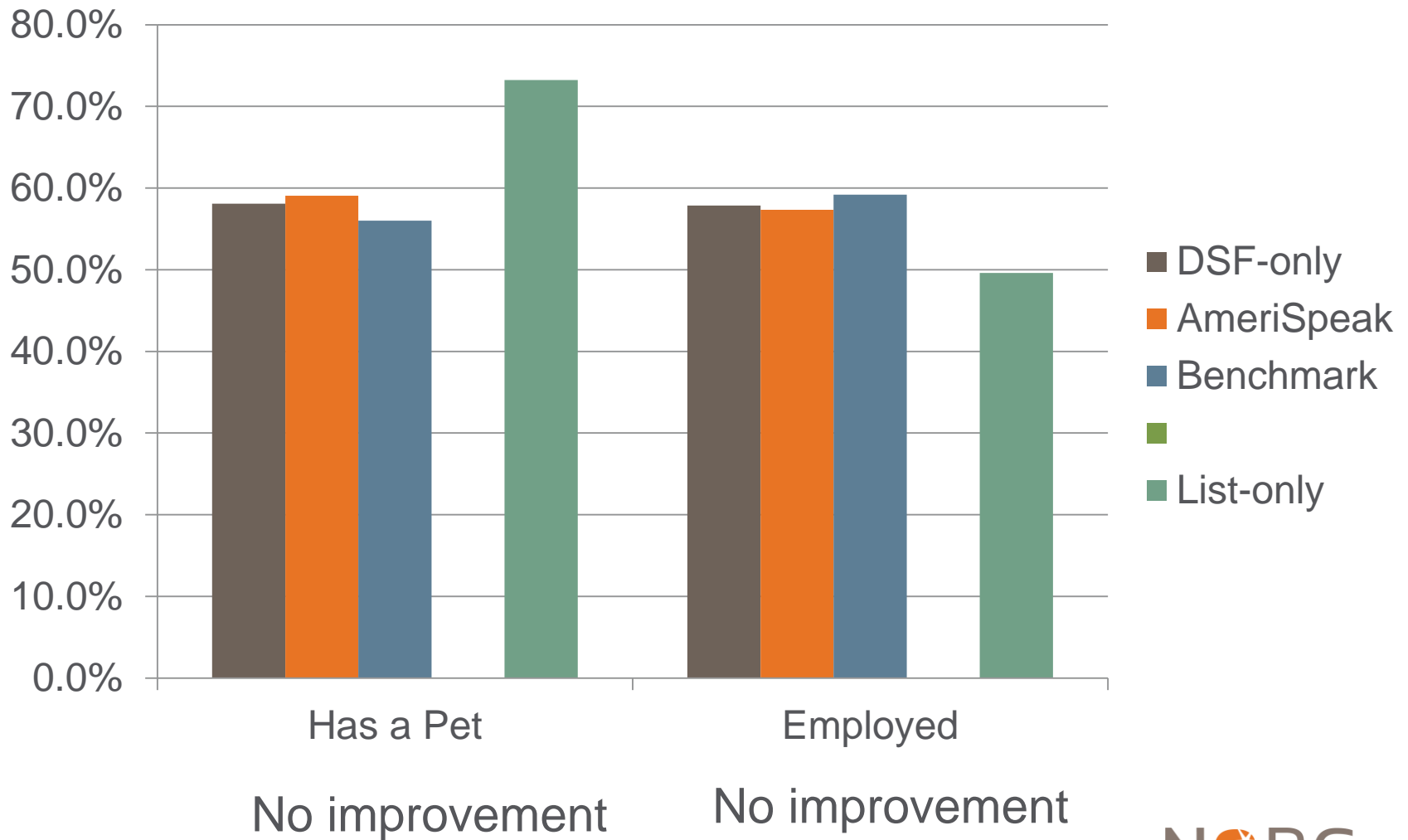
More Representative? Internet and Phone



More Representative? Political Affiliation



More Representative? Miscellaneous



No improvement

No improvement

- NORC's AmeriSpeak
 - Uses a full area-probability design to improve coverage
 - Uses in-person recruiting
 - To improve weighted response rates
 - To reduce self-selection bias

- Added Rural Coverage
 - Improves Representativeness in Education, Low Income HH's, Large HH's?, Internet and Phone, Marital Status, Owners/Renters
 - Does not improve representativeness in Gender, Minorities, Age, High Income HH's, Single-Person HHs, Pet Owners

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Thank You!



AmeriSpeak