

Effect of Wireless Substitution in a NJ Health Care Opinion Poll

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Current Issues in Survey Methods for State Health Surveys

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NJ Health Care Opinion Poll Design (1)

- Purpose: Gauge concerns about health care issues and support for reform in NJ
- Field period: June 1 to July 9, 2007
- Questions: Drawn from prior national and state polls, when possible
- Interviews: English and Spanish
- Calling design: Up to 18 contact attempts
- Incentives: \$10 for wireless respondents
- Length: 20.2 min (landline) & 22.8 min (wireless)

NJ Health Care Opinion Poll Design (2)

- Final sample: 1,104 adults total
 - 804 landline
 - 300 wireless
 - wireless only (197) and wireless “mainly” (103)
- Response rate (AAPOR RR-3)
 - 34.4% (landline) & 36.2% (wireless)
- Weights
 - Probability of selection
 - NHIS Northeastern US wireless-only (trended)
 - Extrapolate from our screener for “wireless mainly” incidence
 - Post-hoc adjustment to Census distributions (age, sex, education)

Wireless Screening Strategy

In addition to having a cell phone, do you also have at least one land line phone in your house at which you or anyone else in the household **NORMALLY** receive in-coming phone calls?

IF YES: Please do not include modem only lines, fax only lines, lines used just for a home security system, beepers, pagers, or the cell phone.

(IF YES) Thinking just about the land line home phone, NOT your cell phone, if that telephone rang, and someone was home, under normal circumstances how likely would it be answered?

Would you say:

Extremely likely

Very likely

Somewhat likely

Somewhat unlikely

Not at all likely

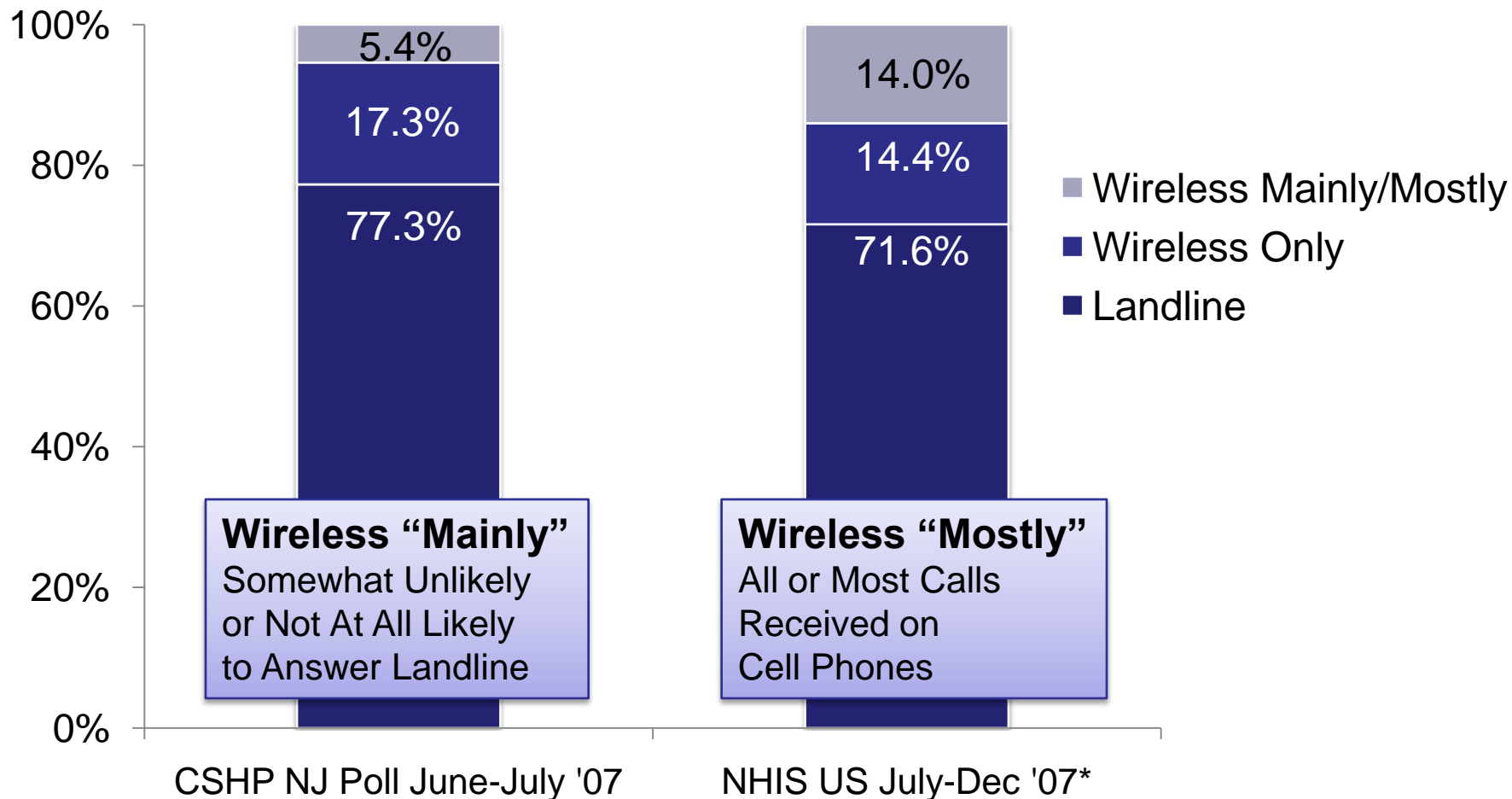
Screen Out

Wireless Mainly Sample

Analysis

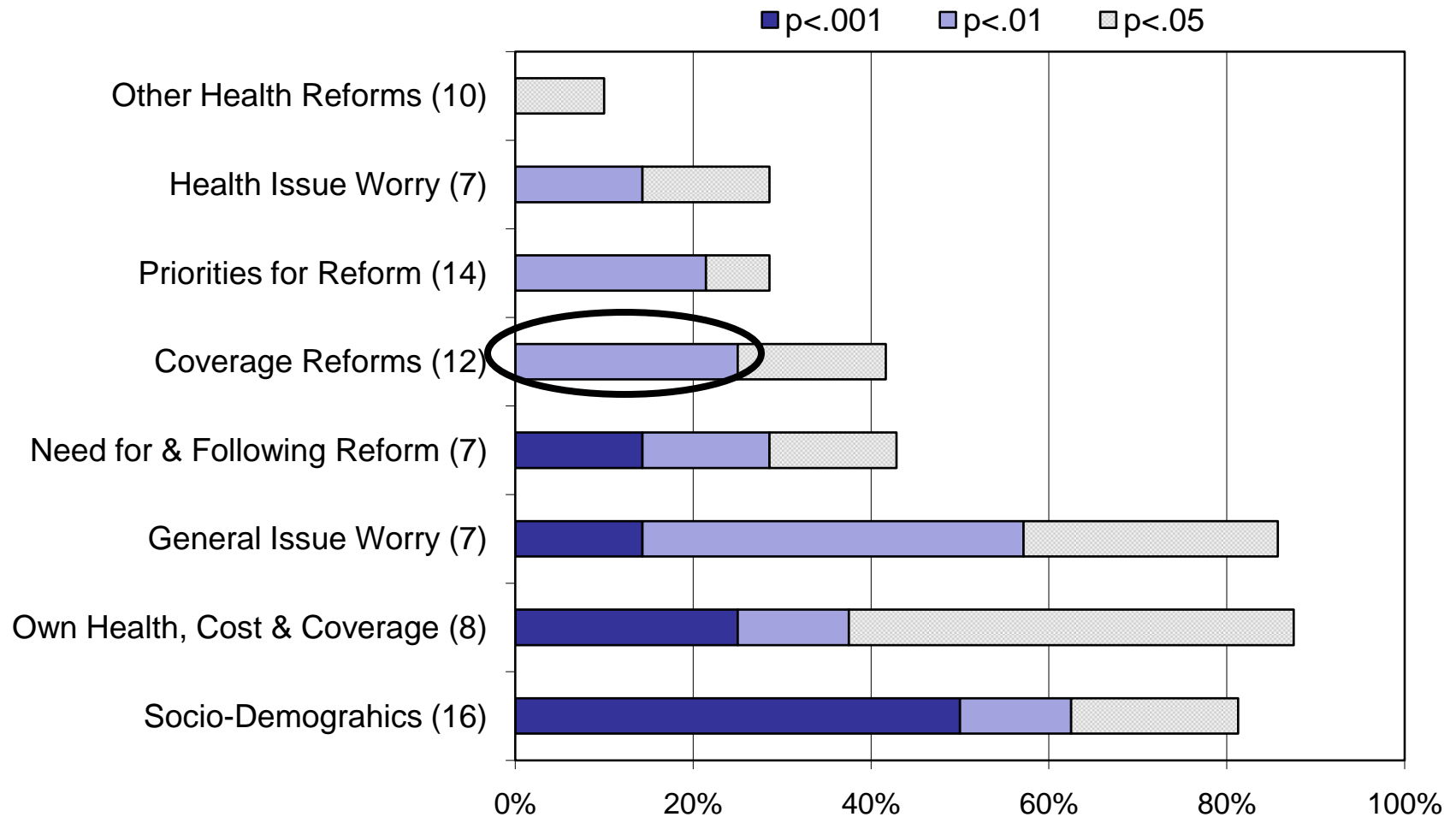
- Estimate of wireless-only and wireless-mainly populations
- Landline-wireless differences in 81 variables
 - 78 interview questions
 - Region, urban location, language of interview
- Multivariate analysis of support for three coverage reforms (with bivariate landline-wireless difference at $p < 0.01$)
 - Model 1 – Unadjusted
 - Model 2 – Adjusted for socio-demographic variables (selected using backward-elimination stepwise regression)
 - Model 3 – Adjusted for socio-demographic variables plus health status and coverage variables (selected the same way)

Estimated Population Size by Wireless Status



*Blumberg and Luke, *Wireless Substitution: Early Release of Estimates from the National Health Interview Survey*. July-December 2007. National Center for Health Statistics, May 13, 2008.

Percentage of Variables With Differences Between Landline and Wireless Respondents by Level of Significance and Survey Domain



Note: Number of variables in each domain shown in parentheses.

Patterns of Bivariate Differences

- Demographics, SES, coverage – same as NHIS
- Health status – wireless more likely to report “excellent” and “fair” self-assessed health
- Health coverage reforms ($p < 0.01$)
 - Favor expanding public programs
 - +1.8% points in combined sample vs. landline only
 - No difference when “if it meant higher taxes” added
 - Strongly favor individual coverage mandate
 - +2.7% points in combined sample vs. landline only
 - Favor state subsidies for low-income uninsured
 - +2.4% points in combined sample vs. landline only
- Few wireless-only vs. wireless-mainly differences
 - Little power

Unadjusted and Adjusted Relative Odds of Support for Selected Reforms by Landline-Wireless Status

Odds Ratio	Expand Public Coverage	Individual Mandate	Subsidies for Low-Income Uninsured
Model 1: Unadjusted	1.89 (1.17-3.07)	1.65 (1.13-2.42)	1.70 (1.22-2.38)
Model 2: Adjusted for socio-demographic differences	1.55 (0.94-2.56)	1.86 (1.21-2.84)	1.55 (1.10-2.19)
Model 3: Adjusted for socio-demographic, coverage, & health differences	1.31 (0.78-2.21)	1.67 (1.04-2.53)	1.62 (1.14-2.29)

Note: Significant odds ratios shown in bold.

Conclusions

- Adding wireless sample to a state poll is feasible
- Our “wireless-mainly” smaller than NHIS “wireless-mostly”
- Differences in demographics, SES, & coverage consistent with prior research
 - Not sure what to make of self-assessed health difference
- Modest but significant bias observed in support for key health coverage reforms
 - Two of three remain significant after controlling for population differences
- These differences and continuing growth of wireless substitution (17% growth in 6 mo.) suggest including wireless sample is prudent