# Cell-phone-only voters in the 2012 national and state exit polls

Mike Mokrzycki, independent consultant/NBC News Courtney Kennedy, Abt SRBI

AAPOR, Boston, May 2013



Before 2010 the NEP phone polls for early voters were landline-only – so in this presentation, when we're looking at longer-term time series we will do so only among those who voted on Election Day.

We'll focus mostly on more recent data though.

-----

2004: CELLULAR question on national; early voter polls were LLO
2006: No phone status question
2008: CELLULAR question on national; early voter polls were LLO
2010: CELLPHONE and LANDPHONE questions on national, NH, IA; early voter polls were dual-frame (but too few cell phone interviews with this variable to analyze them with statistical reliability)
2012: CELLPHONE and LANDPHONE questions on national and in 12 states; early voter polls nationally and in 10 of the 12 states were dual-frame; 30% (unweighted)

of completed interviews were with the cell sample.

# Phone status q in the exit polls

2012: Telephone status asked on national exit poll + 12 states

Also asked in early-voter polls (overlapping dual-frame RDD) – national and 10 of the 12 states

Early voters weighted to 33% of national sample

Re weighting to the national sample: The 33% target was based on levels of early voting in prior elections. The actual early voting rate isn't known until months after the election. It may have been a little higher than 33% in 2012.

## Phone status q in the exit polls

Cells were 30% (unweighted) of completed interviews in RDD

Phone status estimates weighted to NHIS (national) and NCHS modeled estimates (state level)

National N=3,043, including 1,526 cell-only

Question wording 2010-2012	
[O] Do you have a cellular phone? 1 ☐ Yes 2 ☐ No	
[P] Do you have a regular land- line phone at home? 1	

Before 2010 the wording for this variable was a single, four-part question; it was changed for questionnaire formatting reasons, but in a way that we feel the results can be categorized the same as before.

Note the questions simply ask whether the respondent has either type of phone; for those who have both, we do not have a measure of the relative propensity to take calls on each type.



Re second point:

For a number of years the big question for RDD polling was, are there so many cell-only respondents and do they differ from landline-reachable people to such an extent that dual-frame samples are necessary?

At this point there is little doubt the answer to those questions are yes (although automated polls continue to miss cell-only respondents).

Now, with cell phone penetration exceeding 90% nationwide, the question starting to be asked – by Peytchev and Neely in the new issue of POQ, for instance – is whether telephone pollsters need to keep dialing landlines at all.

Thus it remains important to understand differences in survey estimates based on telephone status.

Telephone status, 2012 nat'l exit poll								
Have cell phone	94%							
Have landline	65%							
Have both	60%							
Cell-only	34%							
Landline only	5%							
No phone	1%							

First let's look at telephone status among voters in the 2012 national exit poll.

NOTE: "No phone" was 1% overall and 1% just for the Election Day sample (obviously everyone reached in the pre-election RDD sample had a phone). This is down from 4% of election day voters who reported having no phone in 2008.



### For comparability, the exit poll data in this slide are only from in-person interviews on Election Day – excluding early voter phone polls, which before 2010 were landline-only.

I don't want to make too much of any differences before then because of how the exit poll estimates were weighted to NHIS estimates. For instance, the Nov. 2010 exit poll estimate was weighted at the time to NHIS data from a year earlier (the latest then available) but the NHIS estimate shown here was what subsequently was released for the second half of 2010.

The overall upward trend is the takeaway here.

The 2012 estimates are identical because the exit poll was weighted to the NHIS.



For comparability with previous years, again this includes only Election Day exit poll respondents.

Every age group saw a significant increase from 2010 and the last presidential election in 2008 in the share of voters who are cell-only.

Among voters age 60 and up the share of cell-only has doubled.



As noted, before 2010 the NEP phone polls of early voters only sampled landlines. Now that we had dual-frame samples for the early voter phone polls, we can draw some comparisons on telephone status between those and the exit polls.

In 2012 appears younger cell-only voters were a bit more likely to vote early, while older cell-only voters were more apt to turn out on Election Day. (Why? Can't answer that from the available data.)

But there was no significant difference in vote breaks between early and election-day cellonly voters. More on vote preference in a bit.

(Note the age breaks are not as granular here as on the previous slide because of small subgroup sizes. For instance, if we were to look at age 18-29 instead of 39 as the upper bound for the youngest age group, we'd have only 64 cases, and 85 cases for age 30-39. With high sampling error in mind, 67% of 18-29 were cell-only, as were 57% of age 30-39.)



No sig diff by PID, ideology – BUT we will see some interesting differences in vote preferences

Presidential vote by telephone status										
	<u>ALL</u>	<u>Obama</u>	<u>Romney</u>	<u>N</u>						
Have cell phone	94%	50%	48%	4596						
Have landline	65%			3356						
Have both	59%			3043						
Cell-only	33%			1526						
Landline only	5%			278						
No phone	1%			53						

Keep in mind that even with the pretty large sample sizes for most of these subgroups, sampling error still is plus or minus 3 or 4 points, in good part because of substantial design effects from clustering of the election day precinct sample.

As nearly all voters now have cell phones, the vote among them was similar to the final 51-47 outcome, the difference mainly being because of rounding.

Presidential vote by telephone status											
	ALL <u>Obama</u> <u>Romney</u> <u>N</u>										
Have cell phone	94%	50%	48%	4596							
Have landline	65%	49%	<b>50%</b>	3356							
Have both	59%	48%	50%	3043							
Cell-only	33%			1526							
Landline only	5%			278							
No phone	1%			53							

Among voters with landlines, numerically the results flip but the differences all fall within sampling error tolerances.

Presidential vote by telephone status										
ALL <u>Obama</u> <u>Romney</u> <u>N</u>										
Have cell phone	94%	50%	48%	4596						
Have landline	65%	49%	50%	3356						
Have both	59%	48%	50%	3043						
Cell-only	33%	54%	43%	1526						
Landline only	5%			278						
No phone	1%			53						

We do see a significantly different result among the cell-only population, however. (Sampling error on N=1,526 is +/- 4 points)

Presidential vote by telephone status											
	<u>ALL</u> <u>Obama</u> <u>Romney</u> <u>N</u>										
Have cell phone	94%	50%	48%	4596							
Have landline	65%	49%	50%	3356							
Have both	59%	48%	50%	3043							
Cell-only	33%	54%	43%	1526							
Landline only	5%	59%	39%	278							
No phone	1%			53							

And while just 5% are landline-only at this point (and sampling error on these estimates is +/-7 points) we again see a clear difference from the rest of the electorate.

This appears to be strongly related to income, as LLO are far more likely than others to be at the lower end of the income scale, and lower-income voters tend to favor Democrats.

- 39% of LLO reported 2011 total family income of < \$30k, vs 25% of CPO and 15% of those with both LL and CP.
- <\$30k went for Obama over Romney 63-35 and 30-50k favored Obama 57-42. Romney won all higher-income groups with from 52 to 55%.

#### AGE

Older people are much more likely not to have adopted cell phones yet:

- Among voters over 65 and older, 13 percent still have only landlines (vs 4% among voters under 65).
- Put another way, 43 percent of landline-only voters are 65 and up, while that age group made up 17 percent of the electorate.

But overall, voters 65+ favored Romney by 12 points, 56% to 44% for Obama.

- That's mainly because among 65+ with both LL and CP (N=667), Romney won by 20, 59-39.
- 65+, LLO (N=118): Obama 51, Romney 48 (while among the 57 percent of LLO voters

who were under 65, it was Obama 65-33)

• 65+ CPO: N=66, too few to analyze

	<u>Cell-only</u>	Have landline	<u>CPO-LL</u>
Male	48%	42%	6%
Female	61%	54%	7%
Men w/o children	51%	43%	8%
Women w/o children	61%	52%	9%
Age 18-24	50%	60%	-10%
Age 45-49	56%	47%	9%
Age 60+	51%	43%	8%
HS grad	61%	47%	14%
Non-white coll grad	78%	68%	10%
Non-white, not coll grad	80%	88%	-8%

Now we'll examine some differences by telephone status in vote for president in 2012.

This table shows the percentage of the vote for Obama among various groups – e.g. 48% of cell-phone-only men, vs 42% of men who have landlines.

Note that a number of these demographics are variables typically used to weight telephone polls. So the differences by telephone status suggest that weighting to demographic parameters alone is unlikely to correct for missing or insufficient numbers of cell phone interviews in a sample.

Both men and women who only have cell phones were a bit more likely to vote for Obama than were their cohorts with landlines.

The youngest voters, meanwhile, were more likely to vote for Obama if they had <u>landlines</u> – while the opposite was true for some older age groups. (We'll look at that 18-24 group a little more closely in a moment.)

Voters with no more than a high school diploma were particularly apt to vote for Obama if they were cell-only; non-white college grads too, to a bit of a lesser degree. But we see essentially the opposite for non-white non-college-grads.

Vote for Obama	by telephone status

	Cell-only	Have landline	CPO-LL
Income < \$30k	69%	60%	9%
Independent	54%	43%	11%
Conservative	23%	14%	9%
Hispanic	62%	72%	-10%
Catholic	60%	46%	14%
White catholic	49%	37%	12%
Region: East	64%	55%	9%
<b>Region: Midwest</b>	55%	48%	7%
Region: South	49%	40%	9%
Size of place > 500k	86%	69%	17%
Size of place 10-50k	21%	45%	-24%
Size of place: Rural	46%	35%	11%

	Cell-only	Have LL
N=	237	217
Male	53%	43%*
Female	47%	57%*
Income < \$50k	70%	50%*
\$50-100k	23%	31%
\$100k+	7%	20%*
Democrat	38%	49%*
Republican	31%	27%
Ind/other	30%	25%
Liberal	27%	28%
Moderate	44%	50%
Conservative	29%	22%

Asterisk denotes statistically significant difference

## State-level cell-only status

NCHS has modeled estimates of wireless status on the state level and some regions within states since 2009

NEP data weighted to these modeled estimates

Modeled state-level estimates of wireless substitution are devised by the National Center for Health Statistics with help from the National Opinion Research Center at the University of Chicago and the State Health Access Data Assistance Center at the University of Minnesota. That model is based on the National Health Interview Survey, the American Community Survey and auxiliary data.

% cell-only in 2012 state exit polls												
	AZ	CA	FL	IA	IL	NC	NH	NJ	NV	NY	ОН	VA
NEP	51%	39%	34%	27%	34%	35%	25%	18%	33%	22%	34%	32%
l Ir a	NEP51%39%34%27%34%35%25%18%33%22%34%32%In all states, at least 90% of voters have cell phones and fewer than 1 in 10 were landline-only											

NEP: VOTERS, fall 2012 state exit polls + early voter dual-frame RDD (except NH VA)

# Implications for NEP polls

- Cell-only voters can differ from others in their cohorts in ways that can't always be fixed by weighting
- Higher-than-average cell-only rates in early voting states, coupled with continued cell-only rise, suggests 30% cell allocation should be increased in future early-voter polls

# Implications for RDD pre-eln polls

- Differences observed across telephone service groups continue to indicate that phone polls should sample from both frames, with substantial allocation to cell
- Insufficient cell representation continues to risk overstatement of Republican support
- With cell penetration now at least 90%, moving toward cell frame RDD only designs? (Peytchev and Neely 2013)
  - BUT some findings indicate excluding LL altogether risks its own bias

# Thank you!

Mike Mokrzycki mike@mjmsurvey.com

Courtney Kennedy <u>c.kennedy@srbi.com</u>