

A Brief History of Cell vs Landline Performance Wisconsin BRFSS

2015 IFD&TC

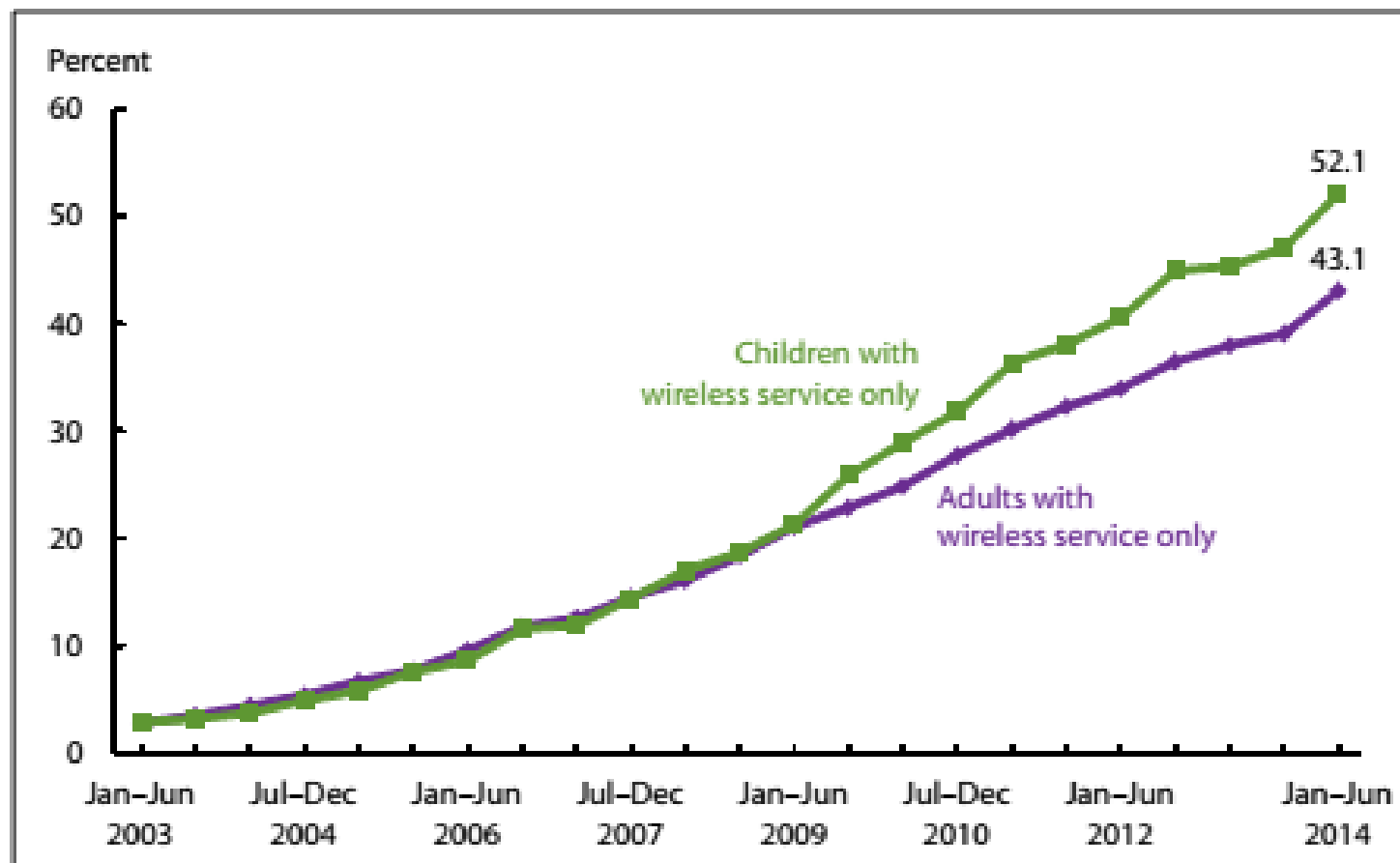
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The problem: Landline vs. Cell Coverage

Figure. Percentages of adults and children living in households with only wireless telephone service: United States, 2003–2014



NOTE: Adults are aged 18 and over; children are under age 18.
DATA SOURCE: CDC/NCHS, National Health Interview Survey.

Why do we use cell samples?

- Error using landline numbers only is not random
- Who do we miss without cell (Luke & Bloomberg 2014)
 - Young
 - Poor
 - Renters
 - Hispanics
 - Those with children

Why am I here?

- Look at cell vs. landline sample
 - A few years ago
 - Cell completes cost 2-3 times more
- Desire to know
 - Who are we getting with cell sample?
 - When should I encourage/discourage with clients?
 - What does new reality (\$) look like
- Look at some crude measures today

History of BRFSS cell as fielded in Wisconsin

- Many changes
 - Cell use – screening for eligibility
 - Use of incentives
 - Length of survey
 - Calling protocol
 - Sample size
 - Proportion cell

BRFSS Cell Phone Sample Protocol - Wisconsin

Year	Cell Use	Incentive	Length	Call limits	N	%CP/ LL+CP
2008	Cell only	\$10 post	~10 min	Varied 5 & 8	267	4%
2009	Cell only	\$10 post	~15 min	5 +12 w/contact	261	6%
2010	Cell only	none	~15 min	5 +12 w/contact	413	9%
2011	Cell only	none	~24 min	5 +12 w/contact	540	12%
2012	Cell 90% +	none	~22 min	6 +8 w/contact	869	19%
2013	Cell 90% +	none	~26 min	6 +8 w/contact	1,514	29%
2014	Everyone	none	~26 min	6 +8 w/contact	2,366	40%

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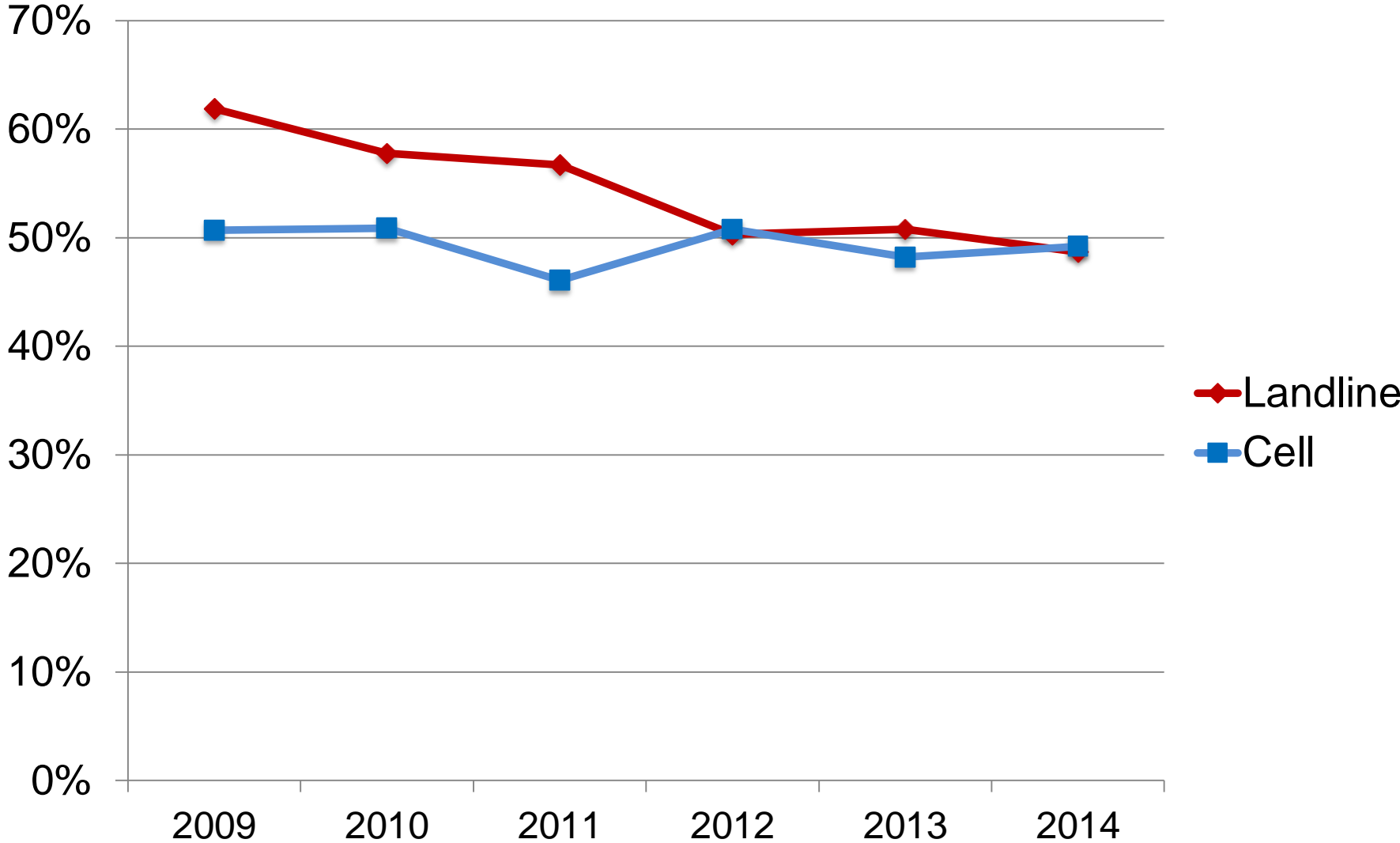
$$\frac{\text{Cell Phone}}{\text{Landline} + \text{Cell Phone}} \times 100$$

Response rates

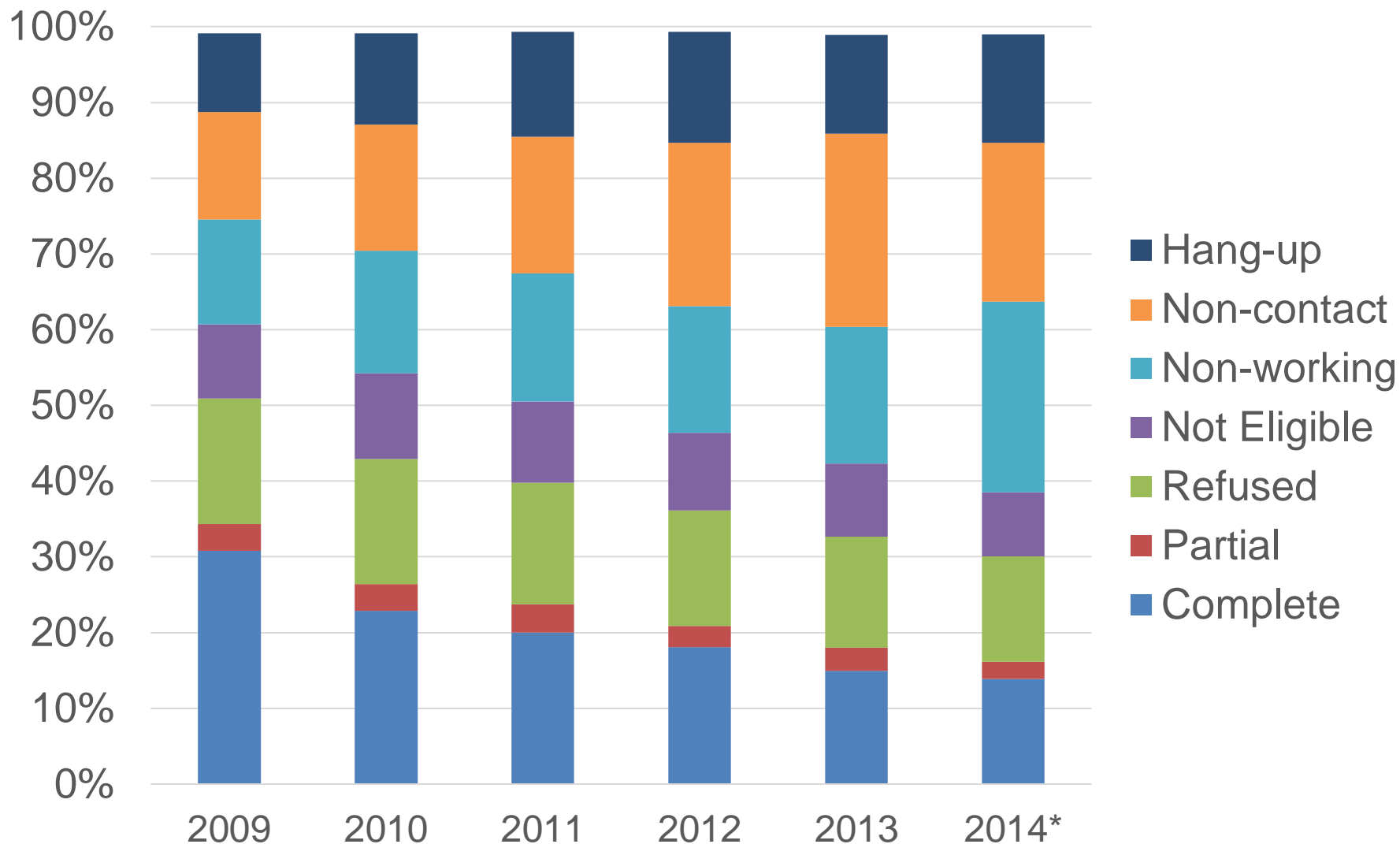
Too many caveats to mention!

- Changes in calling structure
- Changes in calculation
- Sample makeup
- Non-contact and E estimator

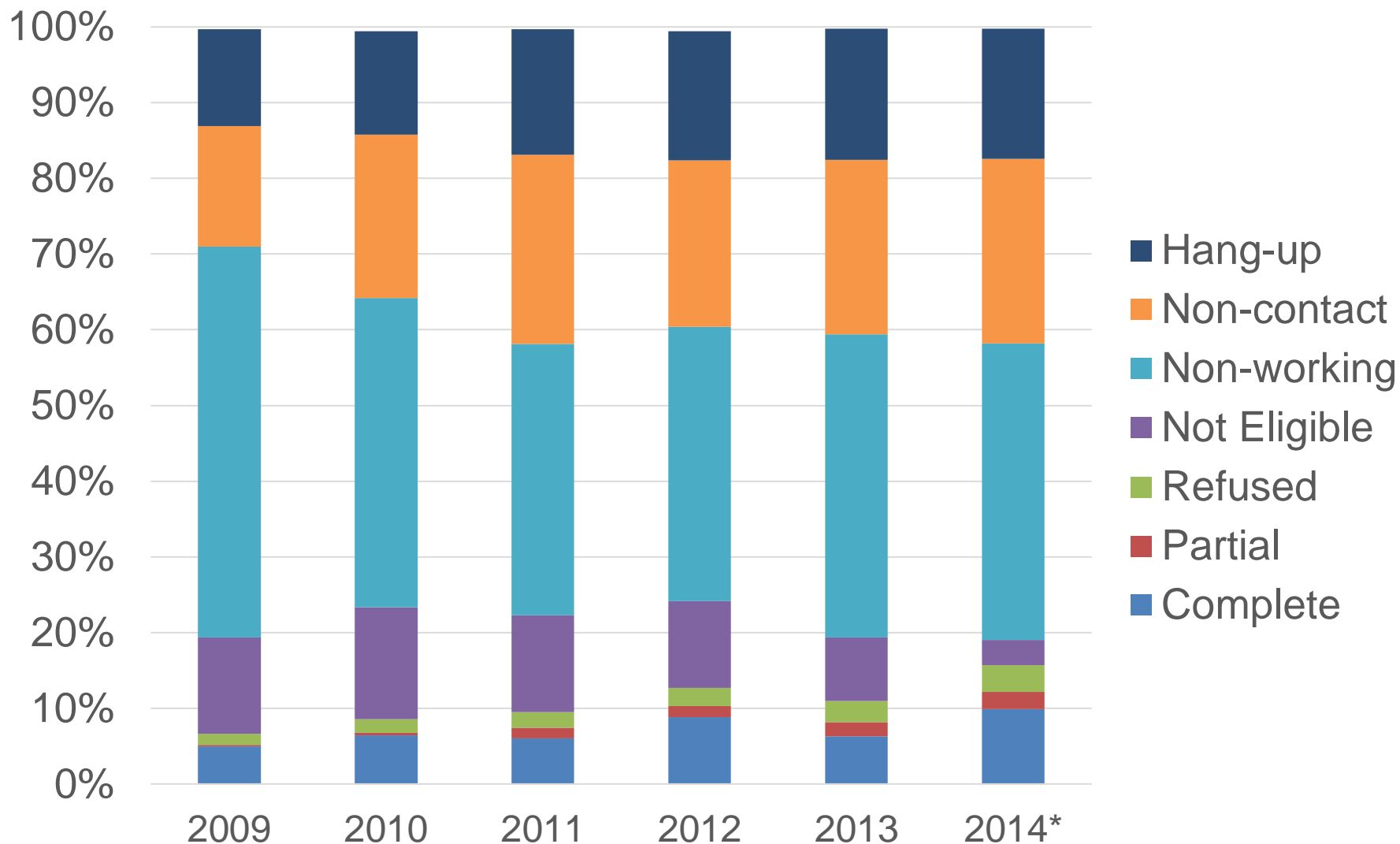
Response Rates – Wisconsin BRFSS



Landline sample call dispositions



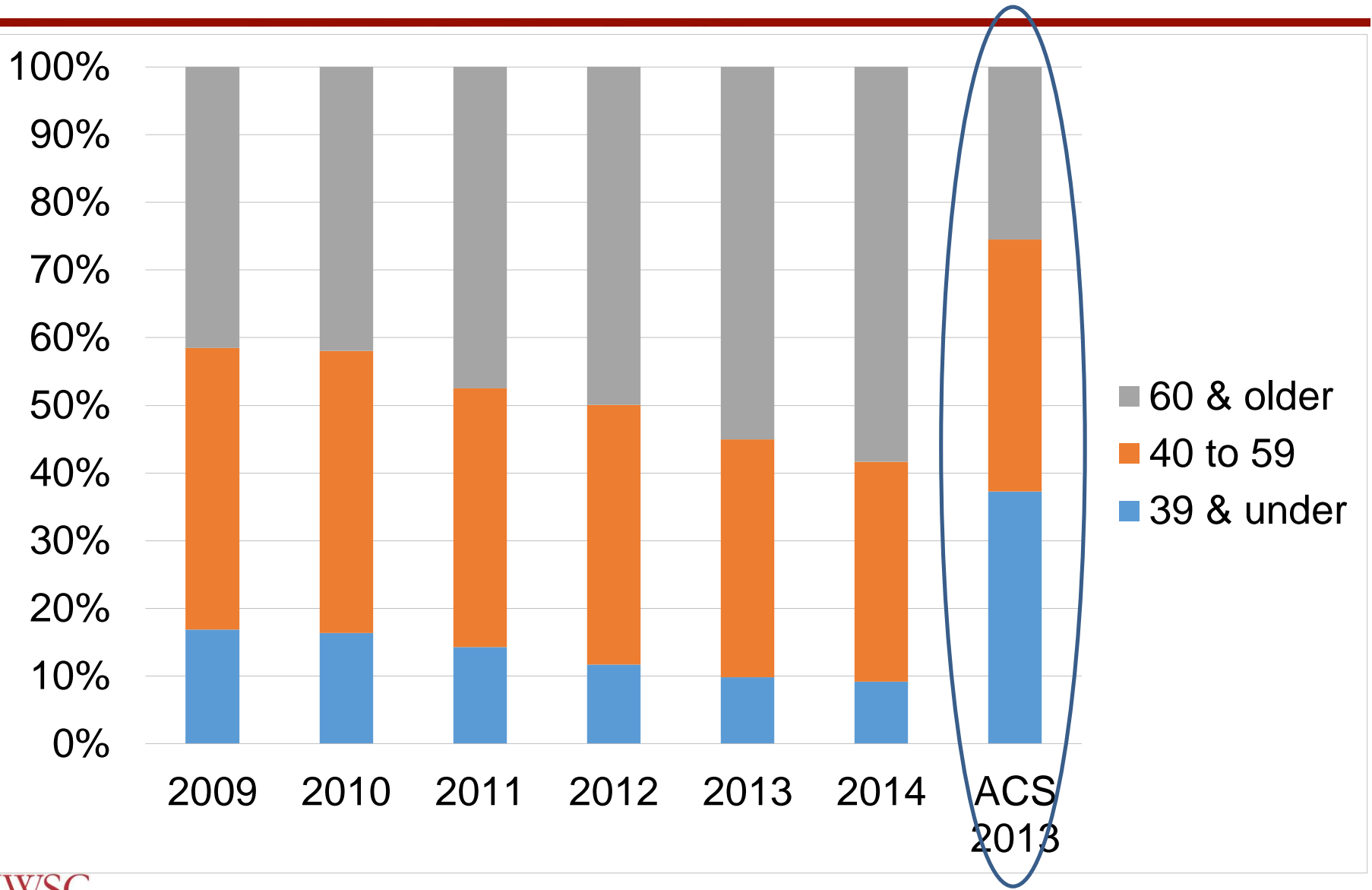
Cell sample call dispositions



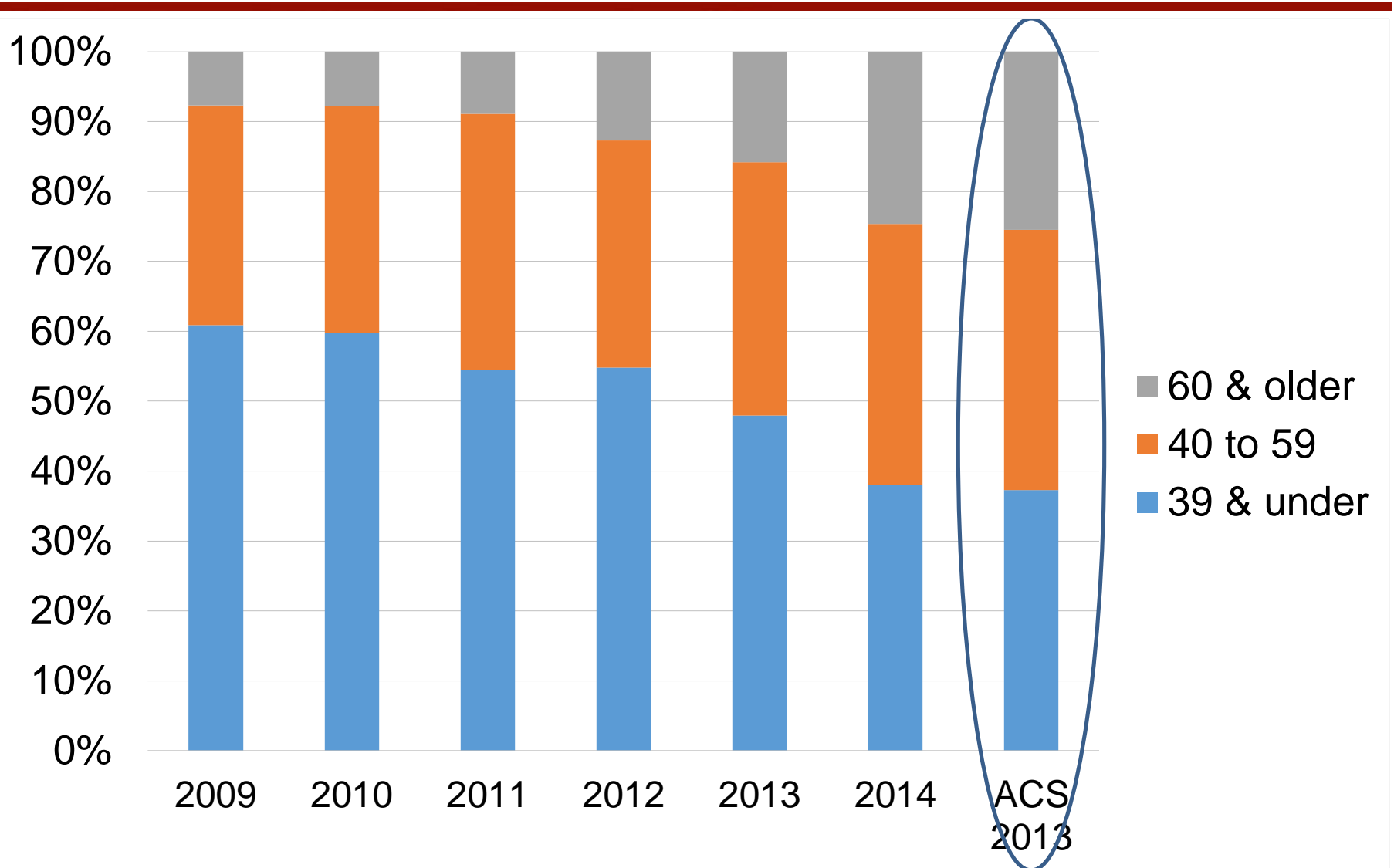
Who are we getting by Cell vs. Landline

- Who are we getting with cell sample?
- Looked at demographics
 - Age
 - Gender
 - Hispanic/Race
 - Education
 - Income
 - Household Size
- Not weighted, just raw counts by year

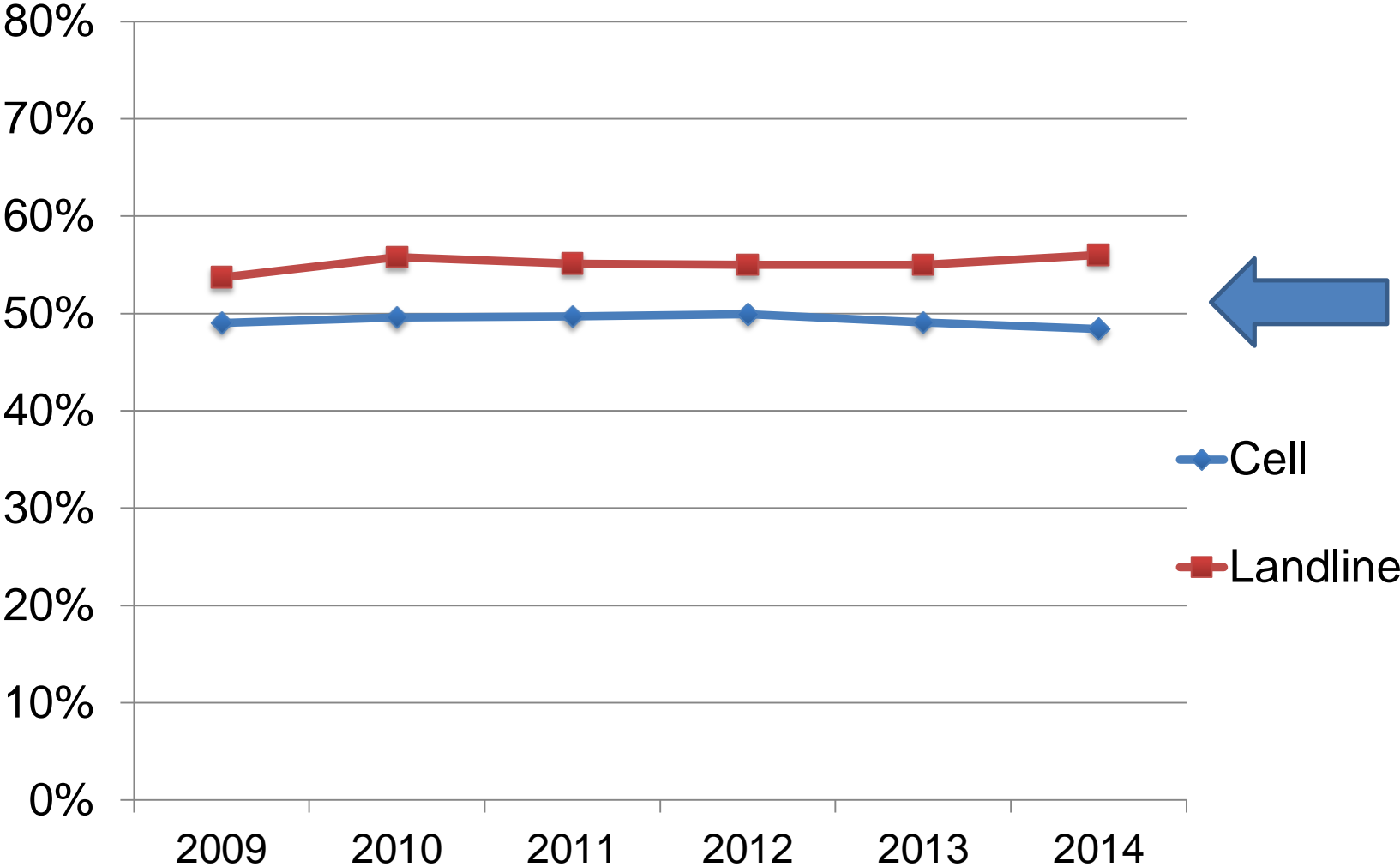
Age – Landline sample completes



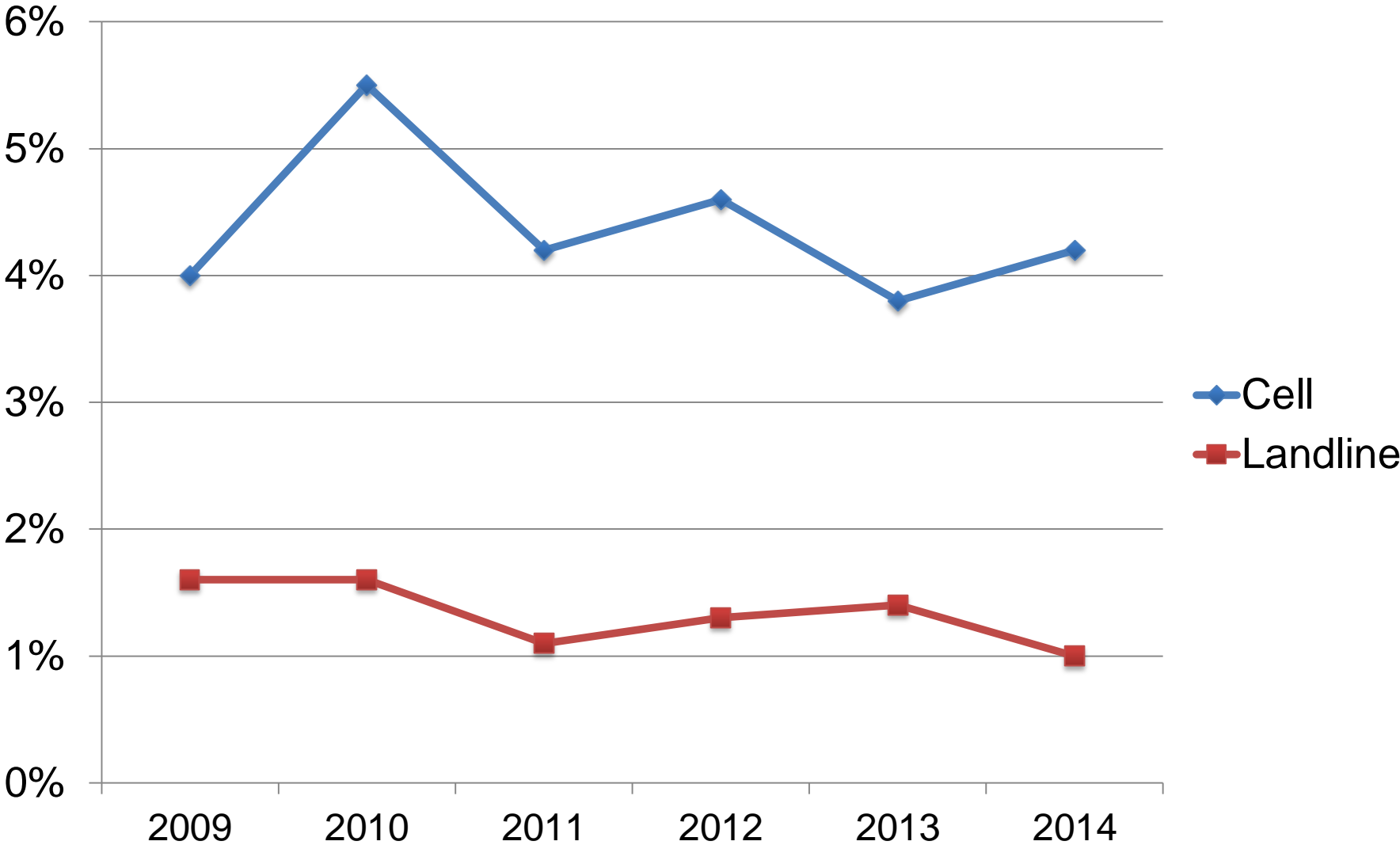
Age – Cell sample completes



Gender - landline vs cell (% female)

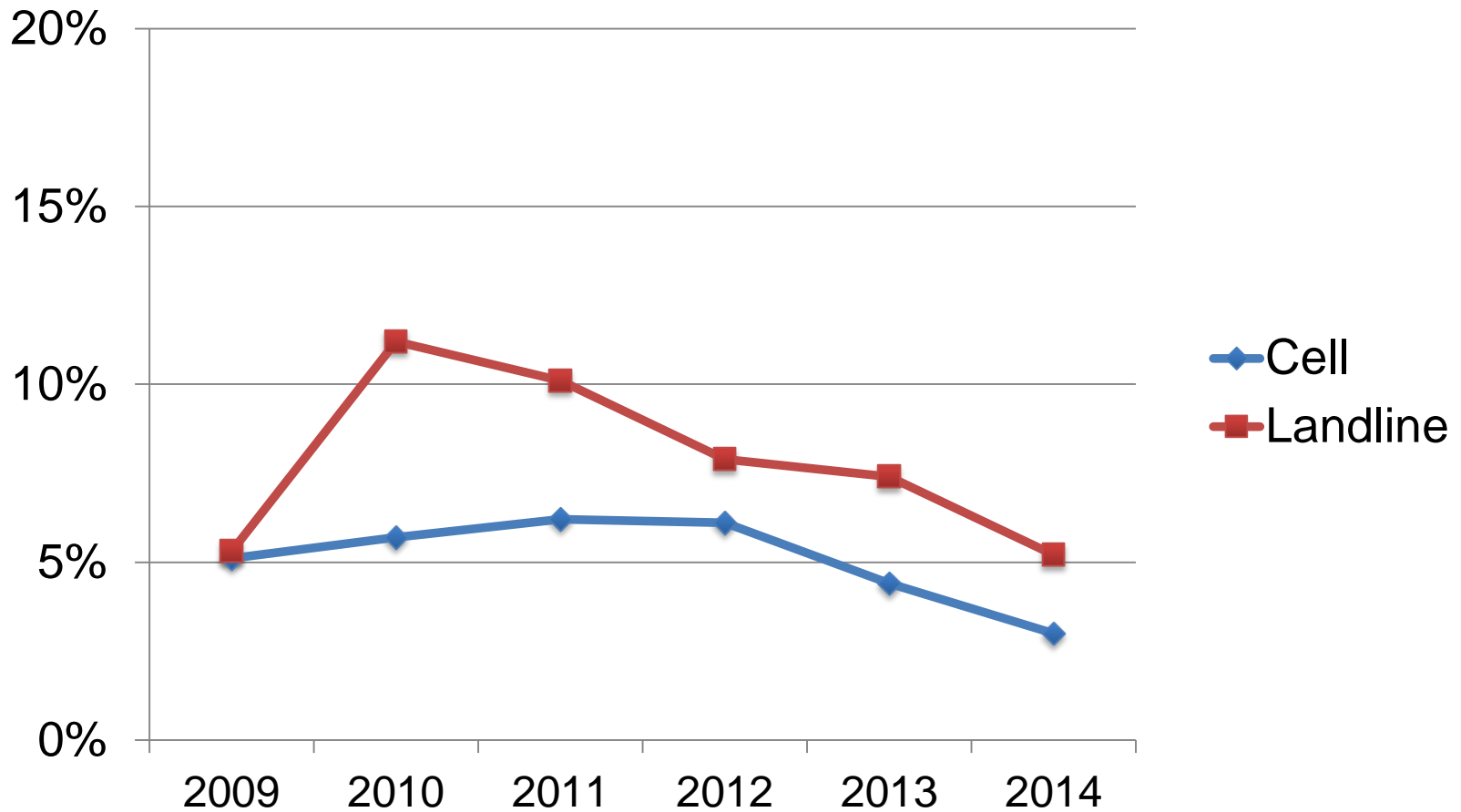


Ethnicity - landline vs cell (% Hispanic)

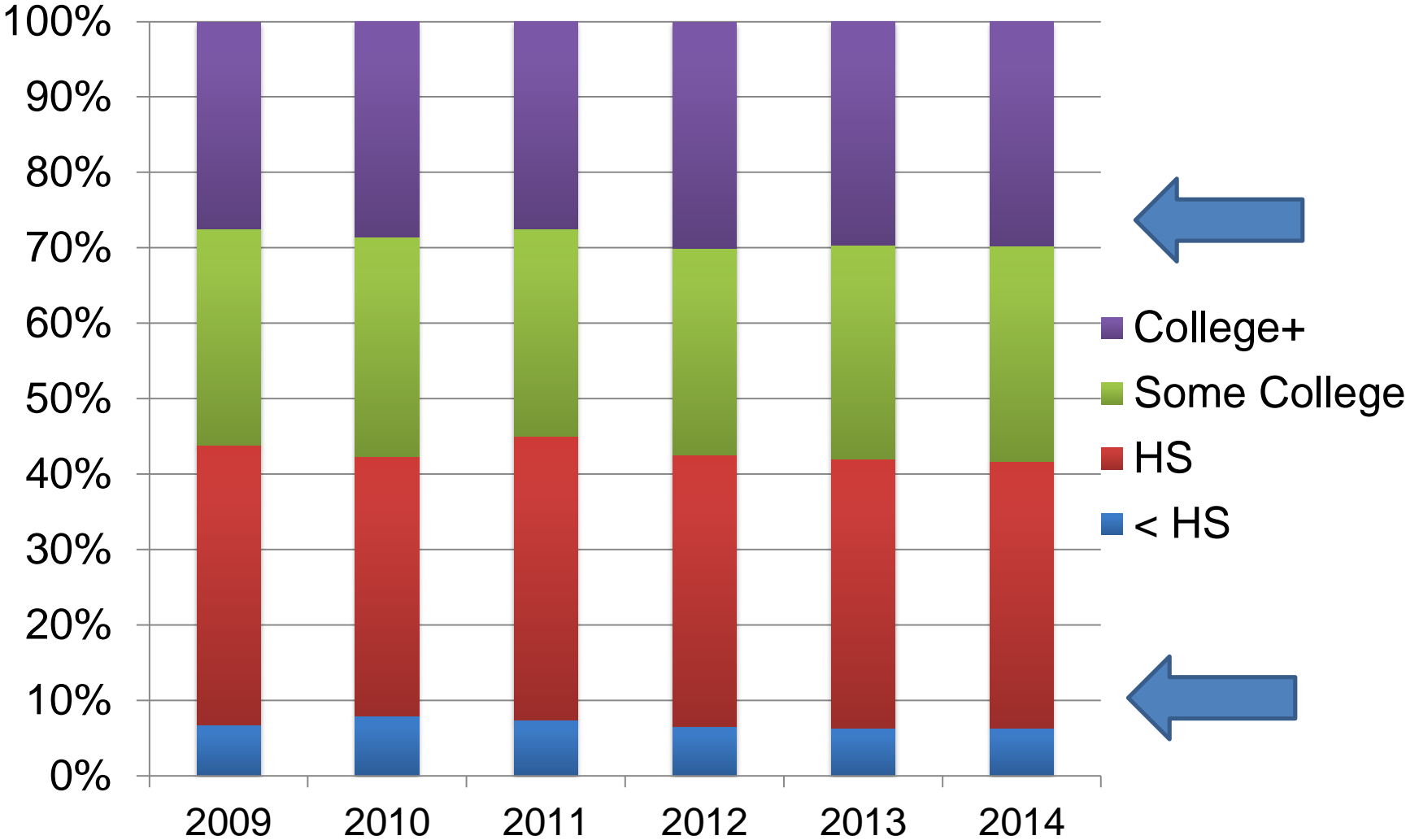


Race, Landline vs cell – Percent African American

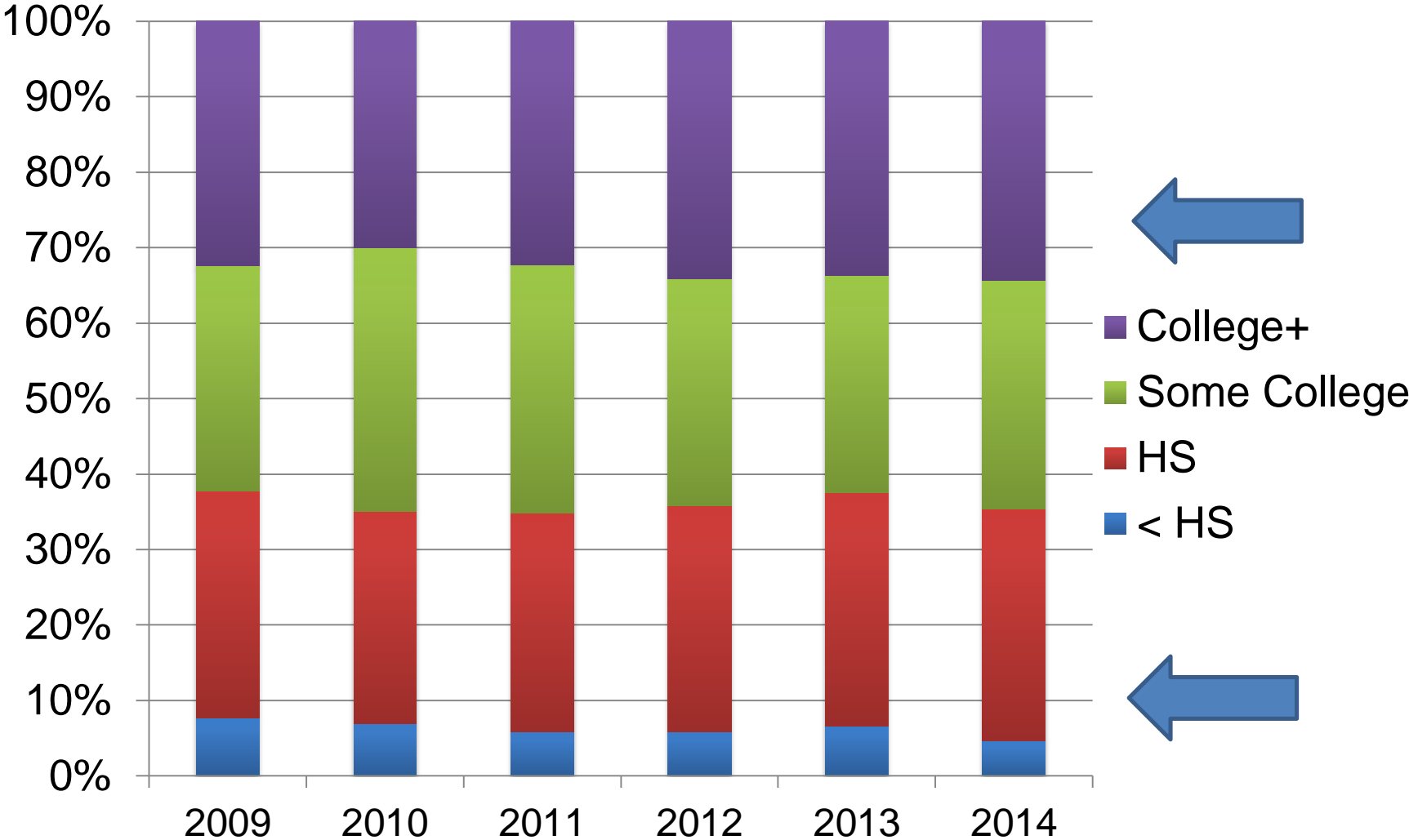
- Absolute measure is problematic!



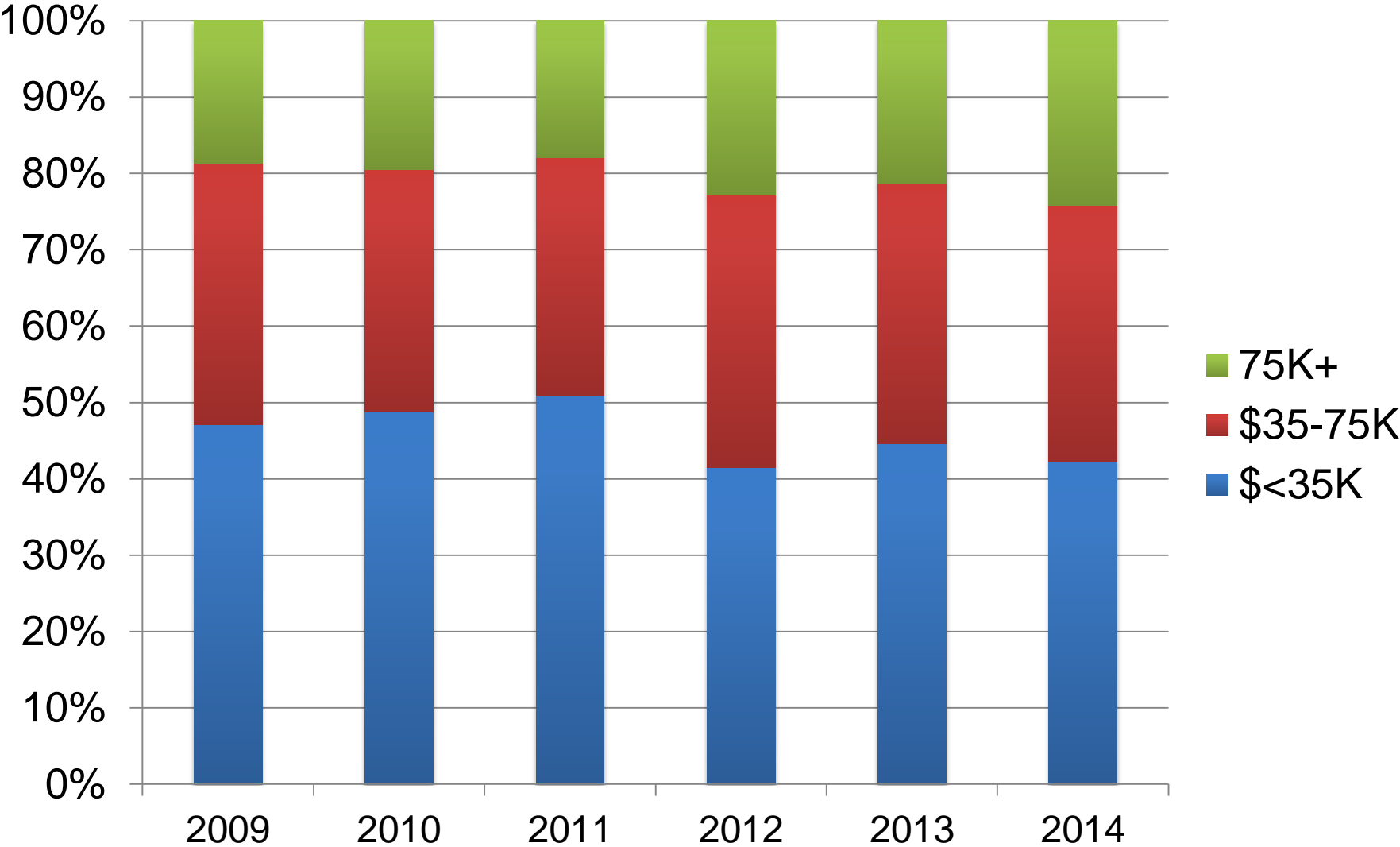
Education – Landline



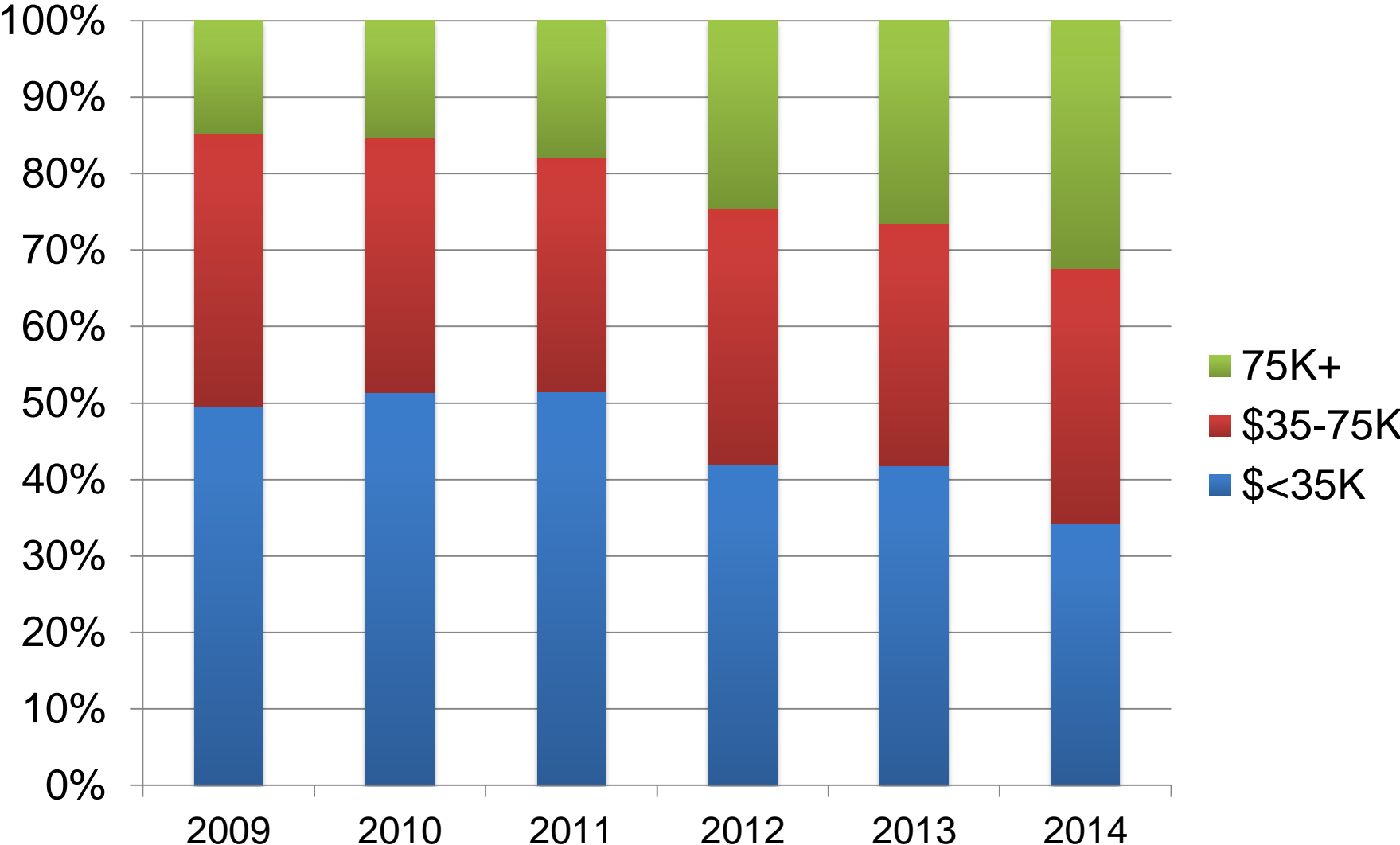
Education – Cell



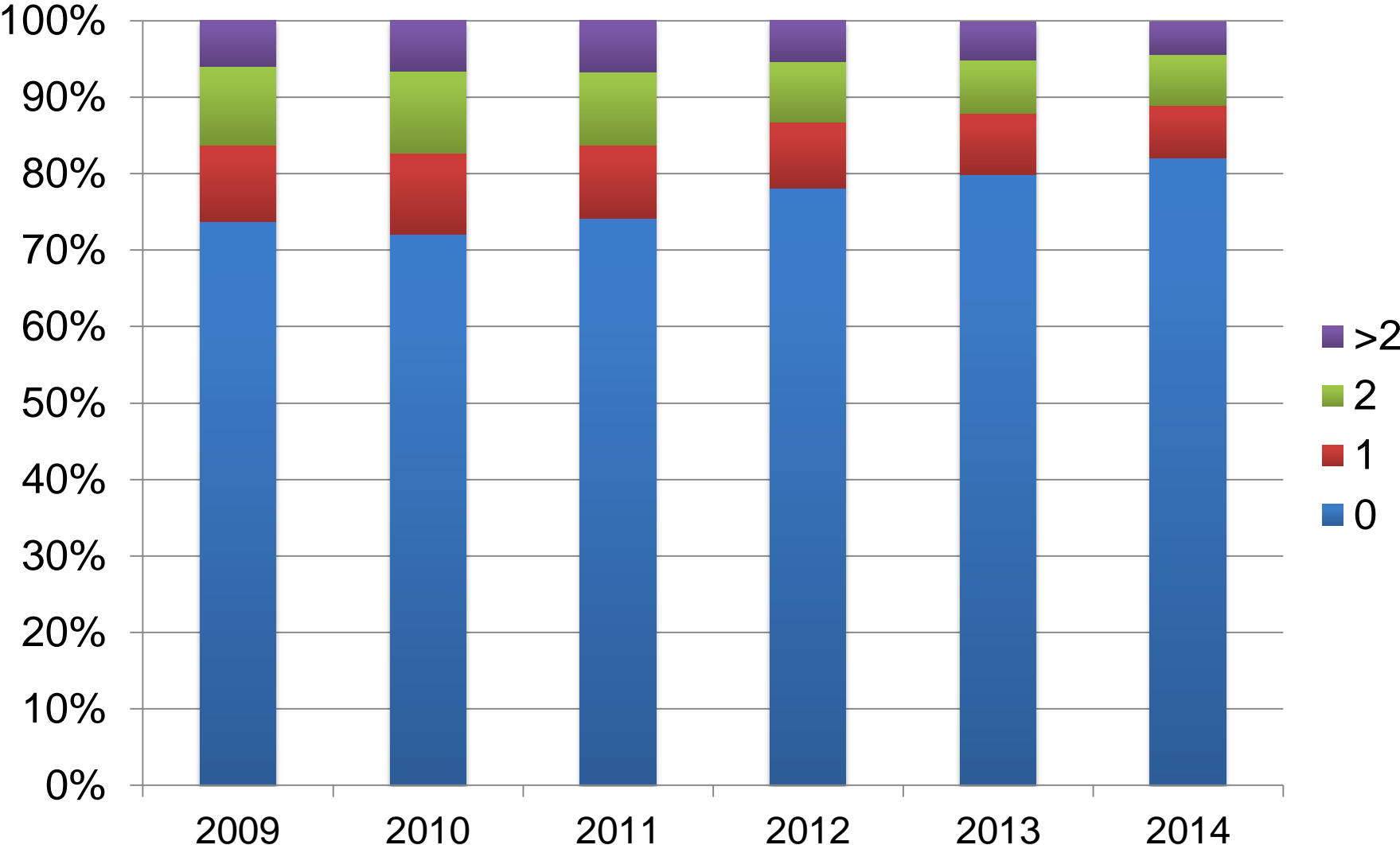
Income – Landline sample completes



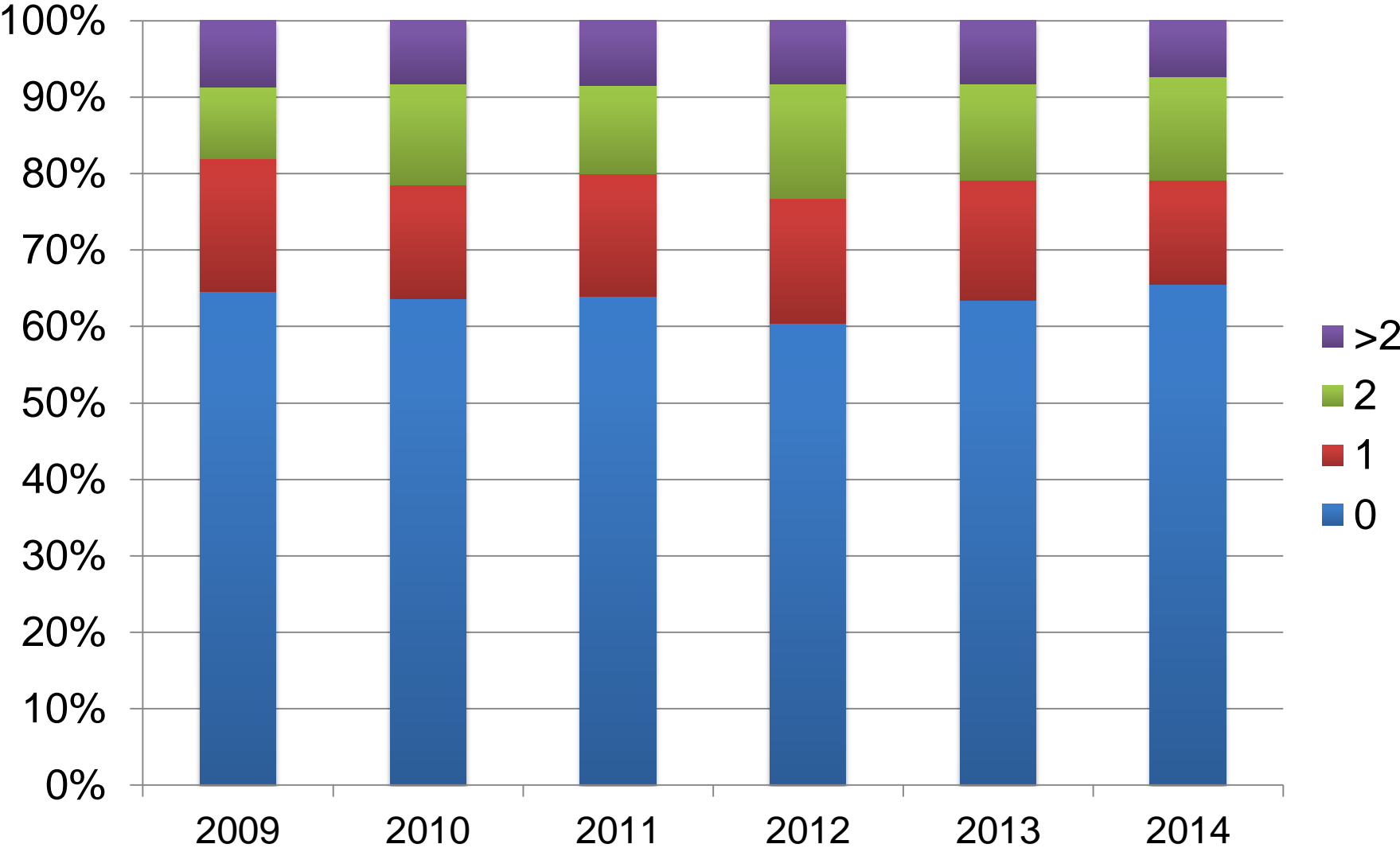
Income – Cell sample completes



Percent of households with children – Landline



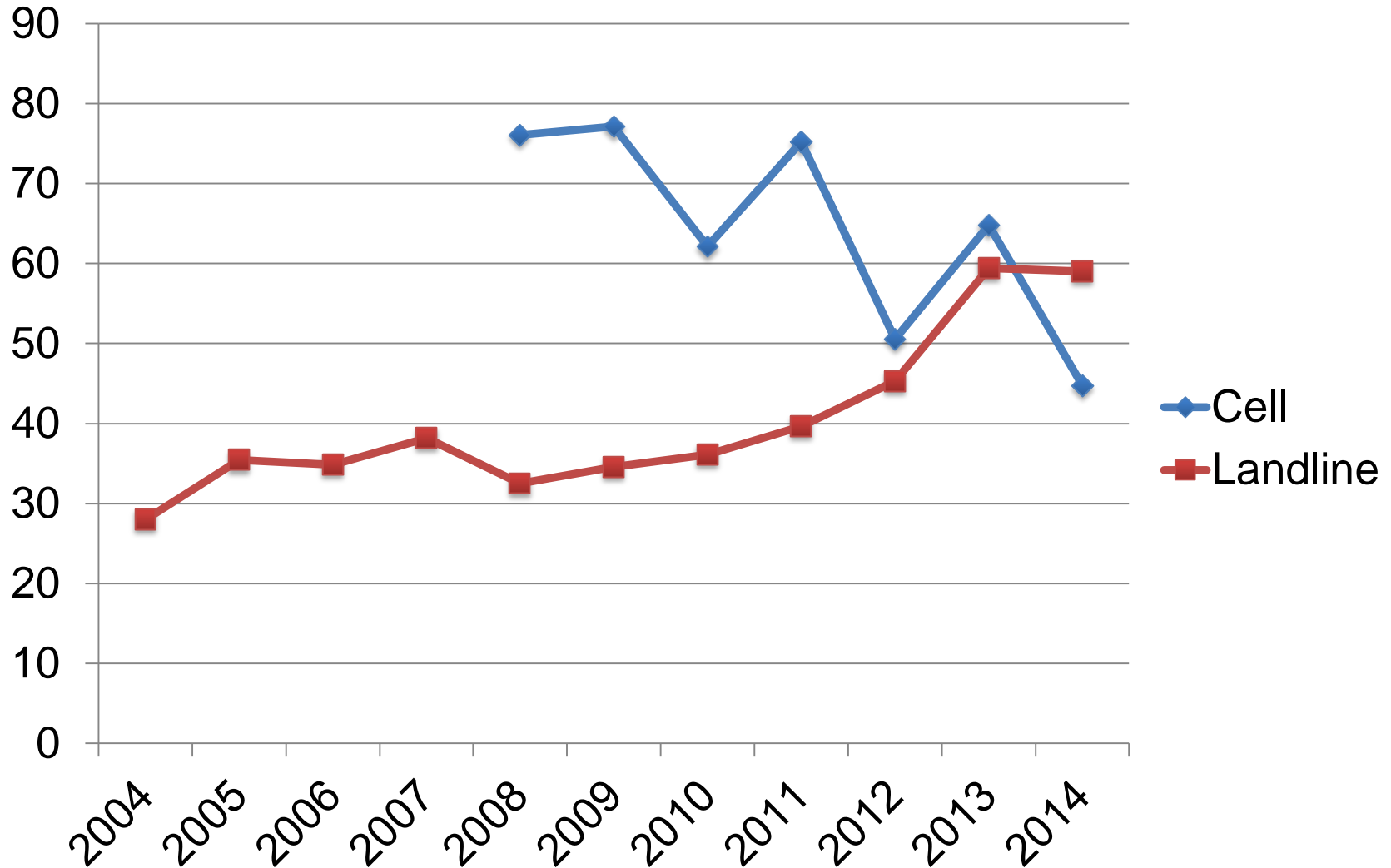
Percent of households with children - Cell



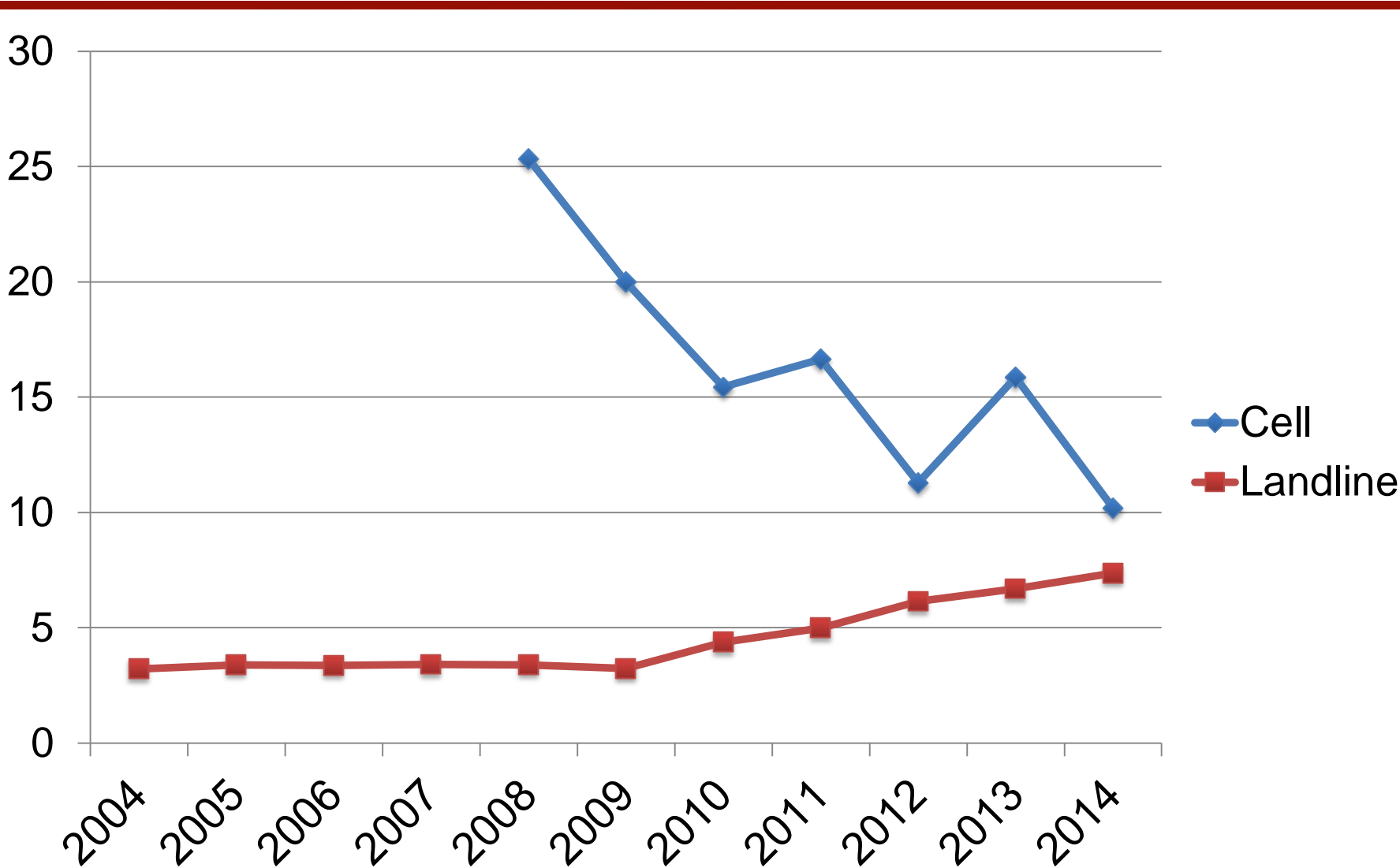
Effects on effort and cost – How are we doing?

- How are calls per complete changing over time
- How are changes affecting yield of sample/amount of sample fielded
- Change in phone room effort
 - Calls
 - Sample fielded

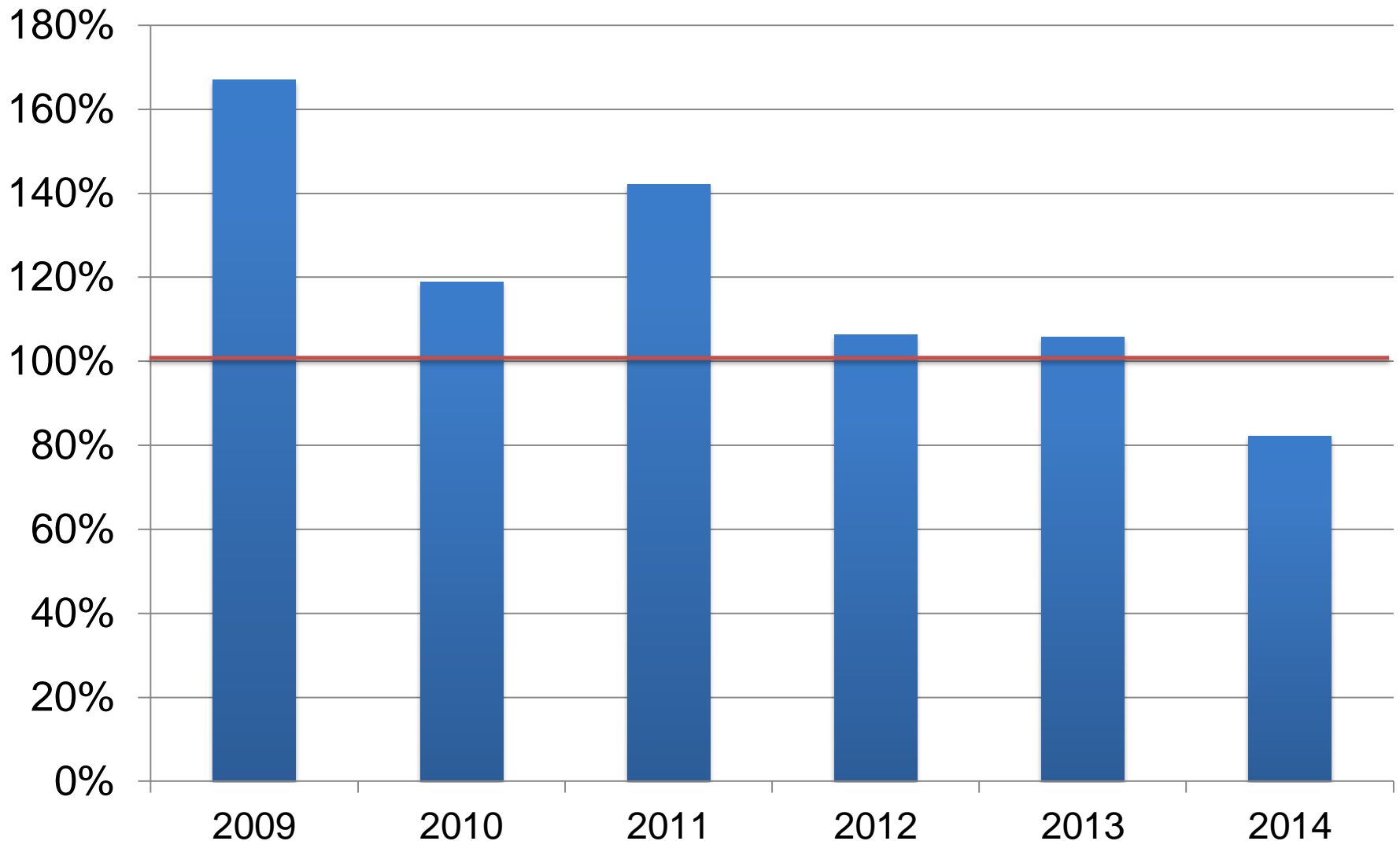
Calls per complete by year



Sample points fielded per complete



Relative cost of cell complete/landline complete (*only included some of the field costs)



Discussion

- Cell efficiency getting better
- Concern about high rate of noncontact for cell
- Tough to reach still tough to reach
- Problem of attempting to oversample/target small geographic areas (add cite)

Questions:

- Consistent with what you are seeing at other shops?
- Improvements in sampling/targeting?

Thank You!

For copies of this presentation or more information, contact:

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