



SURVEY RESEARCH GROUP

***Alternative Data Collection  
Methods: Speech-Enabled IVR***

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# ***Acknowledgements***

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# ***Project Leadership***

- **CMS**
  - **Elizabeth Goldstein and William Lehrman**
- **HSAG**
  - **Laura Giordano**
- **RAND**
  - **Marc Elliott**

# *Speech Enabled IVR*

- **IVR or interactive voice recognition is a telephone-based data capture tool**
- **Speech enabled IVR (SE-IVR) translates a verbal response into a data value**
- **Common customer service tool**
- **Increasing use for survey administration**
- **Active and passive approaches**

# ***Pros and Cons of SE-IVR***

- **Pro**

- **Assures standardization of survey**
- **Reduces labor costs**
- **May improve collection of self-reported adverse or illegal behavior**

- **Con**

- **Development costs**
- **Regional speech patterns**
- **Some survey participants don't like it**

## ***Our Study***

- **SE-IVR was used to administer the HCAHPS survey to patients discharged from 29 hospitals in the U.S.**
- **Sampled 8,689 discharged patients**
- **Data collection occurred in August-October 2008**
- **Modified existing HCAHPS IVR protocol**
  - **Interviewer consents patients**
  - **Interviewer introduces SE-IVR system**

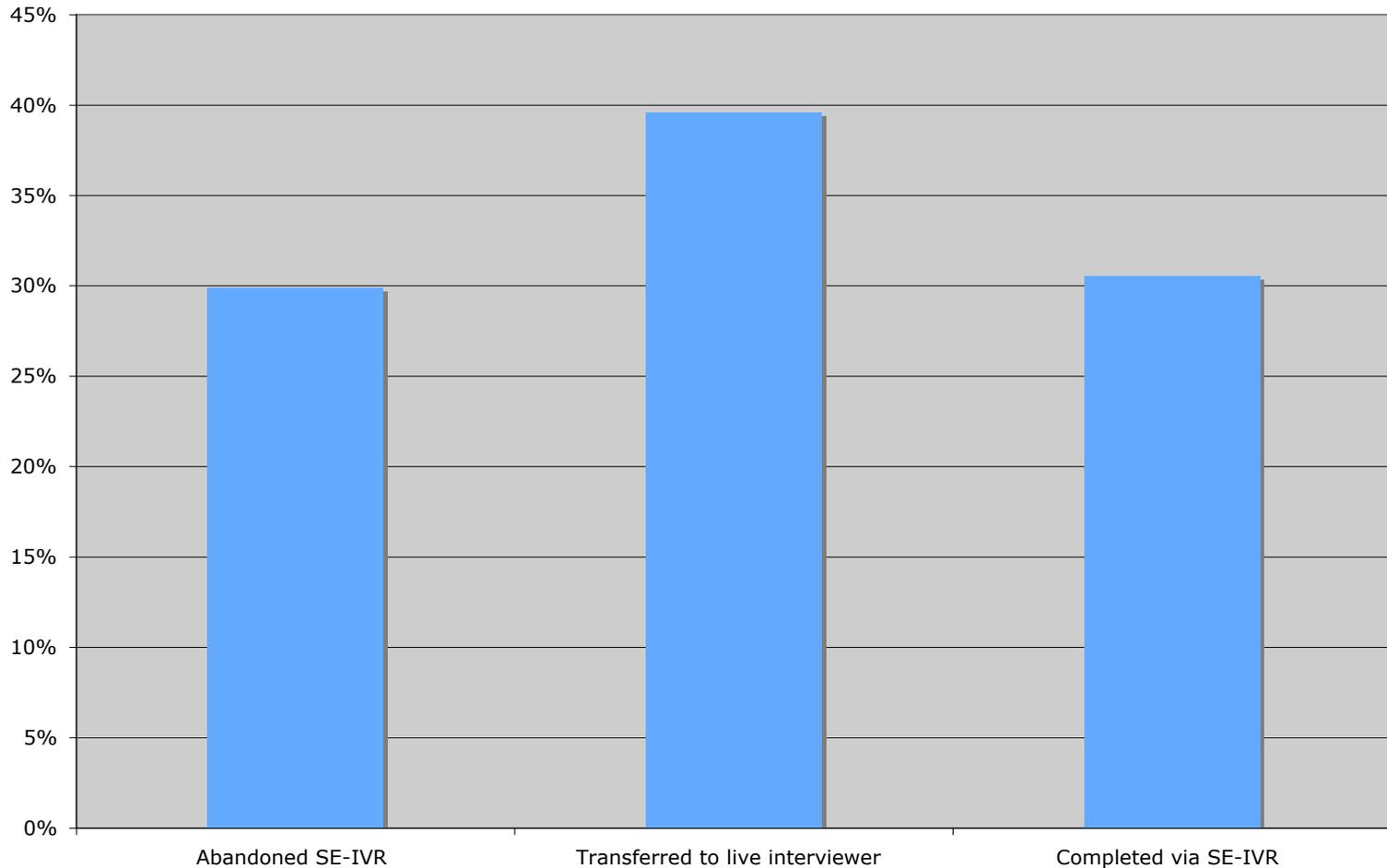
## ***Preliminary Results***

- **Proportion of sample completing the survey via SE-IVR**
- **Rates of abandonment and transfer out of the SE-IVR system**
- **Profile of patients who complete the survey via SE-IVR**

# ***Survey Participation***

- **Response rates varied by month of discharge but overall response rate is 33%**
- **Completed interviews**
  - **25% full SE-IVR**
  - **25% mix of SE-IVR and CATI**
  - **50% full CATI**

# *Abandonment, Transfer, and Completion*



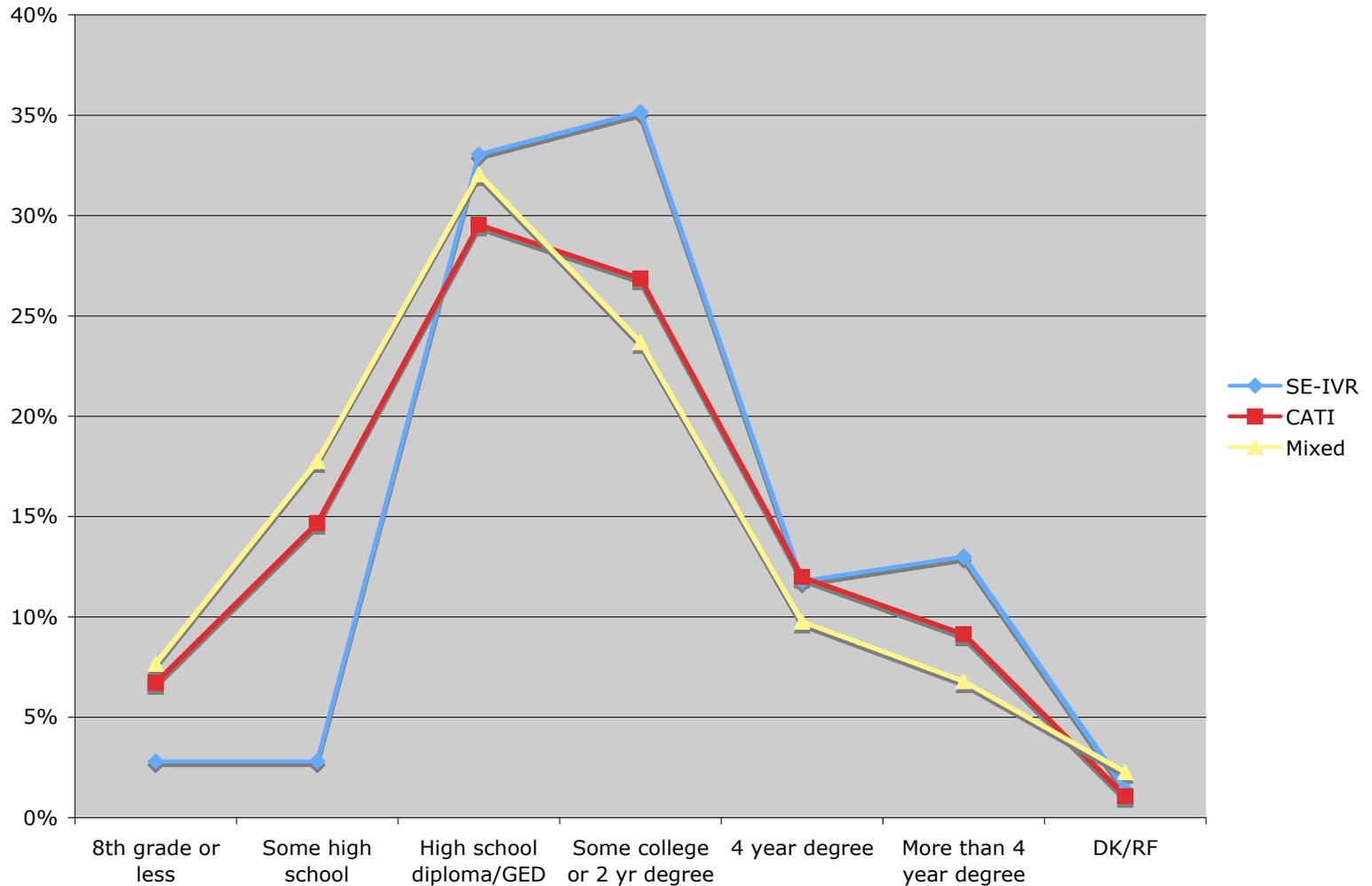
# *Abandon and Transfer Points*

- **48% of abandoned SE-IVR sessions occurred at first question**
- **32% of transfers from the SE-IVR system occurred at first question**

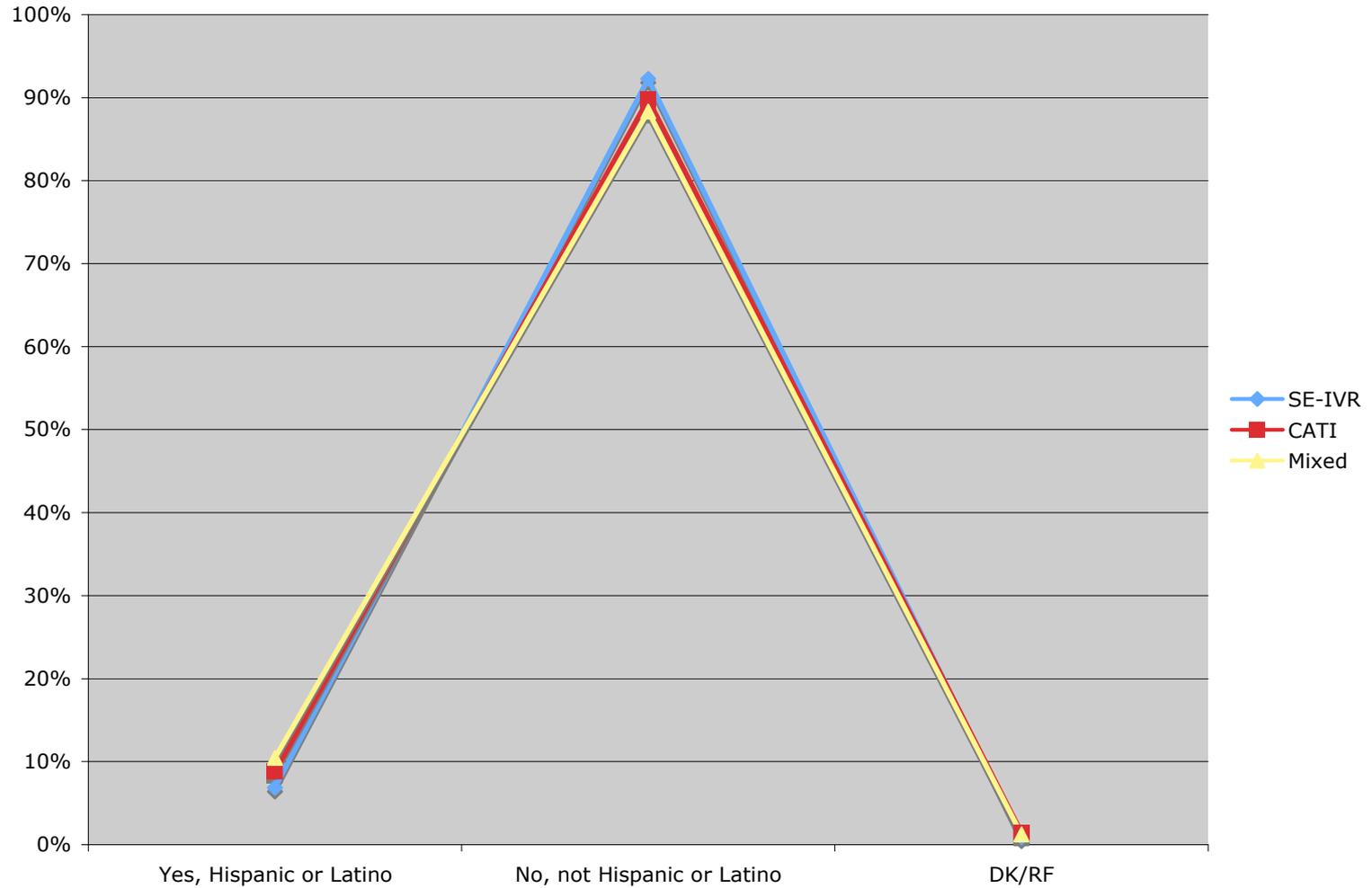
## ***Do SE-IVR Respondents Differ?***

- **Trend toward higher education**
- **No difference in Hispanic ethnicity**
- **Larger proportion are White**

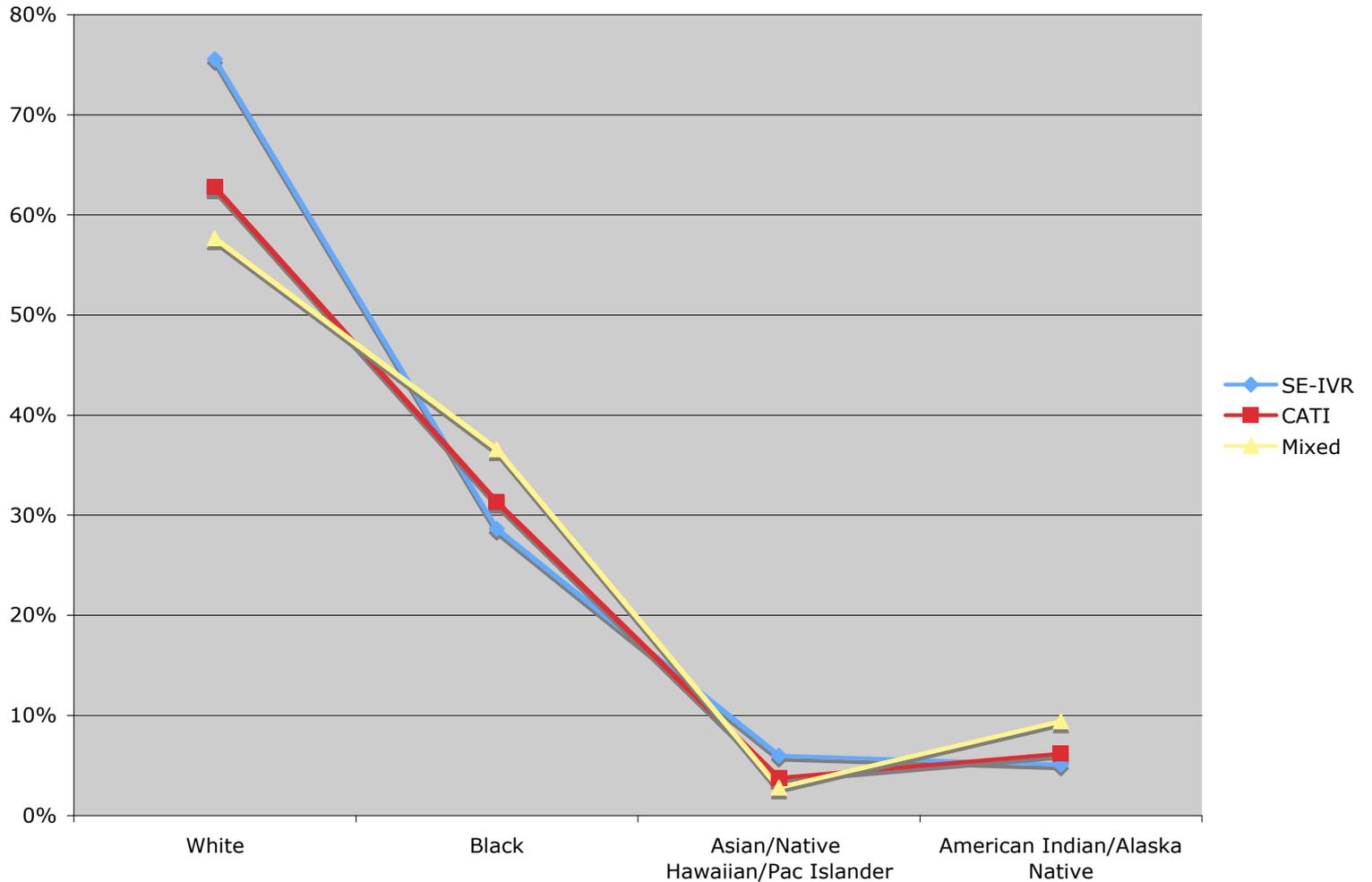
# All Respondents: Education



# All Respondents: Ethnicity



# All Respondents: Race



# ***Next Steps***

- **Analysis of survey data**
- **Analysis of process or “meta” data**