



# **National Health and Nutrition Examination Survey**

## ***Using Text Reminders to encourage fasting for medical exams***

Sheryl Wood, MPH, Westat

Tatiana Nwankwo, MS, National Center for Health  
Statistics (NCHS)



## ***Background***

- Area Sampling – 15 counties/year
- HH screener
- Oversample Hispanic, African American, Asian American, Older Adults, White/other low income
- Home interview then 4.5 hour exam
- 5,000 examined participants/year



- Preselect subsample of persons for morning exams
- Morning exams require fasting of 12+ year olds
  - *2 additional blood tests – OGTT and cholesterol*
- Instructions to fast are in appointment reminder:
  - *Slip*
  - *Letter*
  - *Call script*
  - *Text messages (added May 2011)*



## ***Text Messages***

- Home questionnaire – ask permission to text and cell number
- Reminder texts sent 1:00 pm and 7:00 pm local respondent time (English/Spanish)

*Your health exam is at 8:30am tomorrow morning. Please do not eat or drink anything except water after 11:30 pm tonight.*

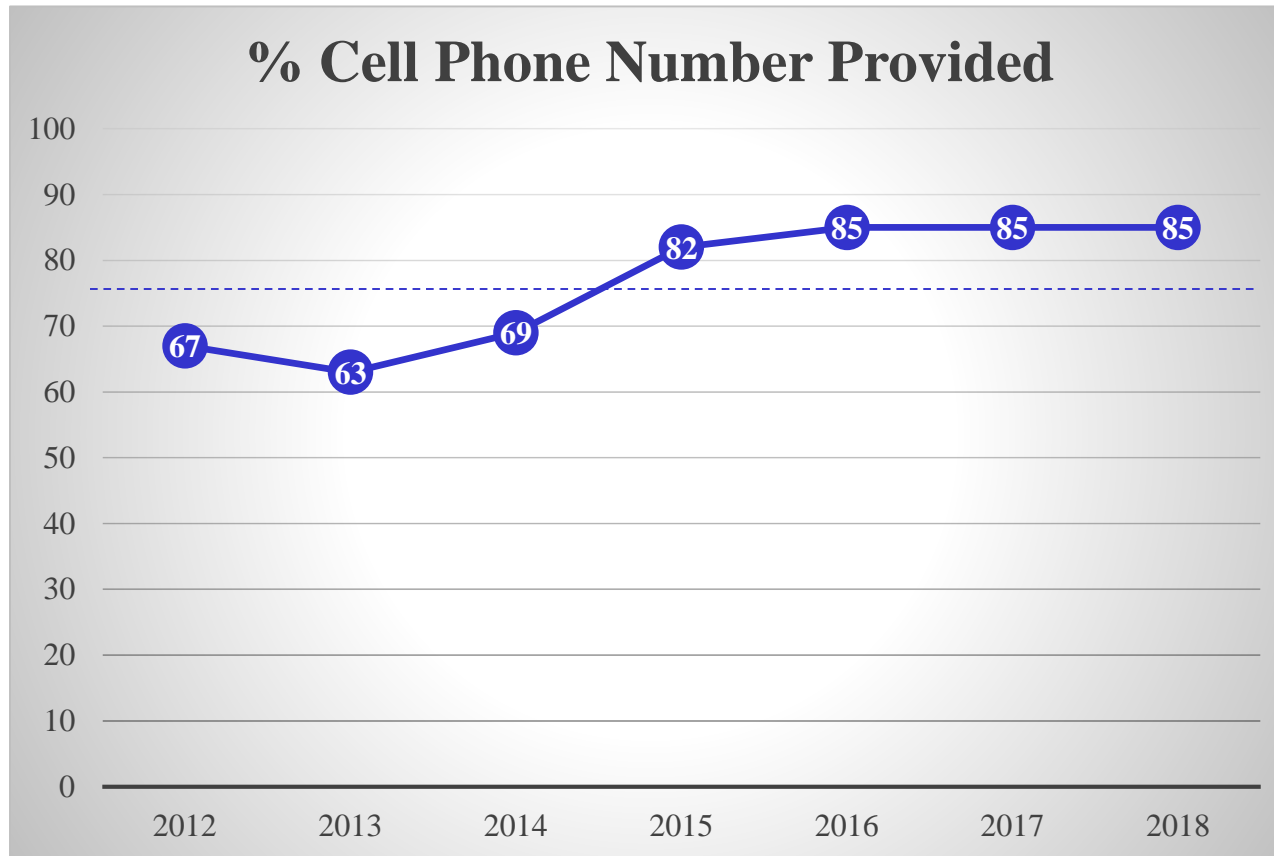


## ***Cell Number Provided***

- May 2011 to December 2018
- 11,802 participants asked to fast overnight
  - 8,933 or 76% reported cell phone number
  - 2,869 or 24% did not report a cell phone number



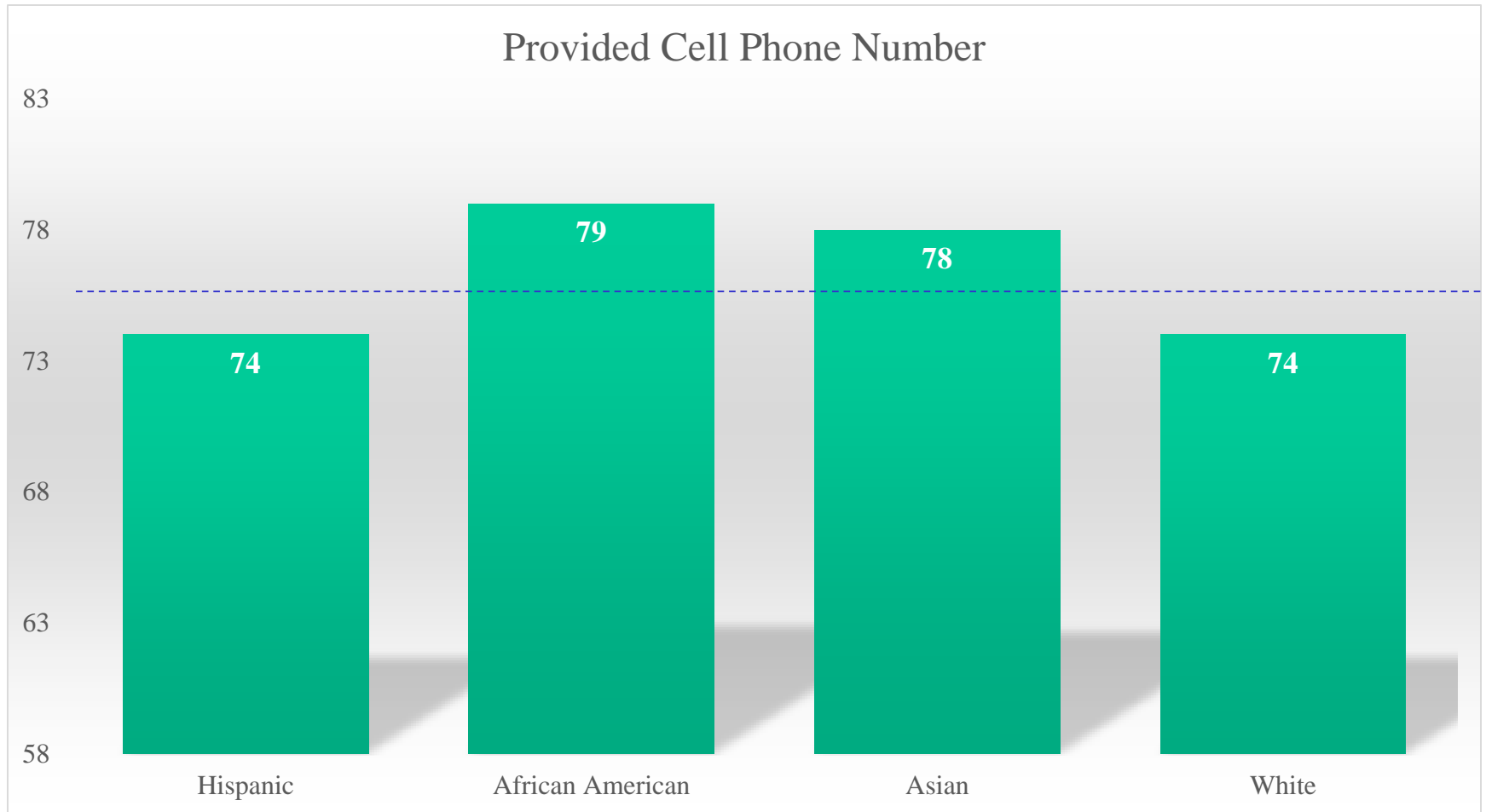
## *Cell Number Provided by Year*



\*Data from 2012 through 2018

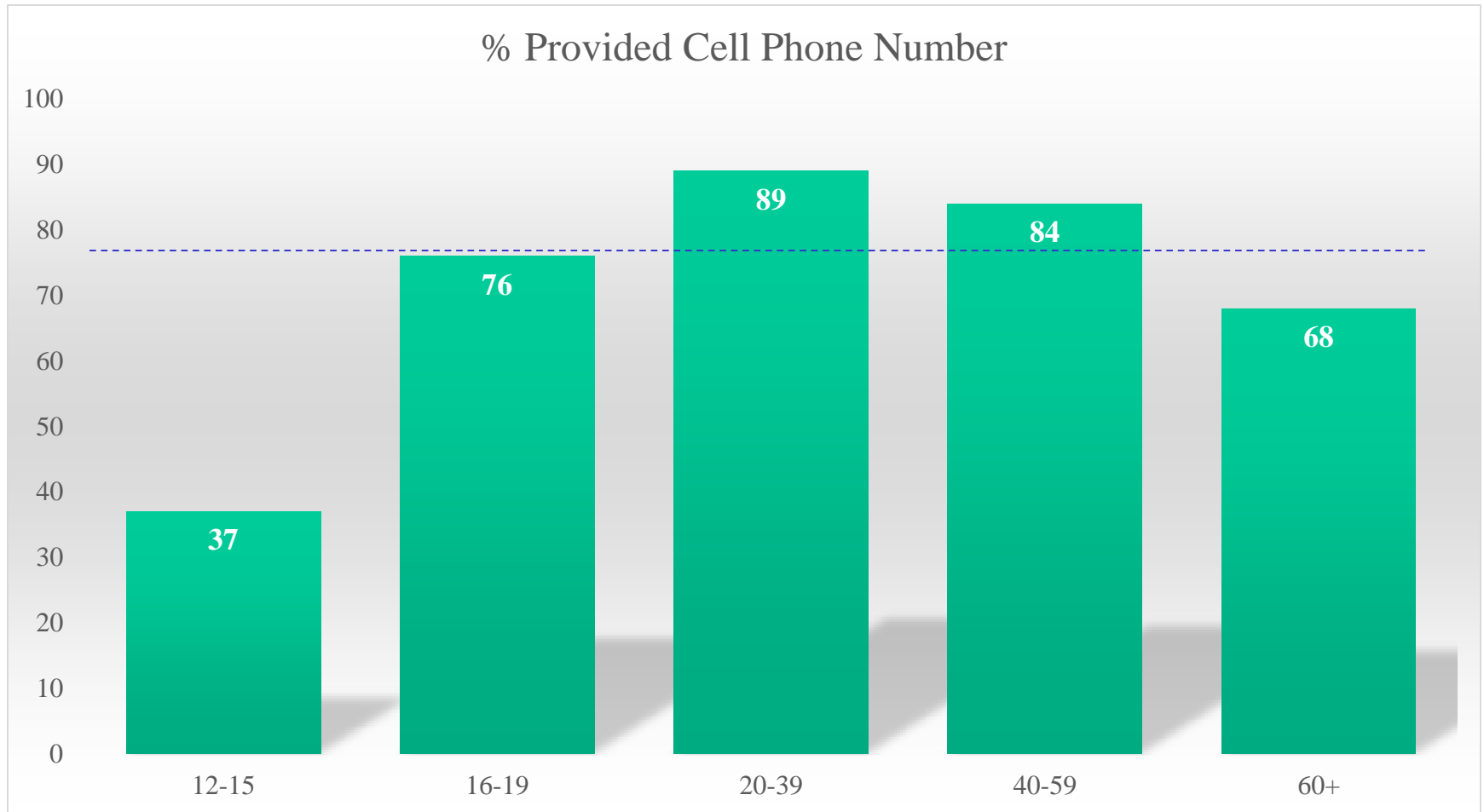


# *Cell Number provided by Race/Ethnicity*



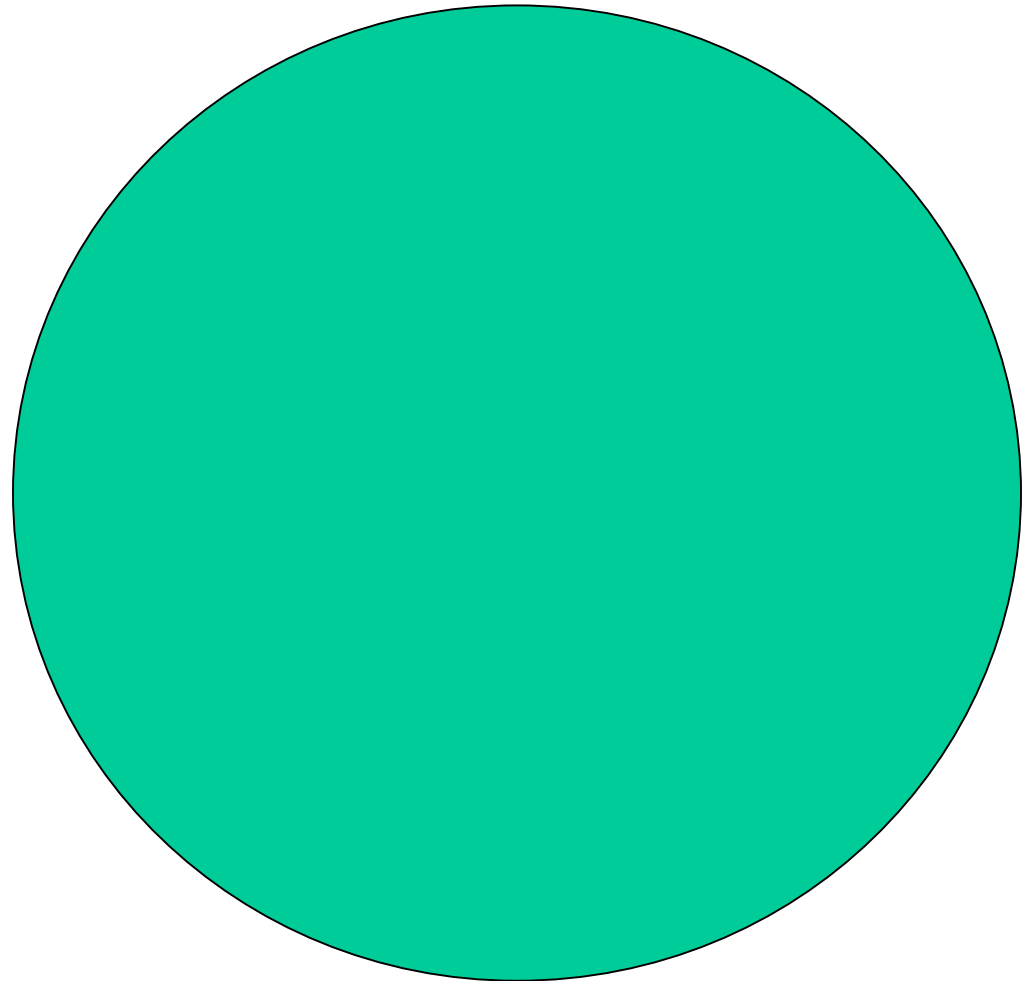


## ***Cell Number Provided by Age***

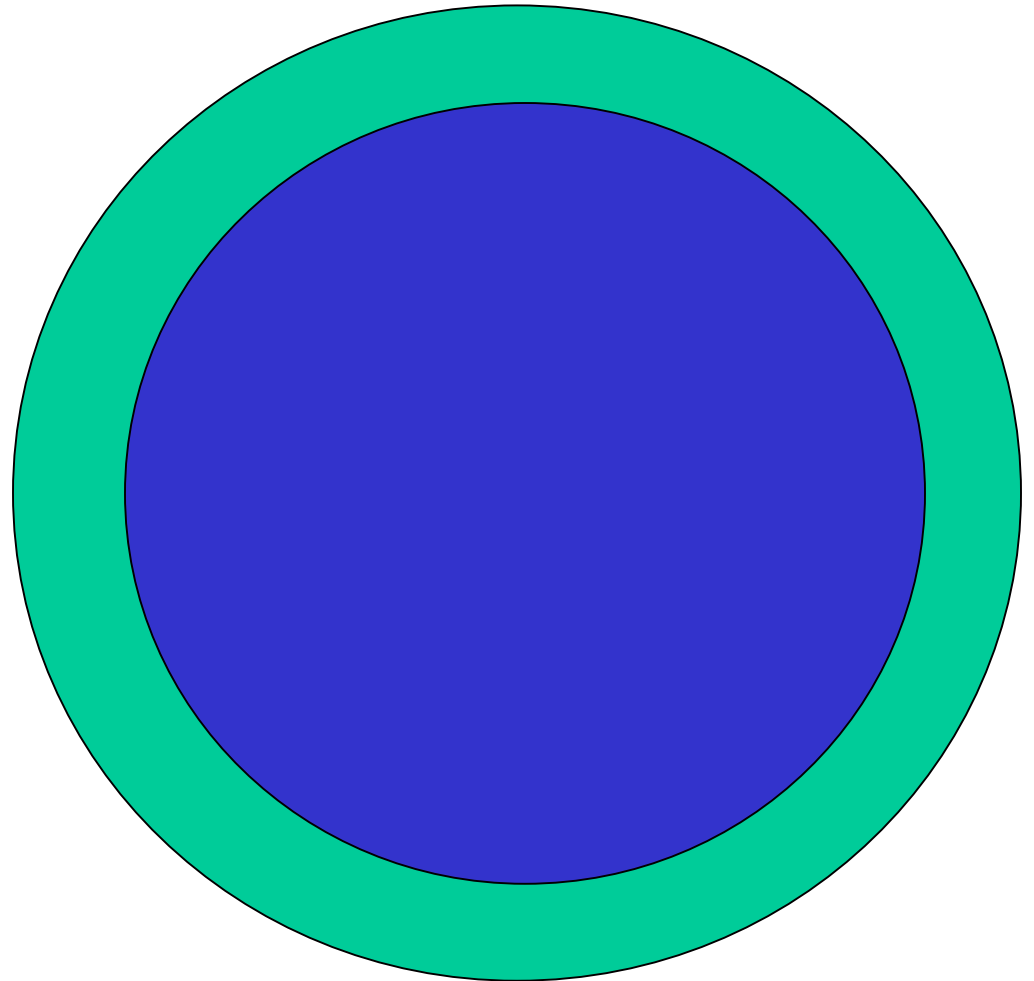




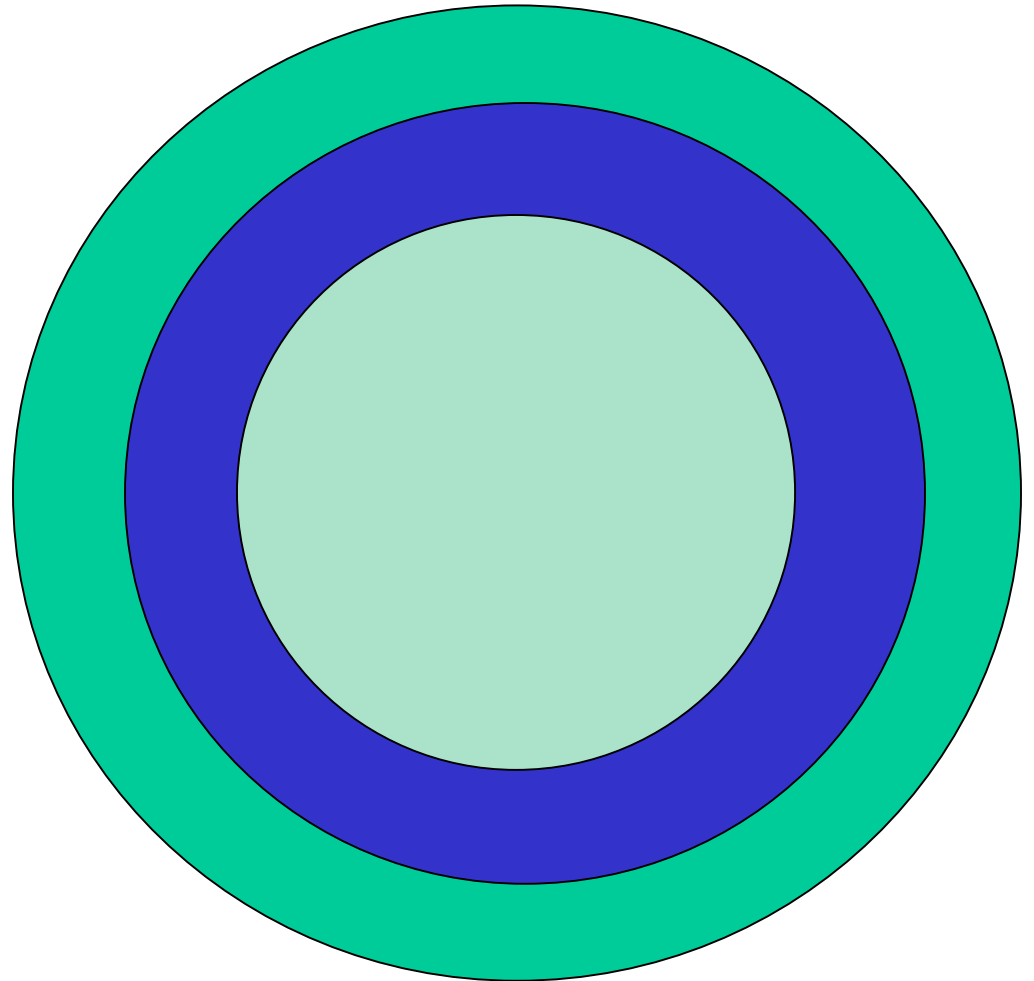
- 11,802 eligible



- 11,802 eligible
- 8,933 cell phone



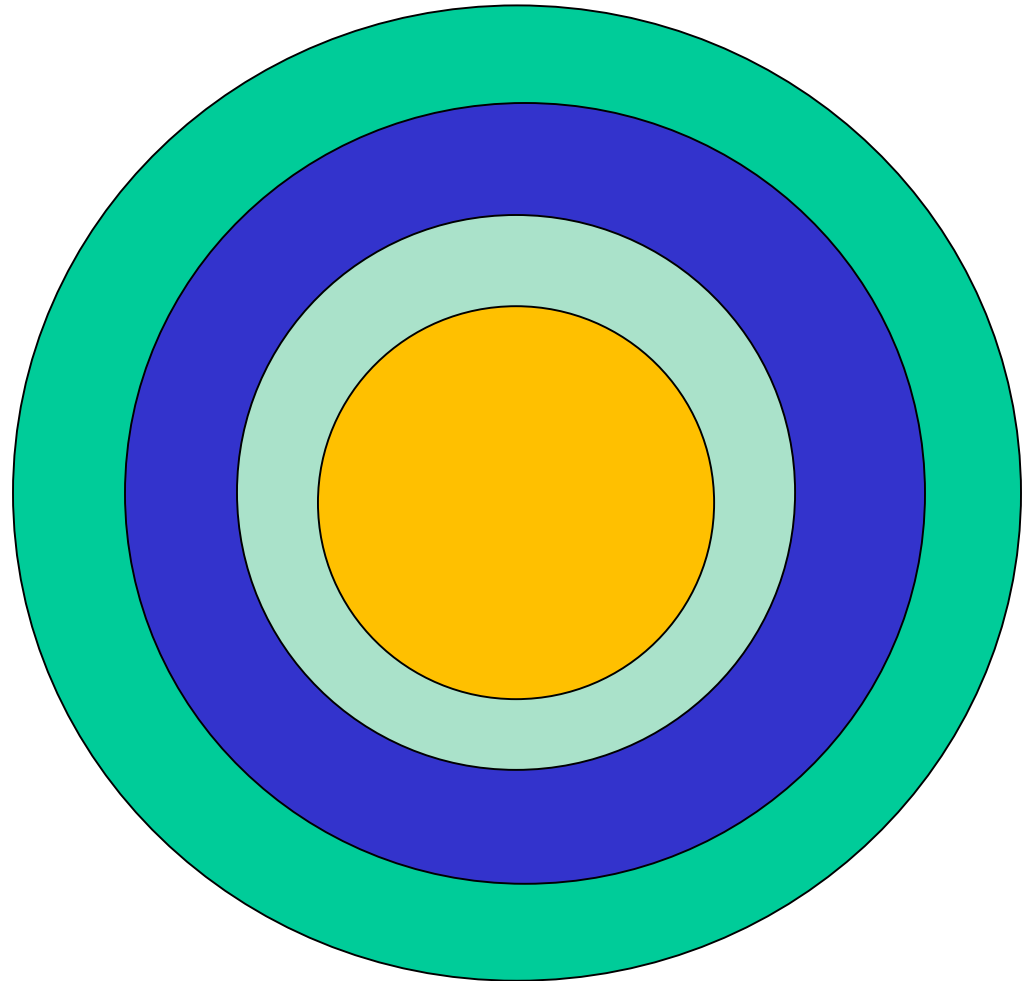
- 11,802 eligible
- 8,933 cell phone
- 6,131 permission  
to text





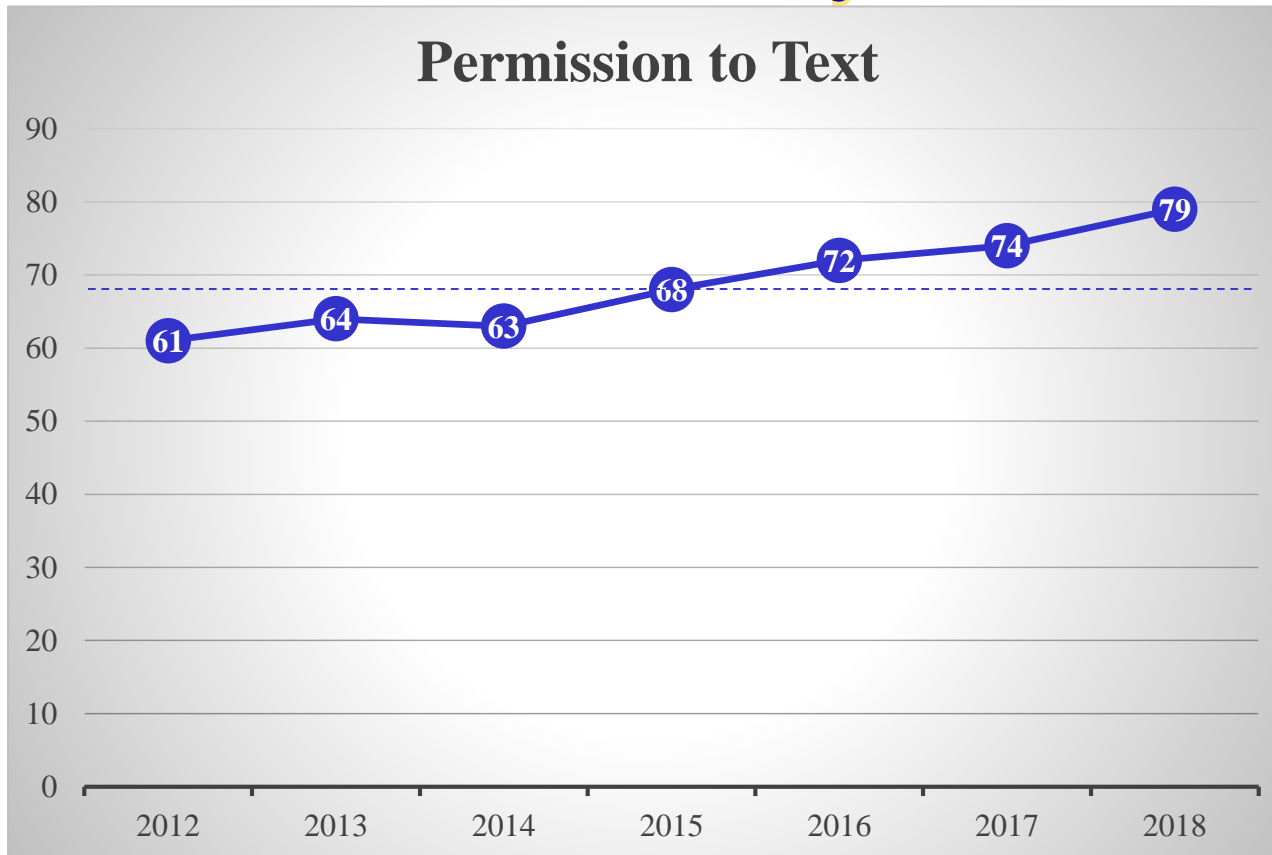
## ***Permission to Text***

- 11,802 eligible
- 8,933 cell phone
- 6,131 permission  
to text
- 4,787 texted (40%)





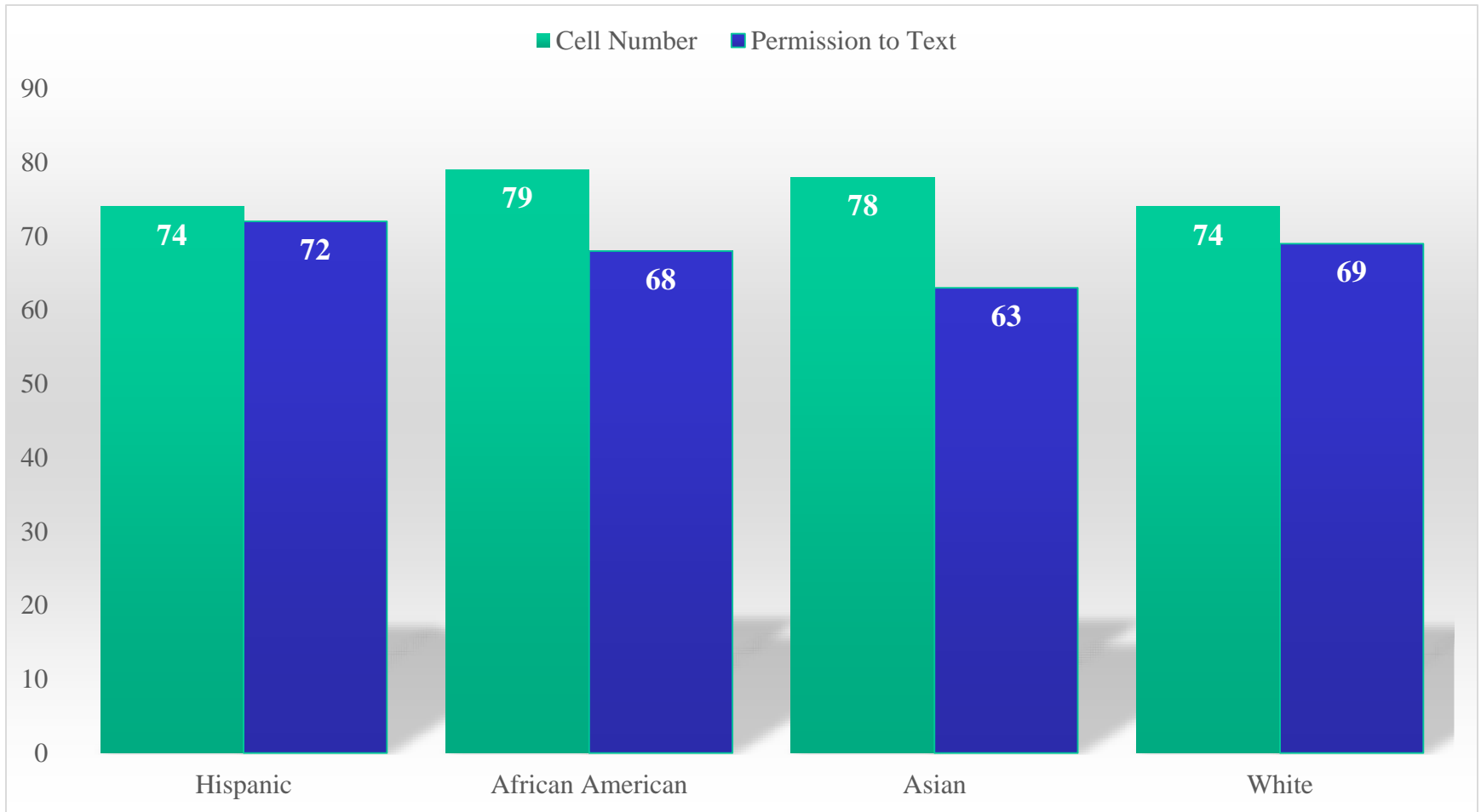
## *Permission to Text by Year*



\*Data from 2012 through 2018

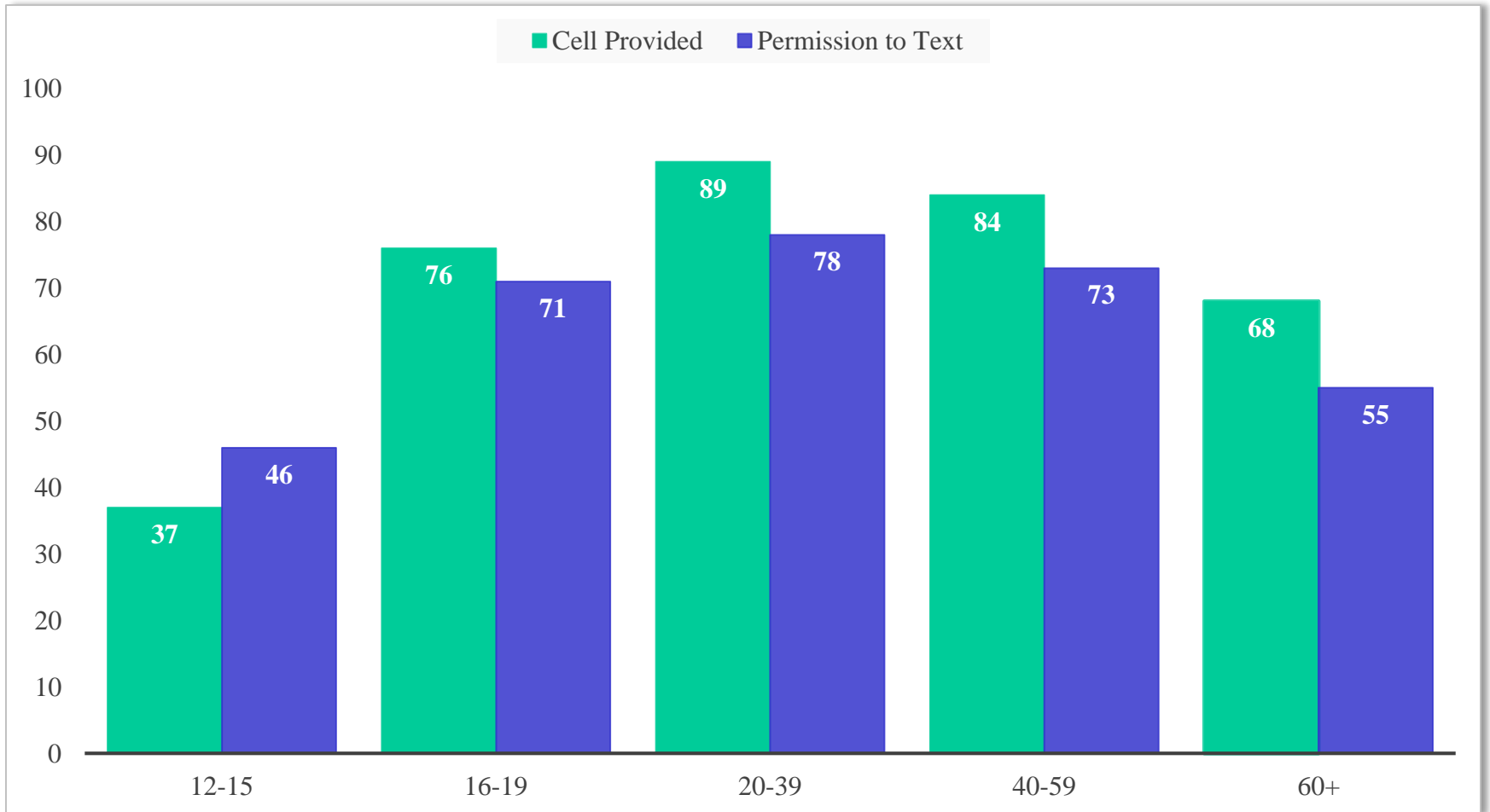


## *Permission to Text by Race/Ethnicity*



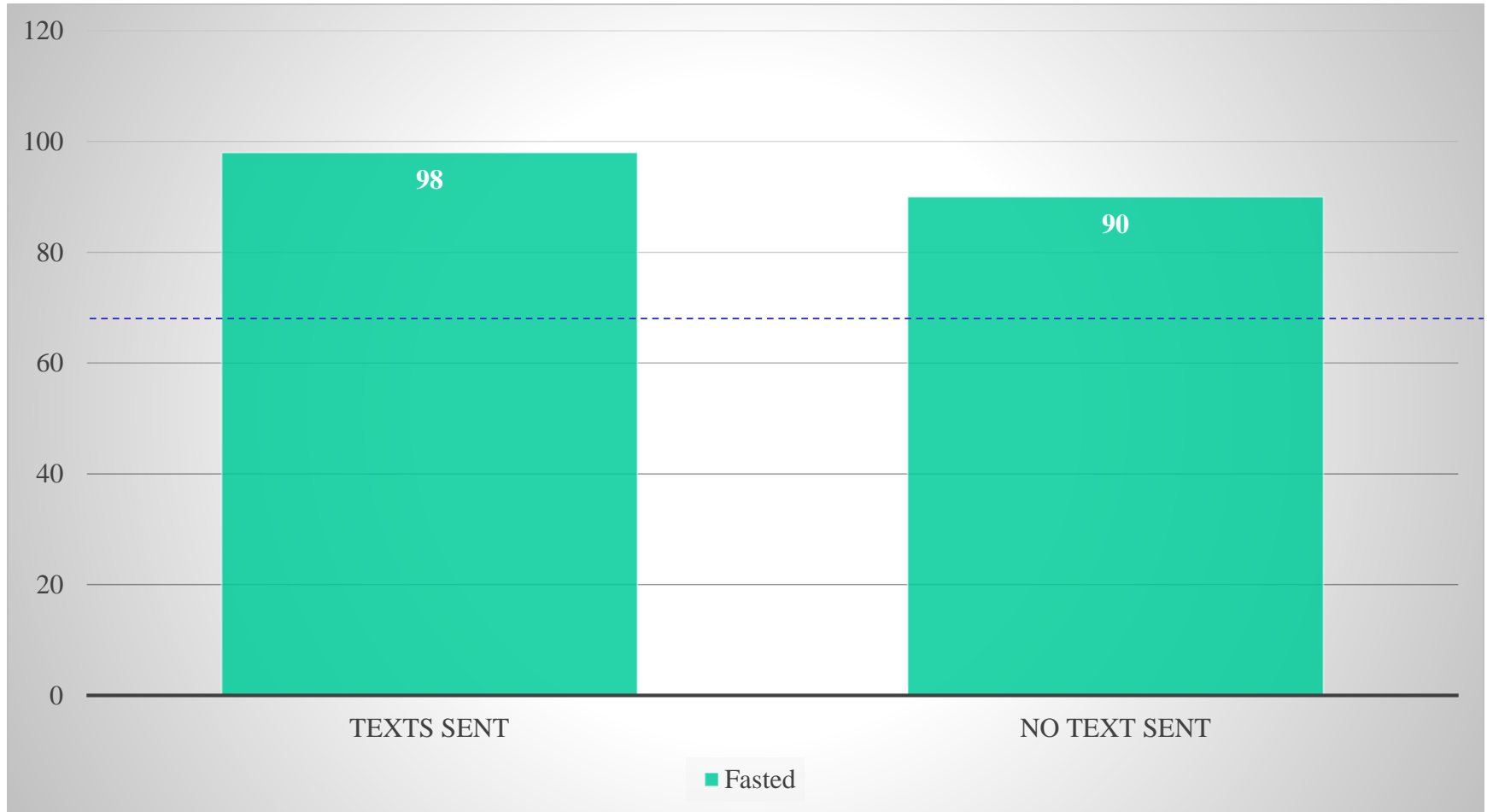


# Permission to Text by Age





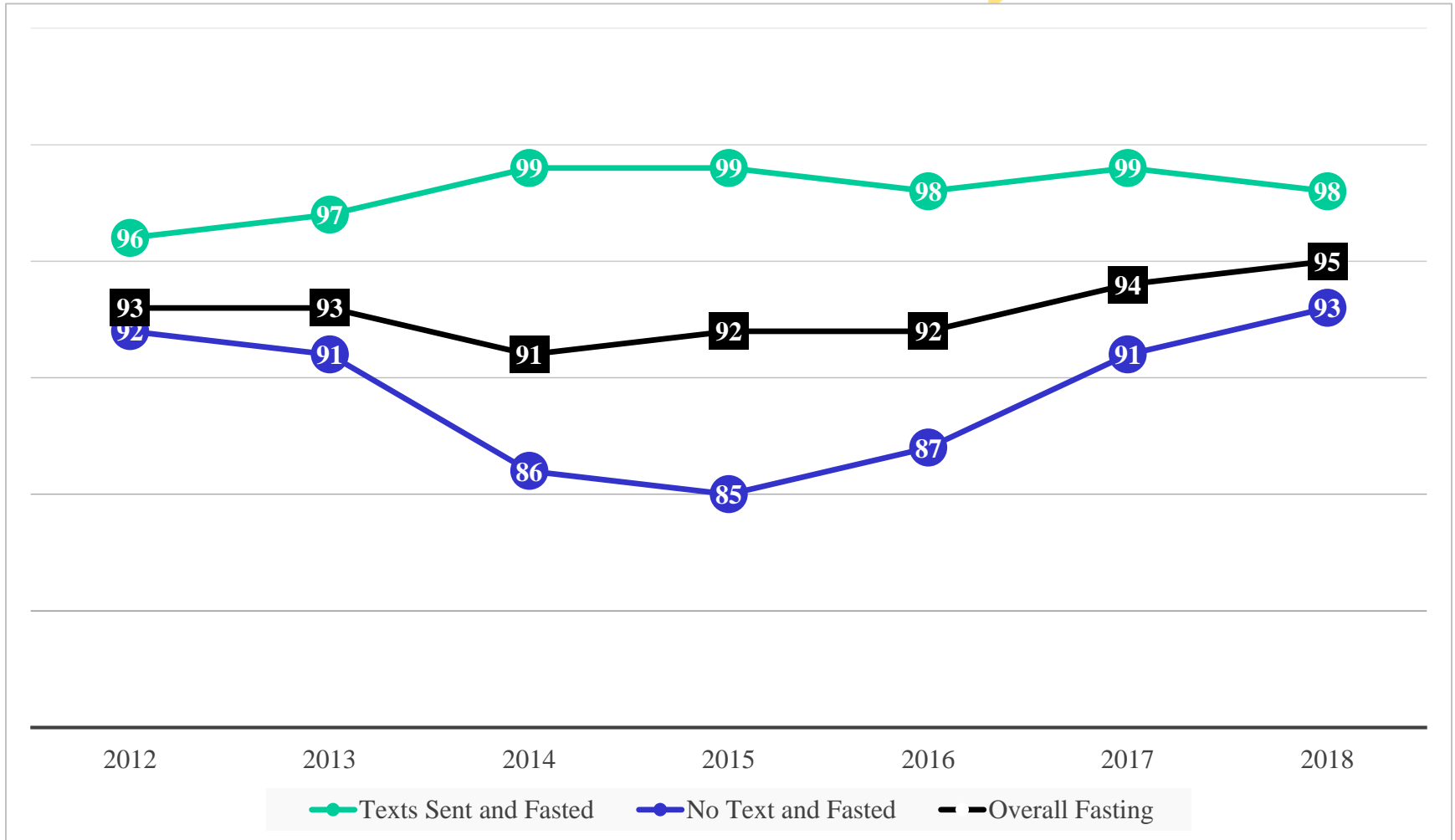
## ***Relationship between texts and fasting behavior***







## Texts Sent and Fasted by Year



\*Data from 2012 through 2018



## ***Final Thoughts***

- Inexpensive to set up
- Once set up, Automated
- Confidential



***Thank you!***

Stephen Bernas

Jay Clark

Brad Edwards

Jacquie Hogan

Douglas Williams

Sheryl Wood

Tatiana Nwankwo

Westat

NCHS

[SherylWood@Westat.com](mailto:SherylWood@Westat.com)

[bwt4@cdc.gov](mailto:bwt4@cdc.gov)