# National Center for Health Statistics Board of Scientific Counselors National Health Interview Survey Early Release Key Health Indicators Workgroup March 29, 2019 Meeting Summary

DR. SHERRY GLIED

NCHS BOARD OF SCIENTIFIC COUNSELORS MEETING

MAY 9, 2019

#### Key Health Indicators Workgroup: Members

- Dr. Sherry Glied
- Dr. Robert Santos
- Dr. Mark Hayward
- Dr. John Lumpkin
- Dr. Ninez Ponce

#### Key Health Indicators Workgroup: Background

- National Health Interview Survey (NHIS) Early Release (ER)
   Program originated in 2001 as an online quarterly report
- Provided researchers with cumulative estimates of key health indicators (KHIs) prior to release of final NHIS data
  - National trends 1997-2018
  - Single year subgroup estimates:
    - Age group and sex
    - Race/ethnicity
    - Metropolitan statistical area (MSA) status

### Key Health Indicators Workgroup: Background

- Purpose of current ER KHI report:
  - Quarterly periodicity allows for close to real-time tracking of trends
  - Also serves as report of nation's health and an evaluation tool for public policy
  - Recent change to dynamic format enables users to visualize and organize the data in a flexible and customizable way

#### Key Health Indicators Workgroup: Background

- 2019 NHIS questionnaire redesign
  - New questionnaire does not contain several of original key health indicators
  - Provides opportunity to reassess covariates and periodicity of product
  - Focus on adult health indicators

#### 2019 NHIS Redesign

- Motivation for redesign
  - Increased respondent burden
  - Decreased response rates
- Implications for KHI report
  - Changes availability for several indicators
    - Some change from annual to rotating years availability
    - Some are eliminated completely from questionnaire
    - Some have a sample size decrease due to only being asked of the sample adult or sample child vs. all persons in the household
    - Changes to question wording or context can affect tracking of trends

#### Key Health Indicators Workgroup: Purpose

- Discuss updating the KHI ER report in light of the redesigned NHIS launched in January 2019
- Specifically:
  - Prioritize indicators for discussion
  - Designate preferred indicators for inclusion in new KHI report
  - Evaluate criteria to drive selection of indicators
  - Prioritize potential covariates
  - Discuss periodicity of KHI ER report release
  - Discuss types of statistics to include

#### Potential Criteria for Selection of Indicators

- Sensitivity to policy
- Timeliness
- Asked consistently across time
- Reliable
- Representative of an issue
- Part of a parsimonious set of indicators capable of characterizing underlying behaviors (e.g., preventive care, care due to cost)
- Seasonally variable

- Indicators selected by 5+ participants (annual core):
  - Cigarette smoking, current
  - Electronic cigarette smoking, current
  - To reduce prescription drug costs, did not take medications as prescribed, past 12 months
  - Influenza vaccination, past 12 months
  - Work days missed due to illness/injury/disability, past 12 months
  - Washington Group composite disability indicator

- Indicators selected by 5+ participants (rotating core):
  - Received counseling or therapy from a mental health professional, past 12 months
  - Did not get needed mental health care due to cost, past 12 months

- Additional indicators (selected by <5 participants; annual core):
  - Additional mental health indicator options:
    - Regularly feel worried/anxious or take prescription meds to control it
    - Depression, ever diagnosed
    - Anxiety disorder, ever diagnosed

- Additional indicators (selected by <5 participants; annual core):</li>
  - Did not get needed medical care due to cost
  - Doctor visit for any reason, past 12 months
  - Hospital emergency department visit, past 12 months
  - Asthma episode, past 12 months
  - Hypertension, currently have or take prescription meds to control it

- Additional indicators (selected by <5 participants; rotating core):
  - Blood pressure check
  - Dental exam/cleaning
  - Regularly experience chronic pain
  - Leisure time physical activity

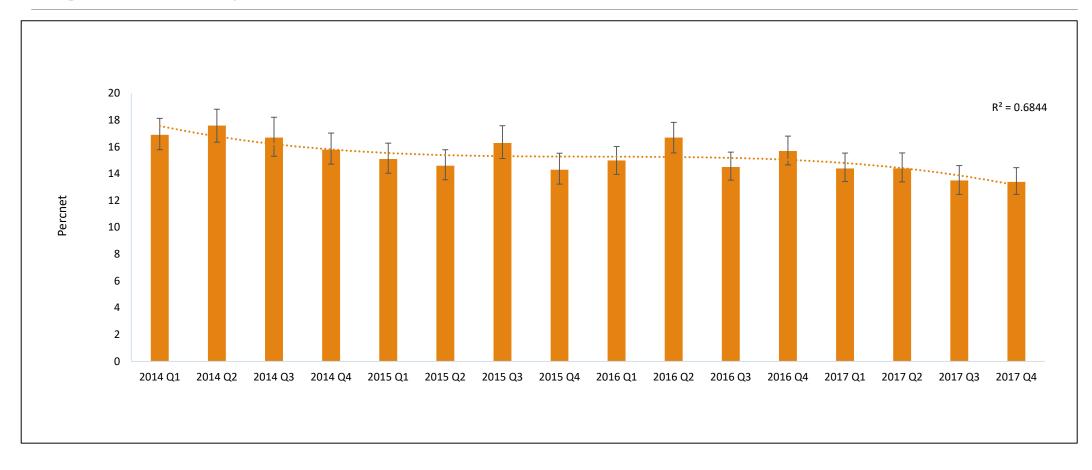
#### **Evaluation of Potential Covariates**

- Education
- Age
- Sex
- Race and Hispanic origin
- Metropolitan statistical area (MSA) status
- Nativity/citizenship

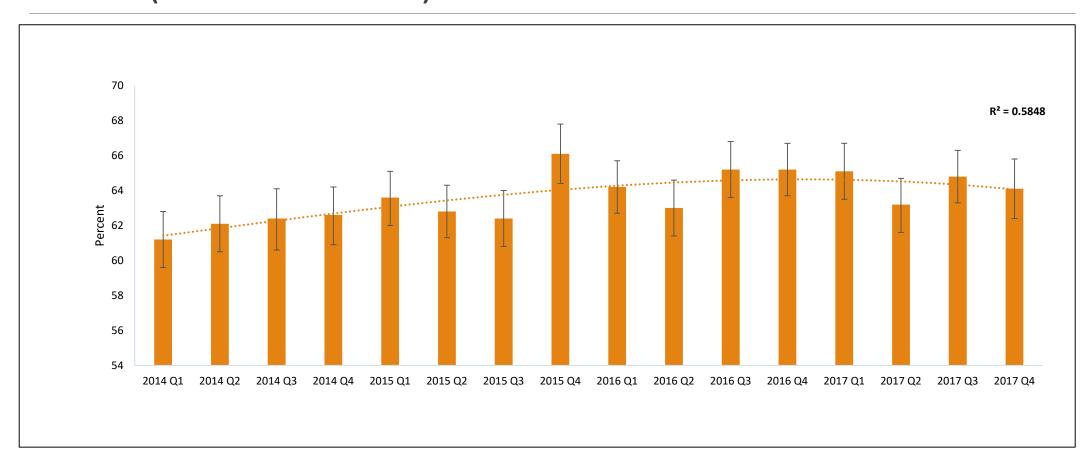
#### **Options for Periodicity**

- Should be dictated partially by sample size and by which quarterly estimates are most "useful and meaningful"
  - Usefulness and meaningfulness should be judged by whether variability is due to real public health differences or to systematic biases in methodology
- For consistency, provide quarterly national estimates and semi-annual subgroup estimates
- Workgroup analyzed past quarterly and semi-annual movement of selected KHIs

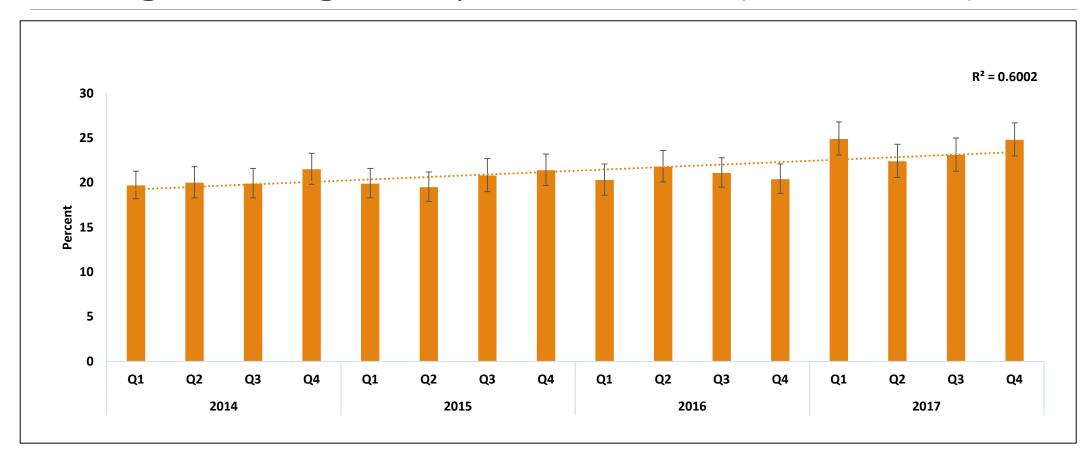
## Current cigarette smoking among adults aged 18 years and over (cubic trend)



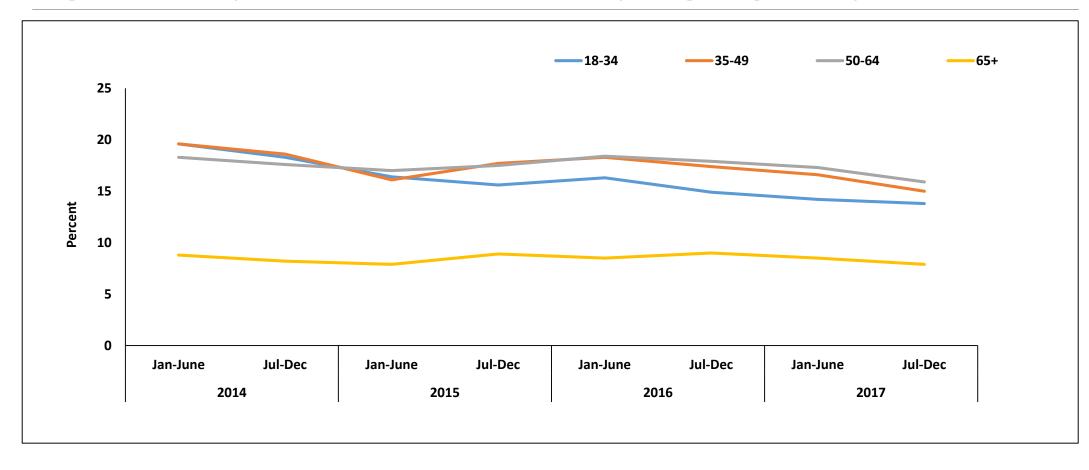
## Dental exam or cleaning during the past 12 months among adults aged 18 years and over (cubic trend)



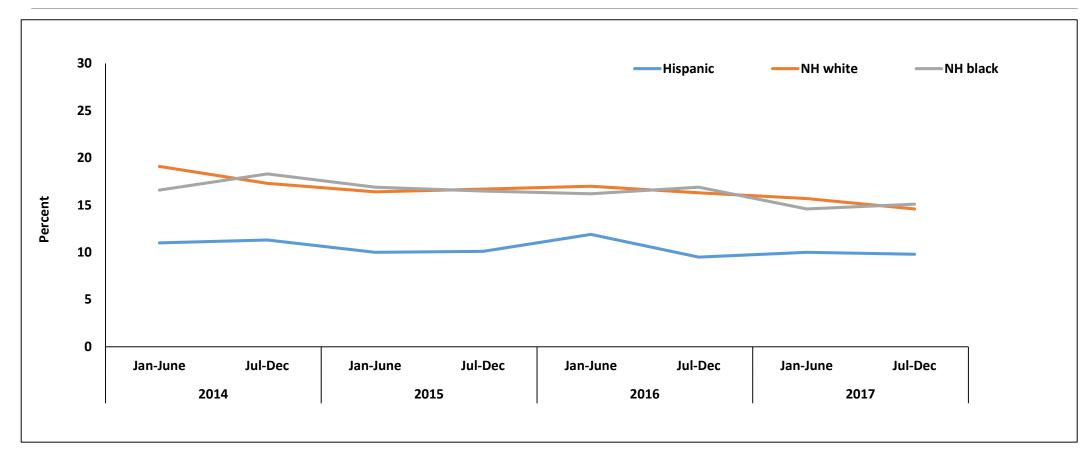
Felt worried, nervous, or anxious weekly or took prescription medications to control those feelings among adults aged 18 years and over (linear trend)



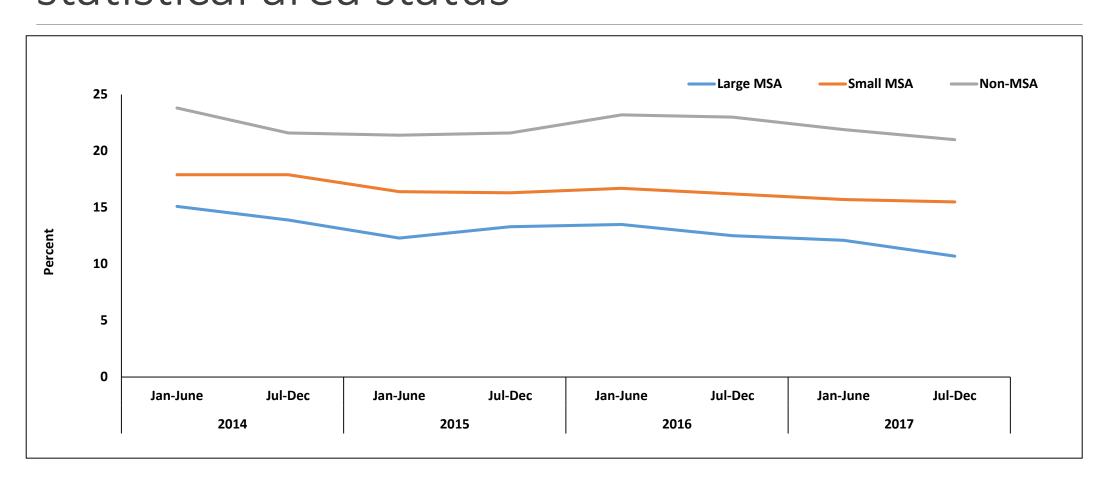
### Current cigarette smoking among adults aged 18 years and over, by age group



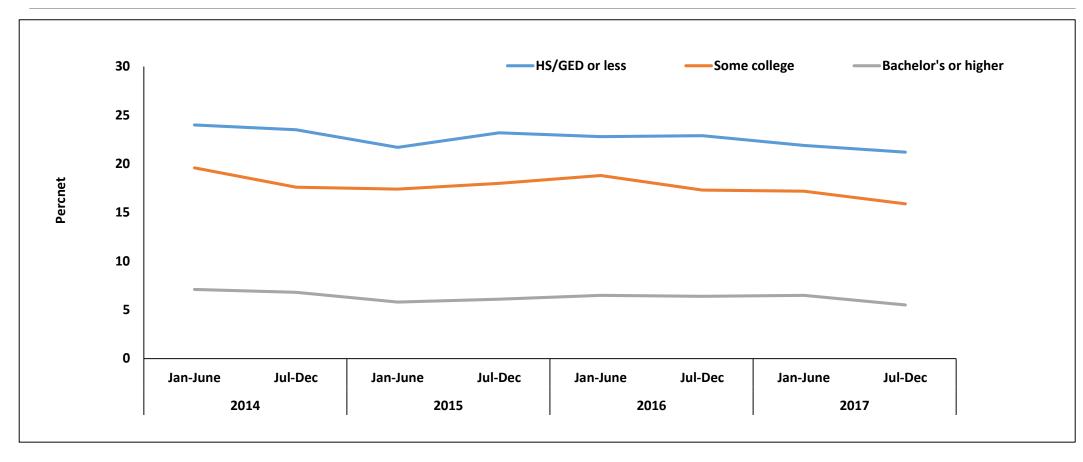
## Current cigarette smoking among adults aged 18 years and over, by race/ethnicity



## Current cigarette smoking among adults aged 18 years and over, by metropolitan statistical area status



## Current cigarette smoking among adults aged 18 years and over, by education



#### Options for Statistics to be Included

- Dependent on purpose
  - Public health dashboard: unadjusted 6-month estimates
  - Annual NHIS results: adjusted 6-month estimates
  - Currently, trends are unadjusted and race/ethnicity estimates are adjusted by age and/or sex
- Provide separate estimates for adults and children when both are available
- No definitive preference for inclusion of frequencies
- Include disclaimers about annual estimates being gold standard; changes in long-term trends

#### Process for Making Future Changes

- Solicit suggestions from users who are pulling data from the website
- Review and analyze metrics from the website in order to identify indicators to add to the KHI ER report
- Assess the usefulness of the KHI ER report for CDC policy priorities and initiatives regularly
- Add "ER indicators review" as a regular agenda item to BSC meetings