

# How Are We Doing with Cervical Cancer Screening in the U.S.?

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# Disclosures

- No financial relationships or conflict of interest to disclose

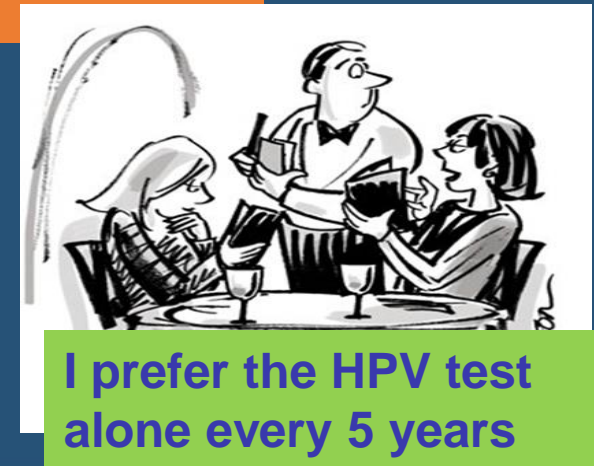
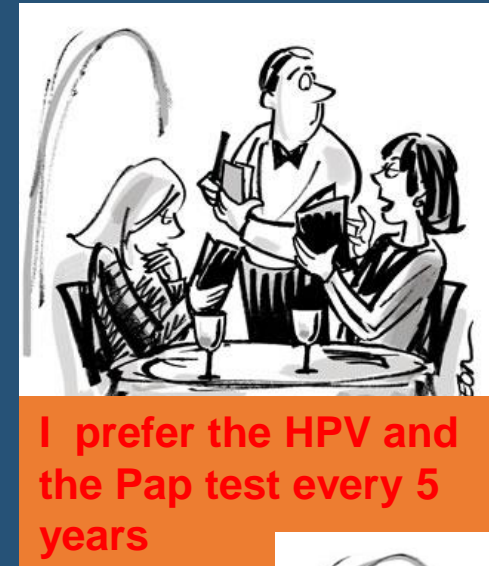
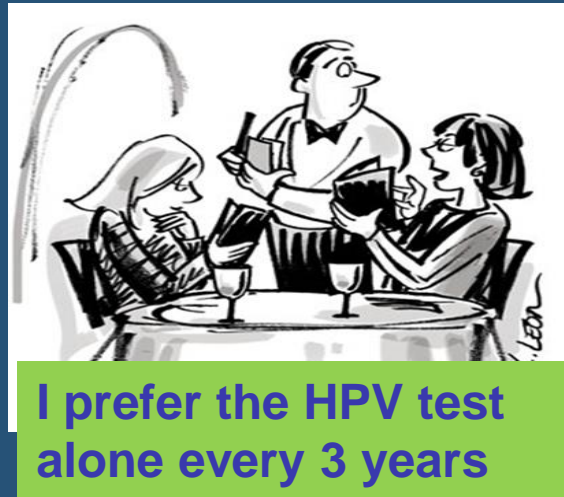
# Cervical Cancer Screening Options

- For women aged 21–29 years, Pap testing alone every 3 years;
- For women aged 30–65 years, either Pap testing alone every 3 years or Pap testing with human papillomavirus (HPV) testing every 5 years;
- For women aged 25-65 years, primary HPV testing every 3 years
- For women aged 30-65 years, primary HPV testing every 5 years (Draft guidelines)

# What Test Will be on the Menu and What Test Will You have?



every 3  
years

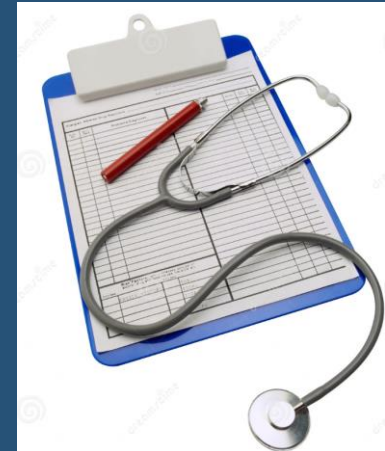


# Cervical Cancer Screening Practices

- Self-report in national surveys



- Administrative and medical chart data
- Screening data from special populations



# Self-report in national surveys

- National Health Interview Survey (NHIS), 2015
- Behavioral Risk Factor Surveillance Survey (BRFSS), 2016
- National Survey of Family Growth (NSFG), 2015
- HealthStyles, 2016
- DocStyles, 2015

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*An HPV test is sometimes given with the Pap test for cervical cancer screening.*

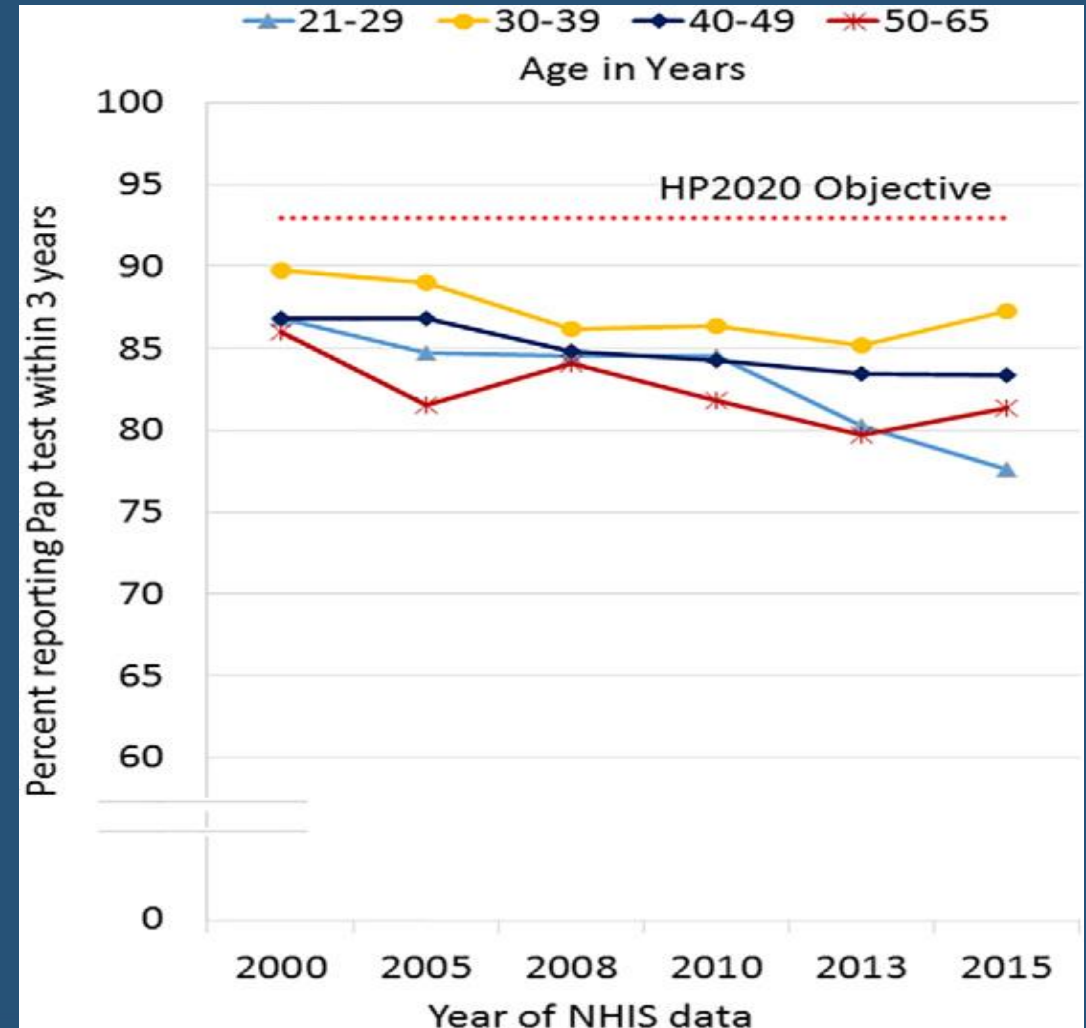
Have you ever had an HPV test?  
Yes ☐ No ☐

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# National Health Interview Survey, 2015

- Overall, 81% report Pap test within 3 yrs
- 1/3 of these reported co-test
- Lower rates reported by recent immigrants (67%), without insurance (61%), and without usual source of care (74%)
- Declines in Pap testing from 2000-2015; largest decline 21-29

Watson et al., Preventive Medicine 100 (2017) 243–247

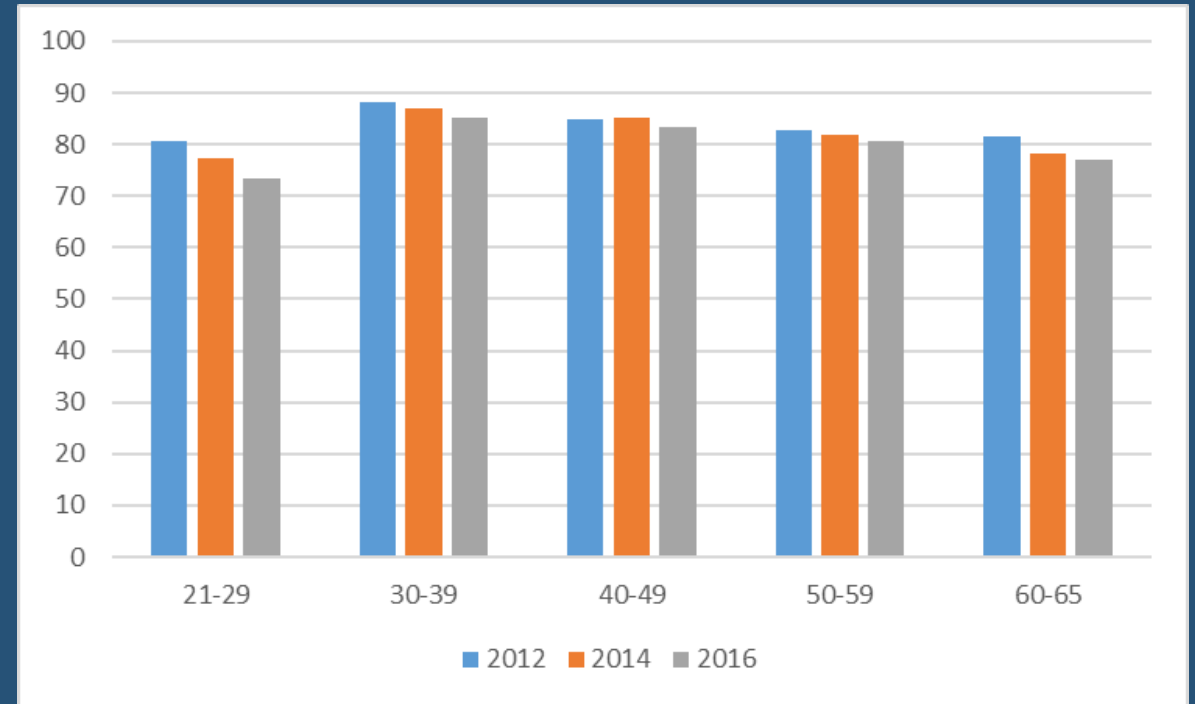




# Behavioral Risk Factor Surveillance System, 2016

- 80% reported Pap test within 3 yrs
- 41% reported co-testing
- Varies by state with lowest reported screening in the South
- 2012-2016, decline in screening for all with largest decline in 21-29

## Cervical Cancer Screening by age and year



Unpublished data



# National Survey of Family Growth, 2011-2015

- Women aged 15-44
- Over 90% reported screening in women 25-44 years.
- Most young women screened were sexually active with multiple sexual partners
- Over half of the younger women screened were vaccinated

Unpublished data

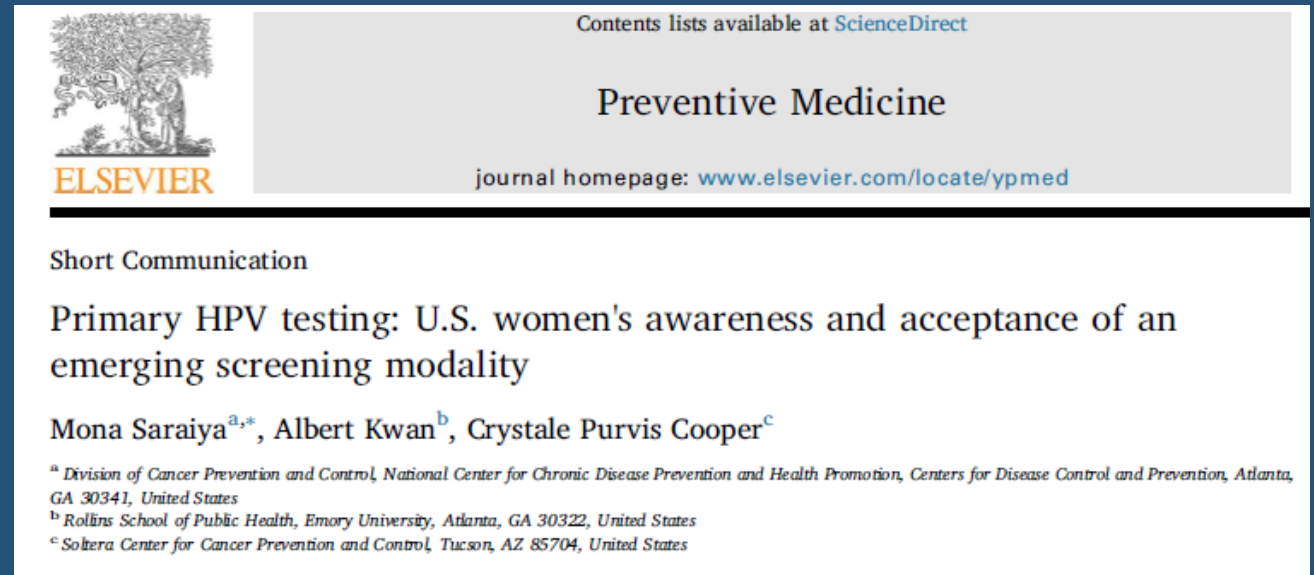


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# HealthStyles, 2015

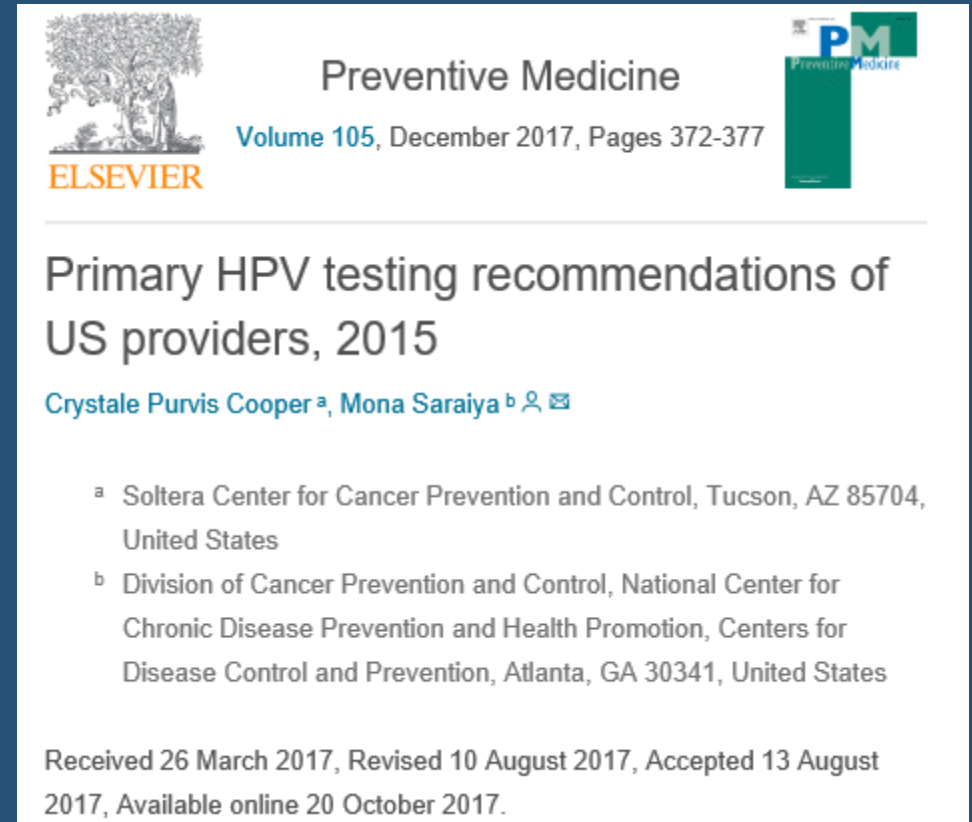
- Primary HPV testing every 3 years was the least accepted screening option (13%).
- Annual testing was the most common accepted screening option (41%).
- Most women reported that they were unsure how the HPV test is administered (65.2%) .
- Women were more open to HPV testing if they had HPV vaccine or prior HPV testing.



Saraiya M et al. Preventive Medicine, 2018, 108:111-114

# DocStyles, 2015

- 4 out of 10 primary care physicians report recommending primary HPV testing.
- Many of those physicians recommend primary HPV testing to women under 25 years of age.
- Over half of the physicians recommend frequent HPV testing every 1 to 2 years.



Cooper C et al. Preventive Medicine, 2017, 105:372-377

# Administrative and medical chart data

## Privately insured medical claims

- MarketScan Commercial Claims includes approximately 30% of the US population with employer-provided private health insurance

## Managed Care Setting

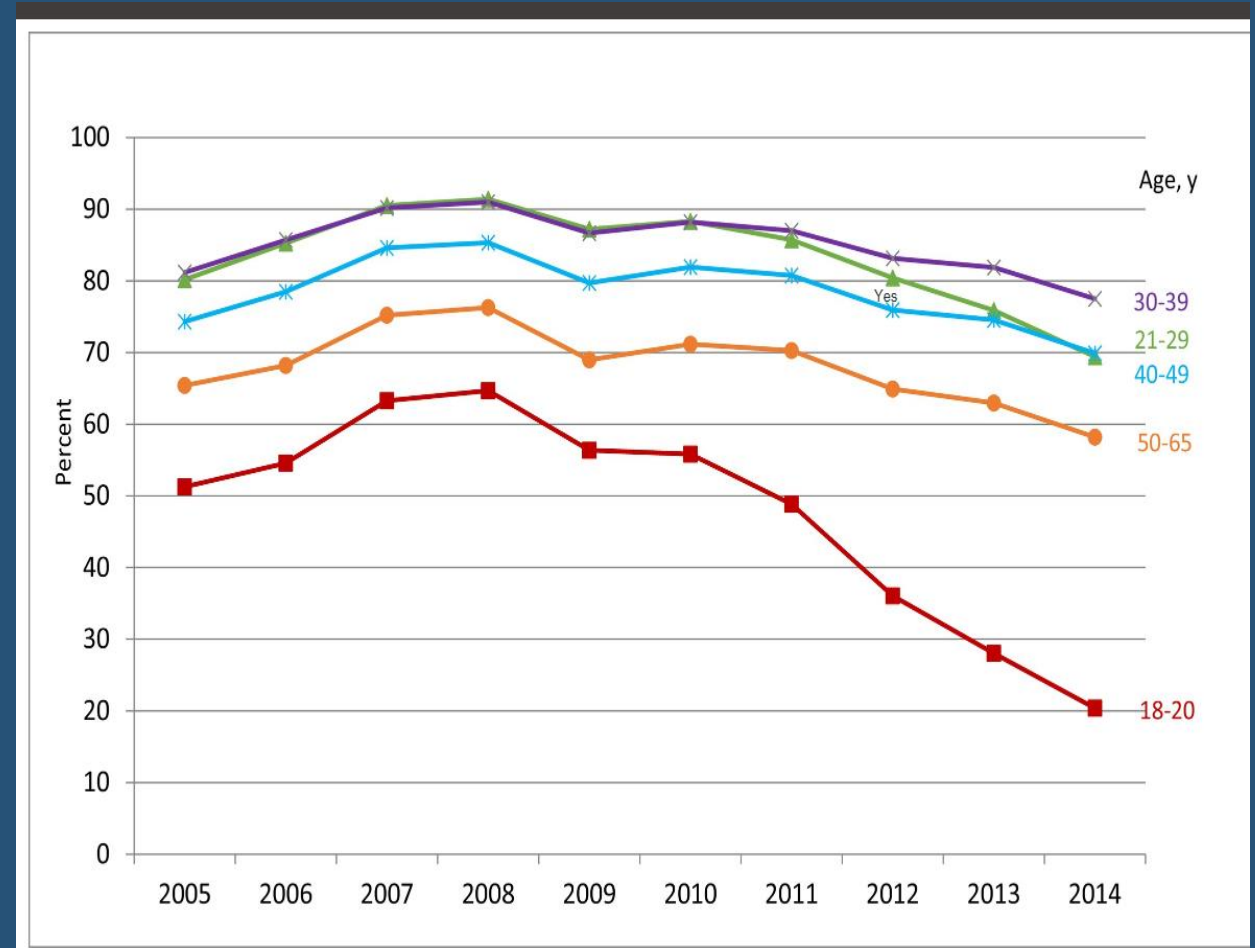
- Longitudinal medical record data Kaiser Permanente Northern CA which adopted triennial contesting in 2003

# Administrative Data, 2005-2014

- 3 year cervical cancer screening status among 42 million privately insured continuously enrolled women aged 18-65
- Overall declining screening rates over time
- Increased co-test use for all ages with 30-39 yr highest at 40%

Watson et al. Preventive Medicine Reports, 108, 9:124-130

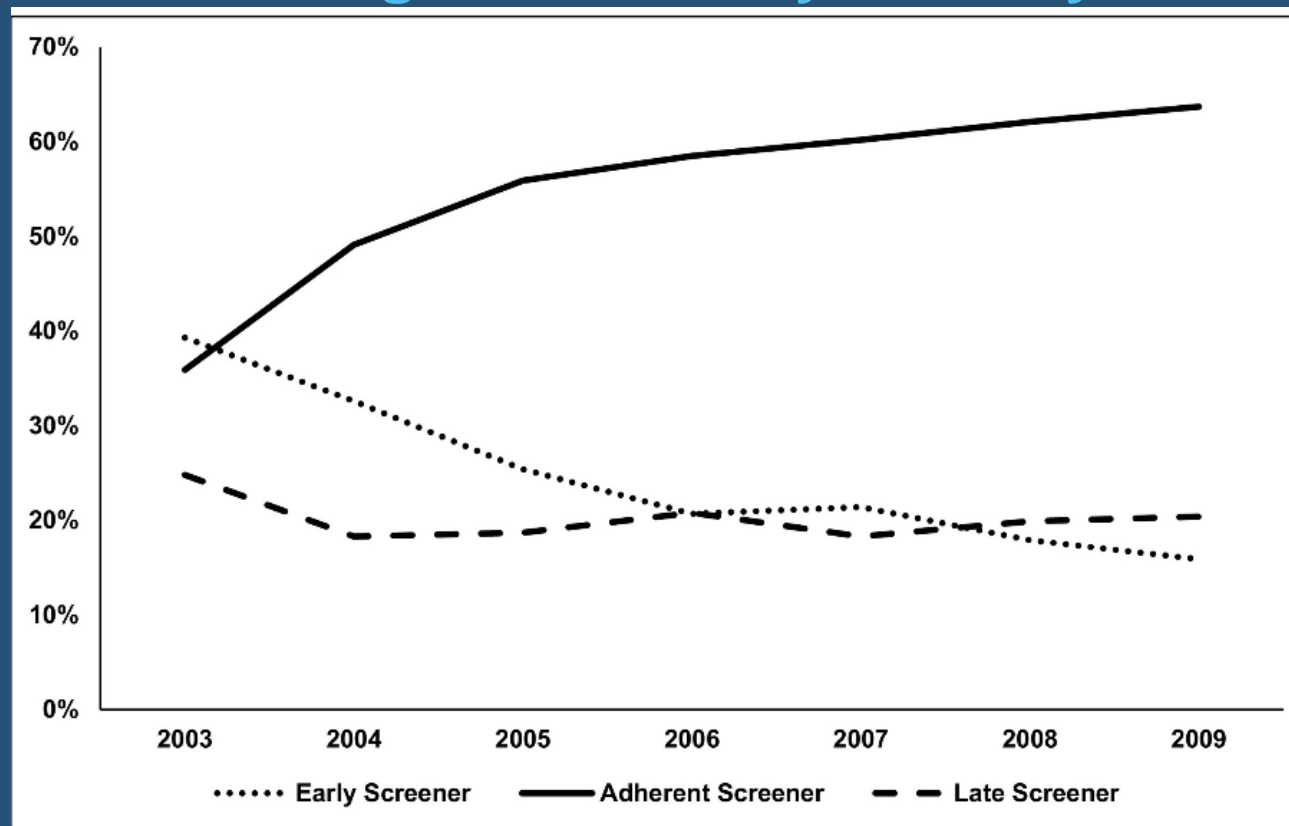
## Cervical Cancer Screening by year



# Managed Care Data, 2003-2015

- Longitudinal medical record data Kaiser Northern CA (KPNC)
- 491, 588 women aged 30-65 eligible for extended interval
- Screening intervals definitions:
  - Early <2.5 years
  - Adherent (2.5 < 3.5 years)
  - Late (3.5 < 6 years)
- Adherent screening increased in each calendar year cohort

## Screening behaviors by cohort year



Rendle et al Preventive Medicine, 2018, 109:44-50



# Screening data from special populations

- Population screening registry
  - New Mexico HPV and Pap Registry
- Underserved populations
  - CDC's National Breast and Cervical Cancer Early Detection Program
  - Title X





# New Mexico HPV and Pap Registry



## Population-based screening estimates

- Established in 2006 under state mandate as a public health surveillance activity
- Collects woman-based Pap, HPV, and cervical/vulvar/vaginal pathology

Unpublished data



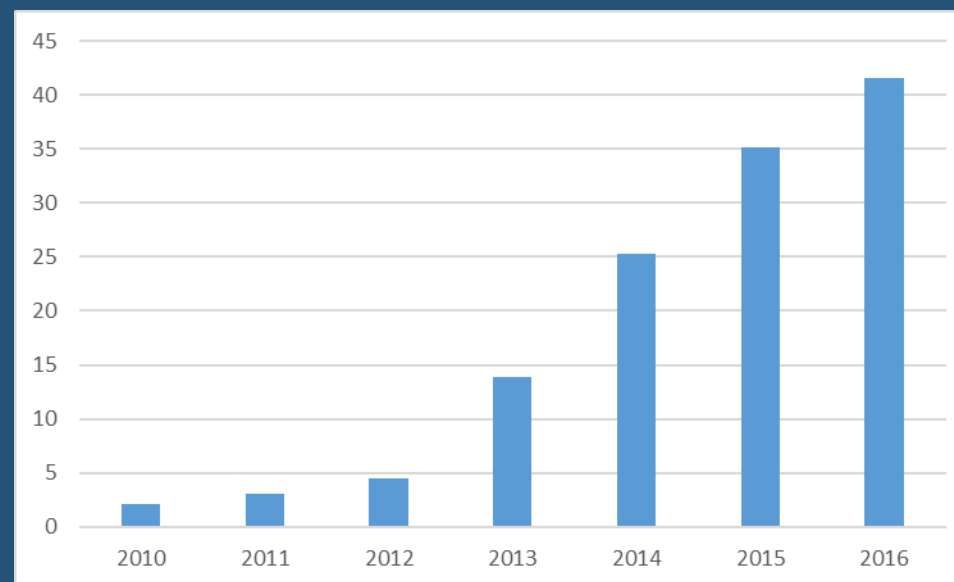
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- In 2016, provided cervical cancer screening and diagnostic services to 140,073 women and diagnosed 171 invasive cervical cancers and 5,919 cervical lesions, of which 40% were high-grade.
- Began reimbursing for co-testing in 2012, with an increase co-testing by year

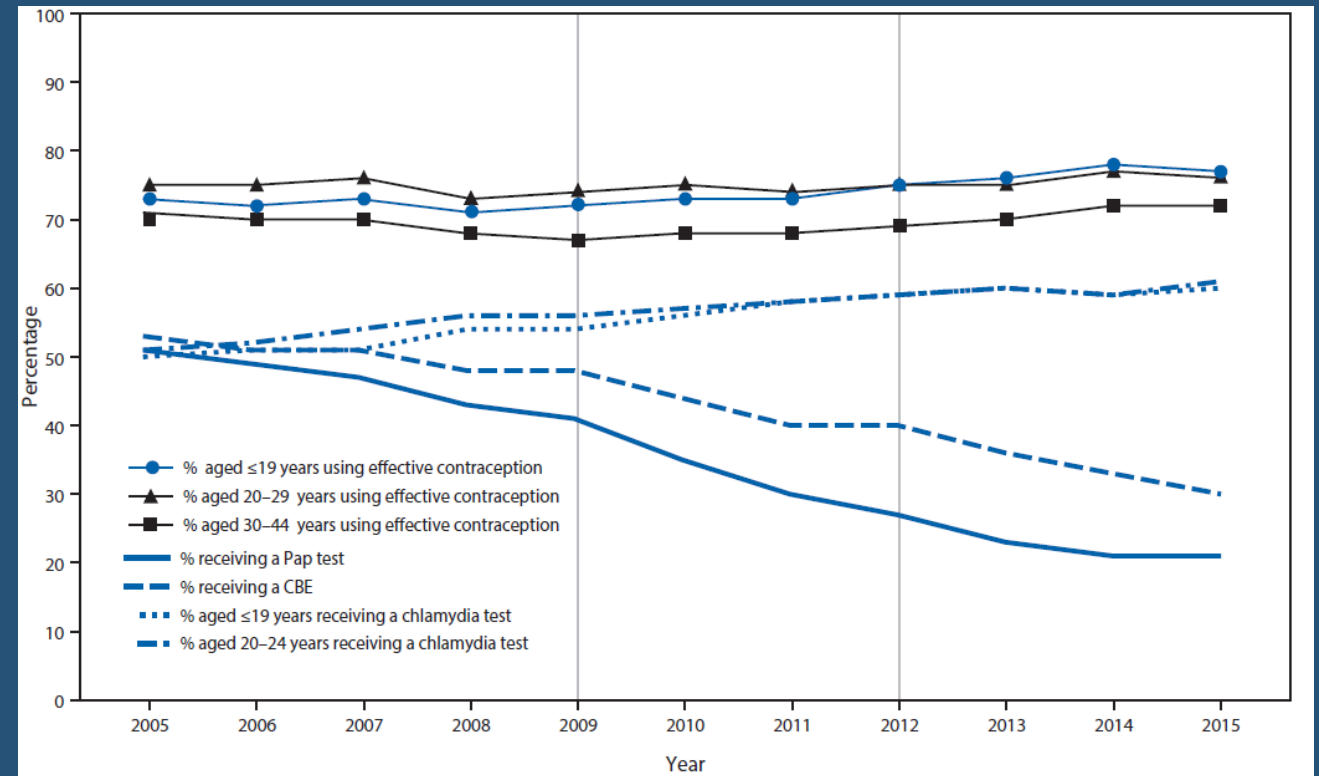
## % Co-testing in program



Unpublished data

# Title X-Funded Health Centers, 2005–2015

- Title X Family Planning Program supports the delivery of contraceptive and related preventive care including cervical cancer screening
- Data for 64 grantees in 50 States and DC which served 3.2 million to 4.3 million over time period
- % Title X clients screened annually for cervical cancer declined from 51% to 21% in 2015 – with the largest declines after major change in guideline recommendations



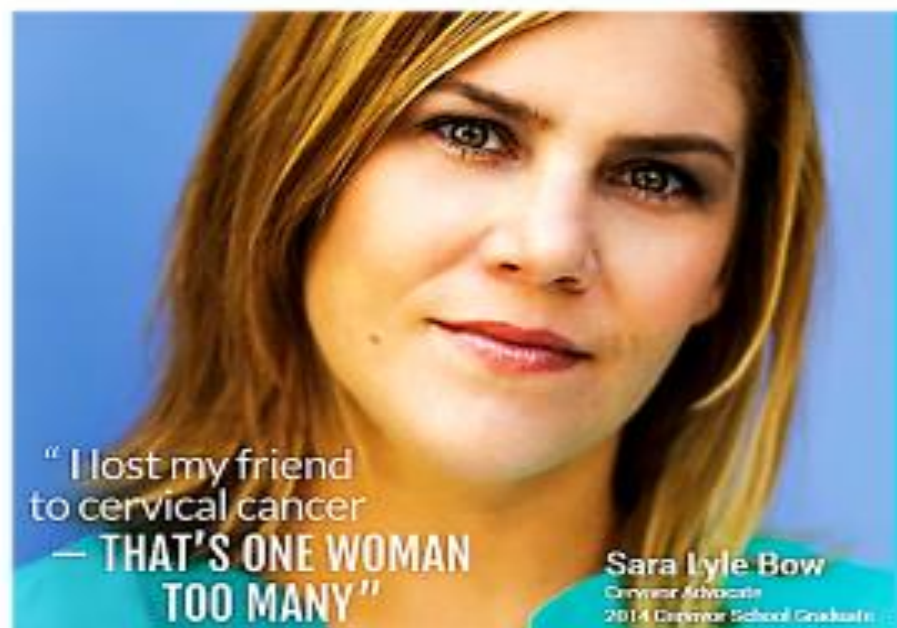
Fowler, et al. MMWR / September 22, 2017 / Vol. 66 / No. 37

# Conclusion

- National surveys report a decrease in screening for all age groups with the largest decrease in the younger women. Also reported is increase in co-test use.
- Annual Pap and HPV test still being accepted as routine practice.
- Claims data in privately insured show similar patterns to self-report with less screening documented by healthcare claims
- We are moving in the right direction – toward a longer screening interval as shown with managed care and NM

# C&CC Study

Case Investigation of Cervical Cancer Study



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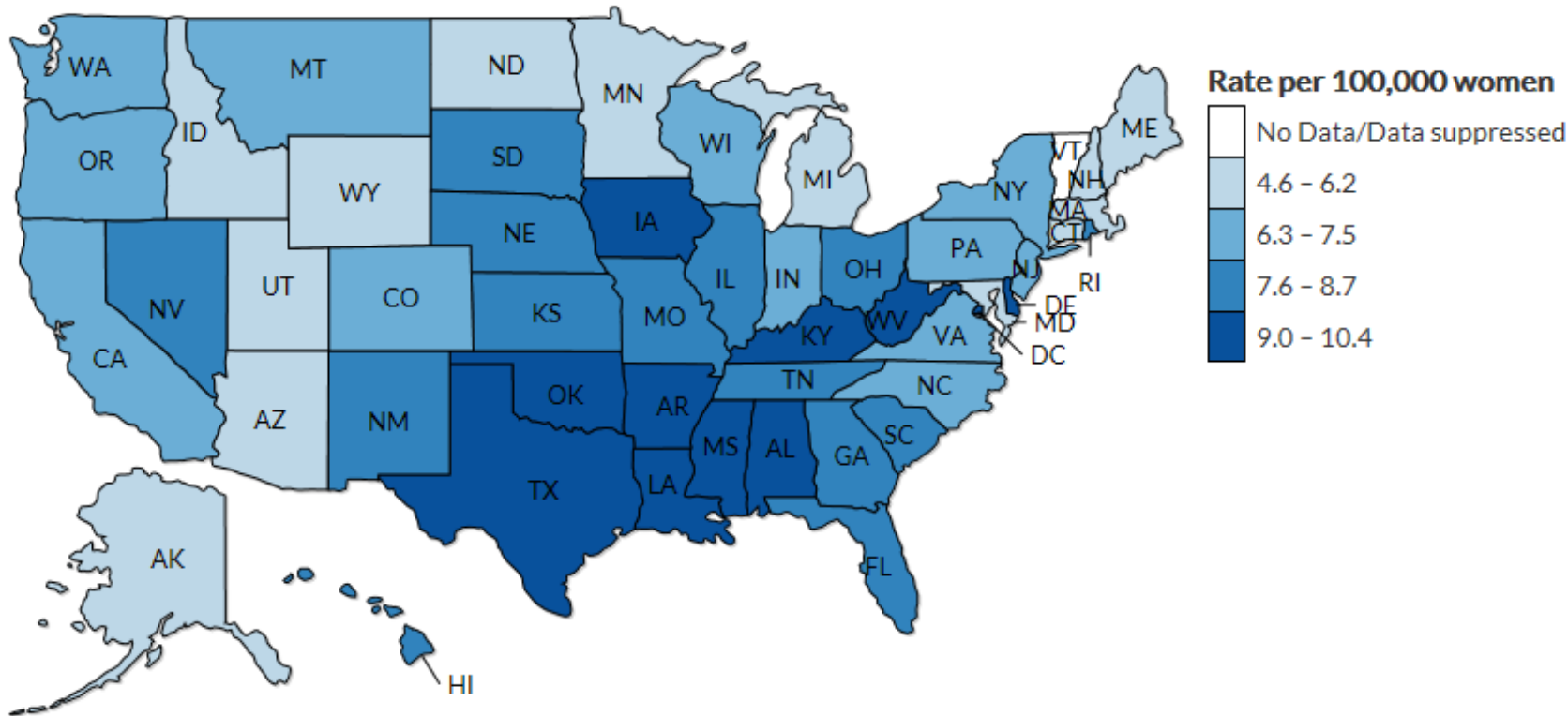
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# <https://gis.cdc.gov/grasp/USCS/DataViz.html>

## Rates of New Cancer Cases in the United States

Cervix, All Ages, All Races/Ethnicities, Female



In 2014, the latest year for which incidence data are available, **12,578 new cases of cervical cancer** were diagnosed, and **4,115 women died of cervical cancer** in the United States.

Cancer is the second leading cause of death in the United States, exceeded only by heart disease. **One of every four deaths in the United States is due to cancer.**

Source: U.S. Cancer Statistics Working Group. United States Cancer Statistics: 1999–2014 Incidence and Mortality Web-based Report. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; 2017.