

# ASCCP Guideline Changes and Management of the Abnormal Pap Test— Accurately Targeting Intervention

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*Improving Lives Through the Prevention & Treatment  
of Anogenital & HPV-Related Diseases*

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# Disclosures

- No financial relationships or conflict of interest to disclose.

# Background

- The Center for Lower Genital Tract Disease at Brigham and Women's Hospital is a referral center for the evaluation & management of abnormal Pap tests or HPV results.
- Staffed by residents and faculty from Harvard Medical School.
- Data on patient demographics, risk factors, clinical characteristics, as well as cytology and histology results is entered into a registry,



# Timeline

Abnormal Pap Smear Registry started (2006)

Based on published literature and preliminary management discussion we implemented ASCCP guidelines in advance of publication (2010-2013)

2006:

Chapter 58 signed into Massachusetts state law requiring universal health insurance.

2012:

ACOG, ACS, UPSTF update screening guidelines

2013:

ASCCP published management guidelines

2014:

Affordable Care Act signed into law.

HPV testing approved (2003)

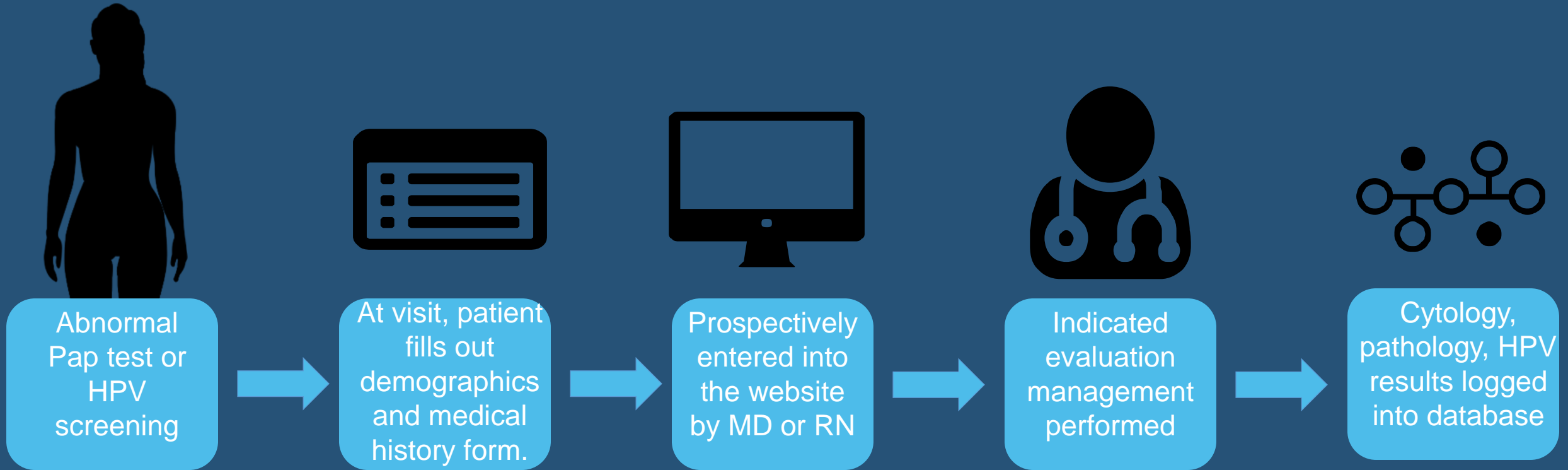
# Background

- Updates to ASCCP management guidelines sought to minimize invasive procedures while still preventing cancer, and cancer precursors.
- These guidelines incorporated patient factors including patient age, Pap test screening history, and human papilloma virus (HPV) test result.
- Guidelines were based mostly on data from Kaiser.
- Further study is warranted to understand if they apply across a variety of populations and accomplish their goals.

# Objectives

- To examine how changes to the American Society for Colposcopy and Cervical Pathology (ASCCP) guidelines impact distribution of high-grade dysplasia and cancer as well as rates of intervention among patients with abnormal cervical cancer screening seen in an academic teaching clinic.

# Study Design



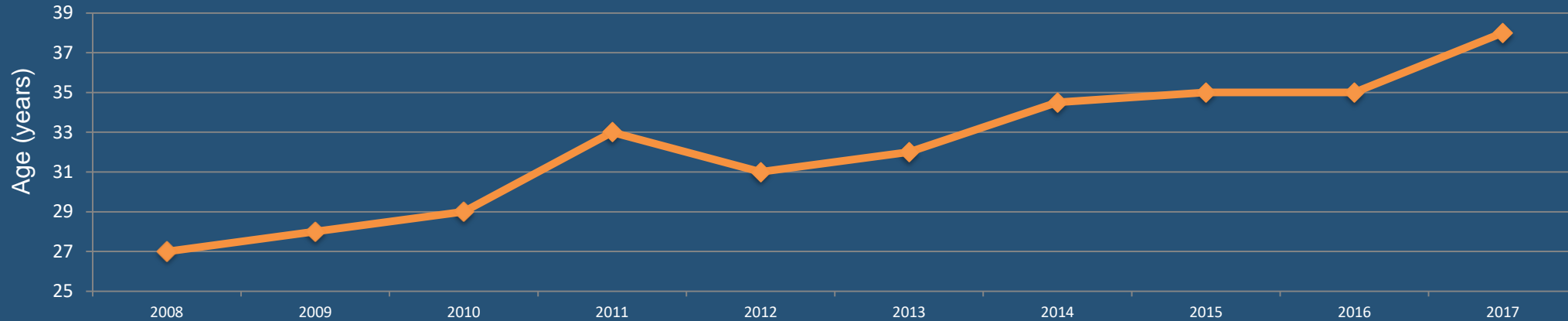
# Study Design

- Study period January 1, 2008-December 31, 2017.
- Women referred to the Center for Lower Genital Tract Disease with abnormal Pap test or HPV screening identified.
- Women without documented cytology or histology results excluded.
- 5,625 women seen over 15,127 visits included in subsequent analysis.

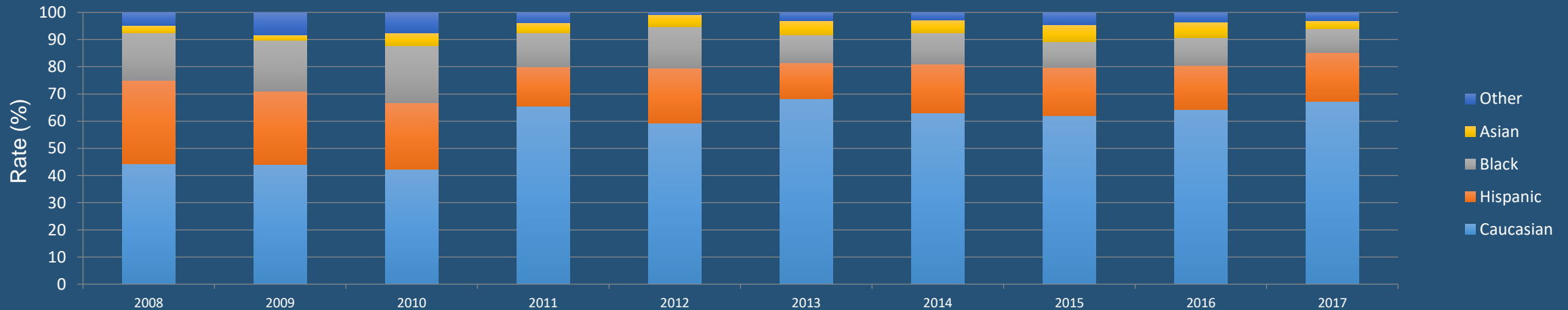


# Patient Characteristics

- Median *patient age* was significantly higher over time ( $p < 0.0001$ ):

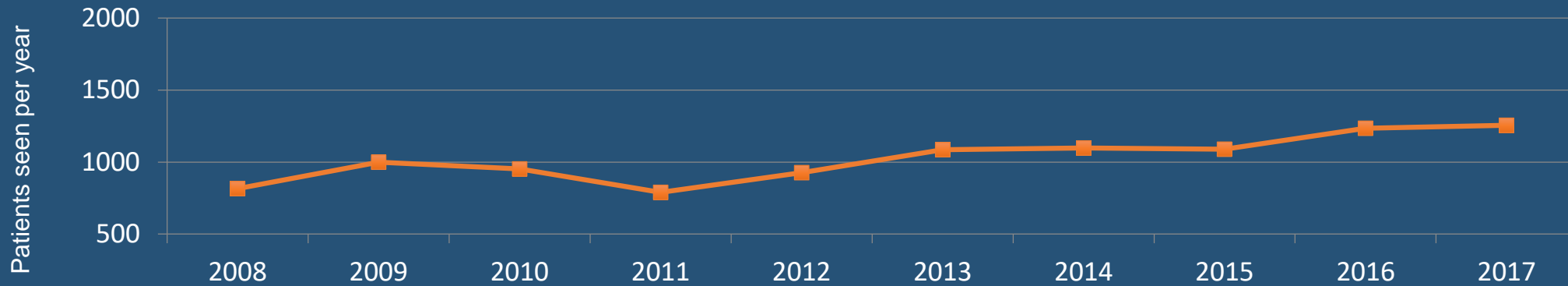


- There was decreased *ethnic and racial diversity* over time ( $p < 0.0001$ ):

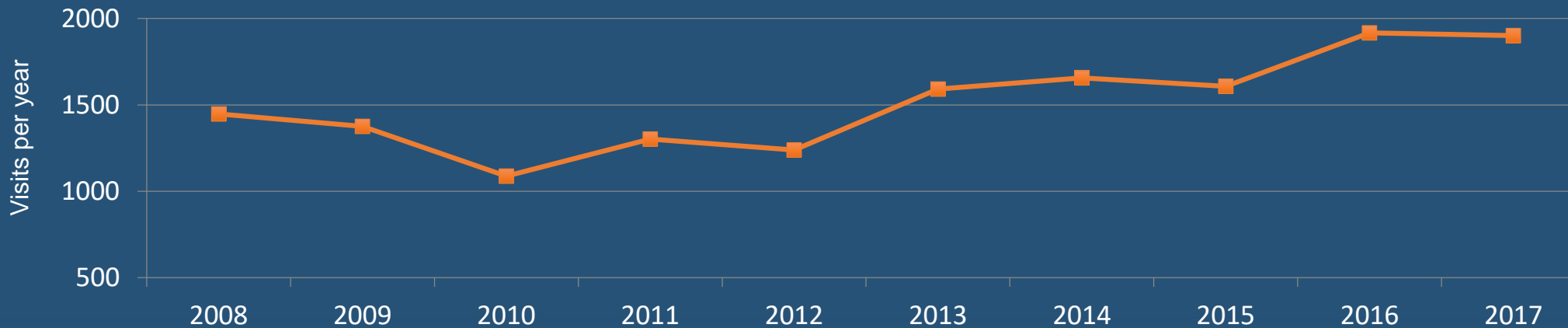


# Patient Characteristics

- Number of *unique patients* seen per year increased over time:

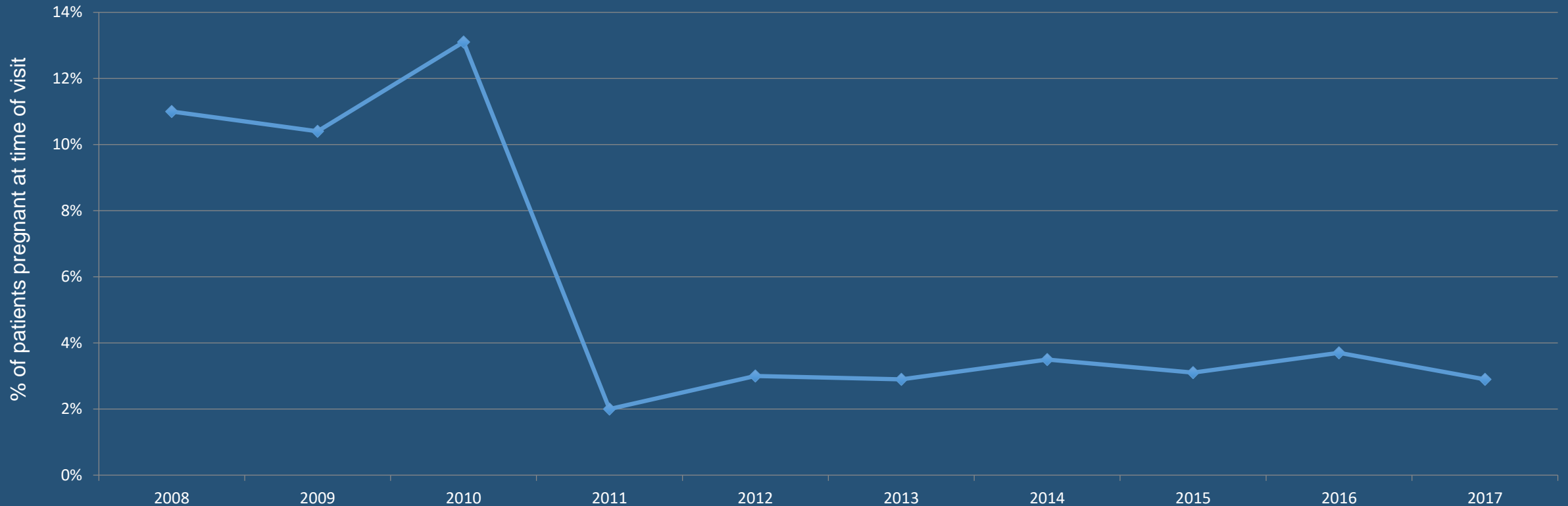


- Number of *patient visits* per year increased over time:



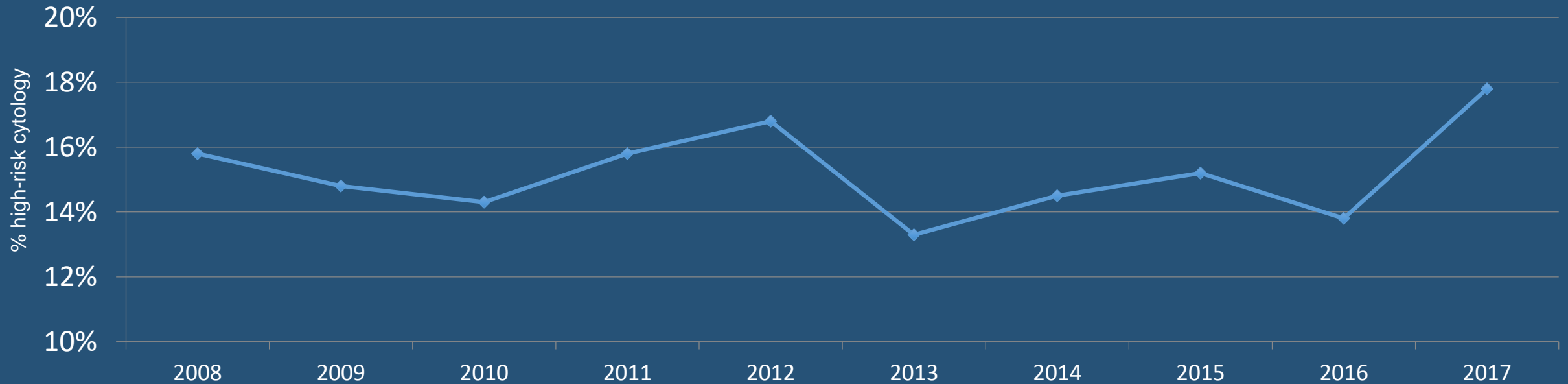
# Patient Characteristics

- Fewer *pregnant patients* were served over time ( $p < 0.0001$ ):



# Trends in Referral Pap Test

- There were no differences in rates of *high-grade cytology* at time of referral (p=0.61):

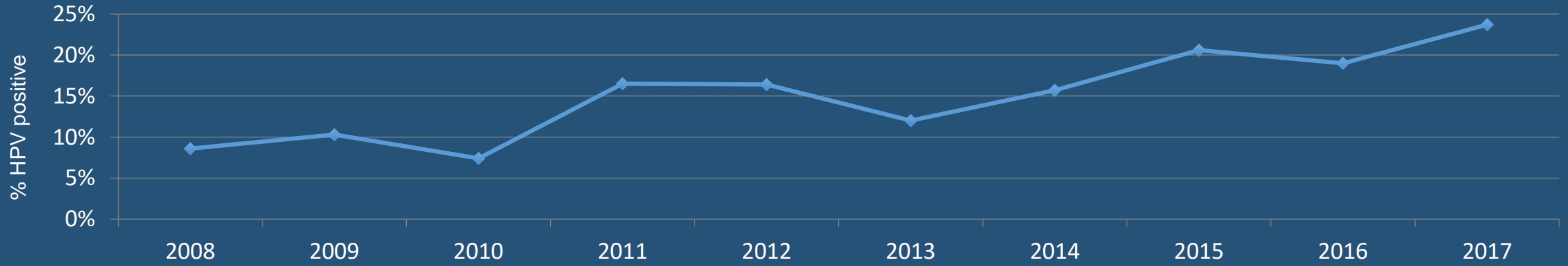


-High-risk cytology: CA, ACIS, AGC, SILLHG, ASC-H

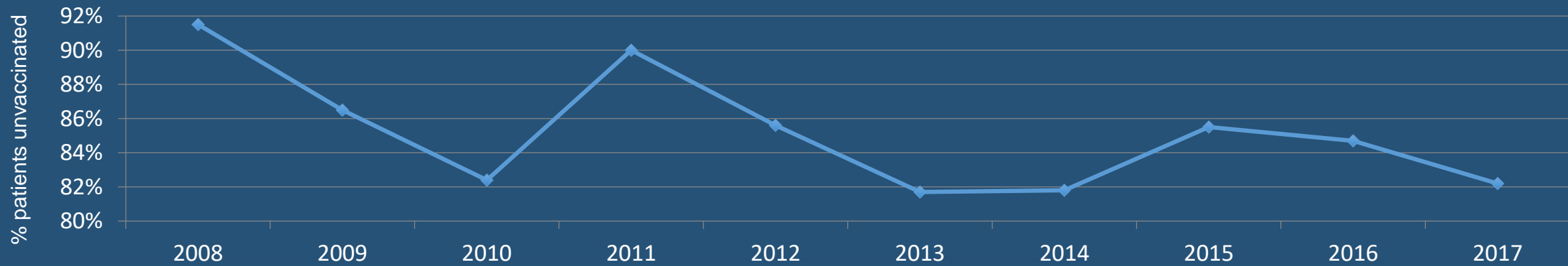
-Low-risk cytology: Normal, ASCUS, SILLG

# HPV Testing and Vaccination History

- **HPV positivity** at time of referral increased over the study period ( $p=0.0001$ ):

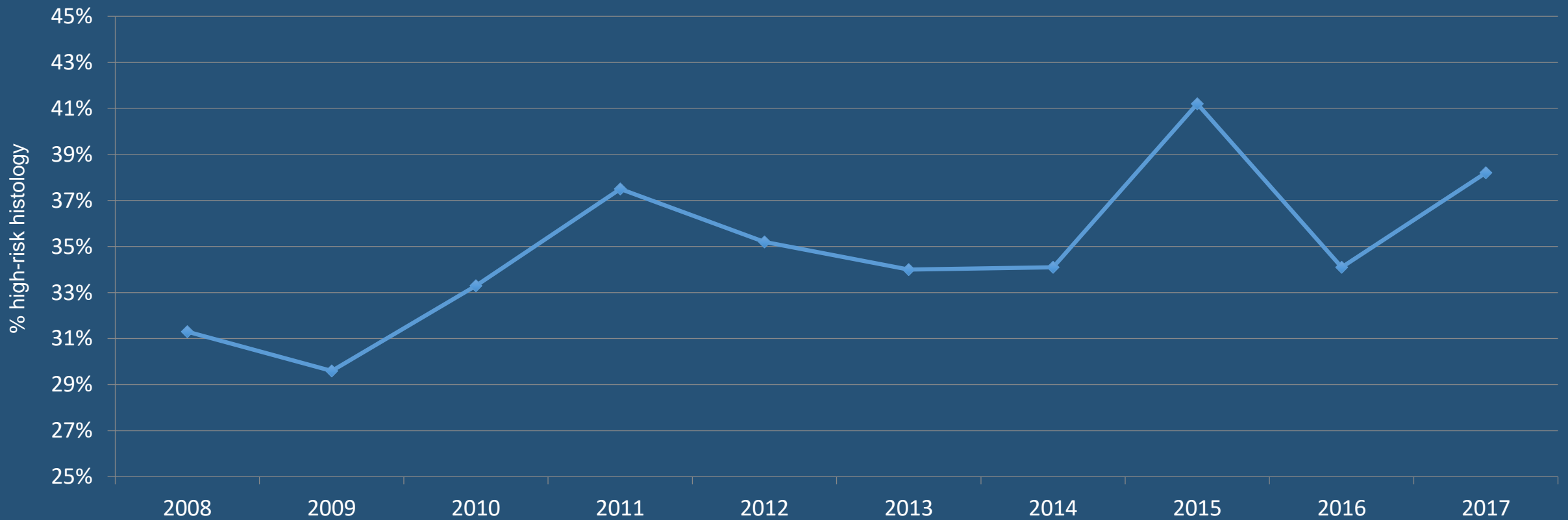


- Rates of **unvaccinated patients** decreased over the study period ( $p<0.0001$ ):



# Trends in Histology

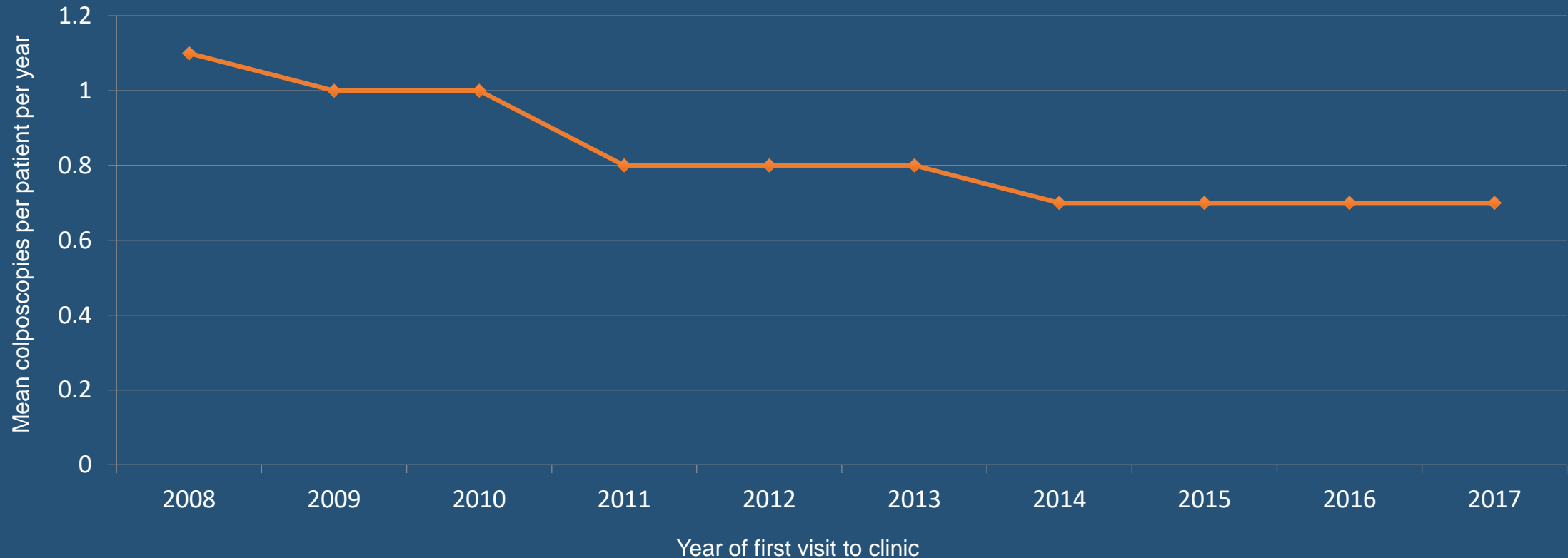
- Rates of *high-risk histology* were unchanged over time ( $p=0.70$ ):



-High-risk cytology: CA, ACIS, AGC, SILLHG, ASC-H

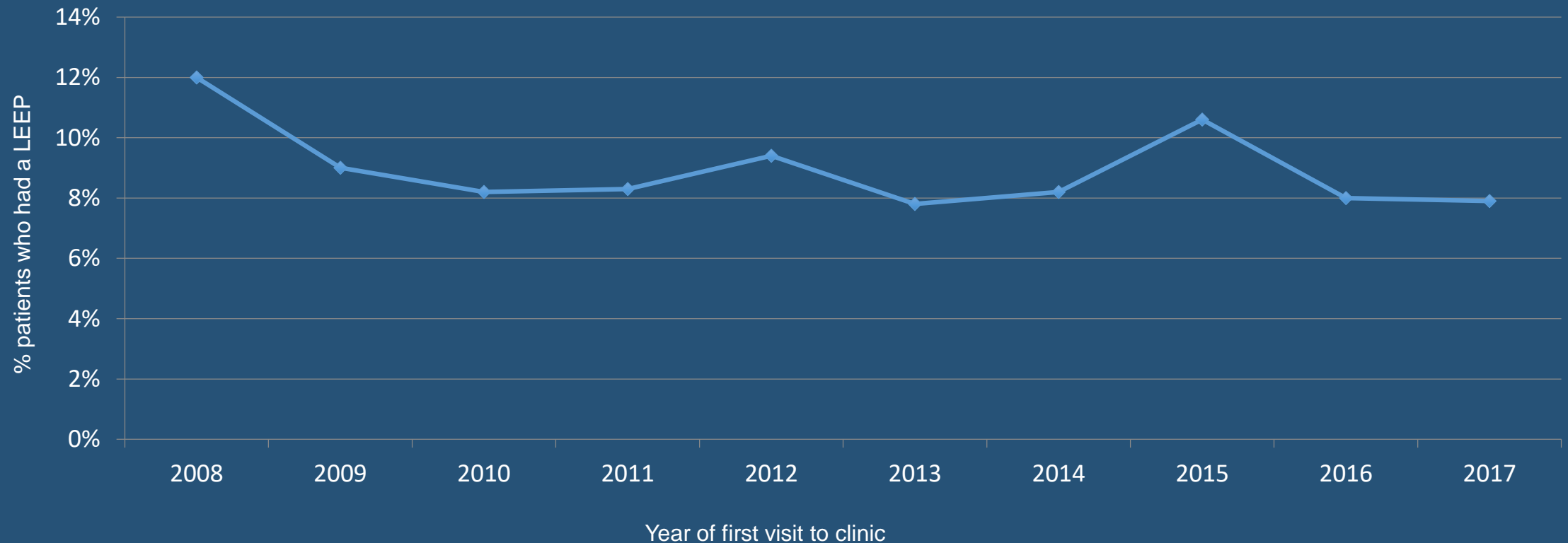
# Trends in Intervention

- There was a lower mean *number of colposcopies* performed per patient over time ( $p < 0.0001$ ):



# Trends in Intervention

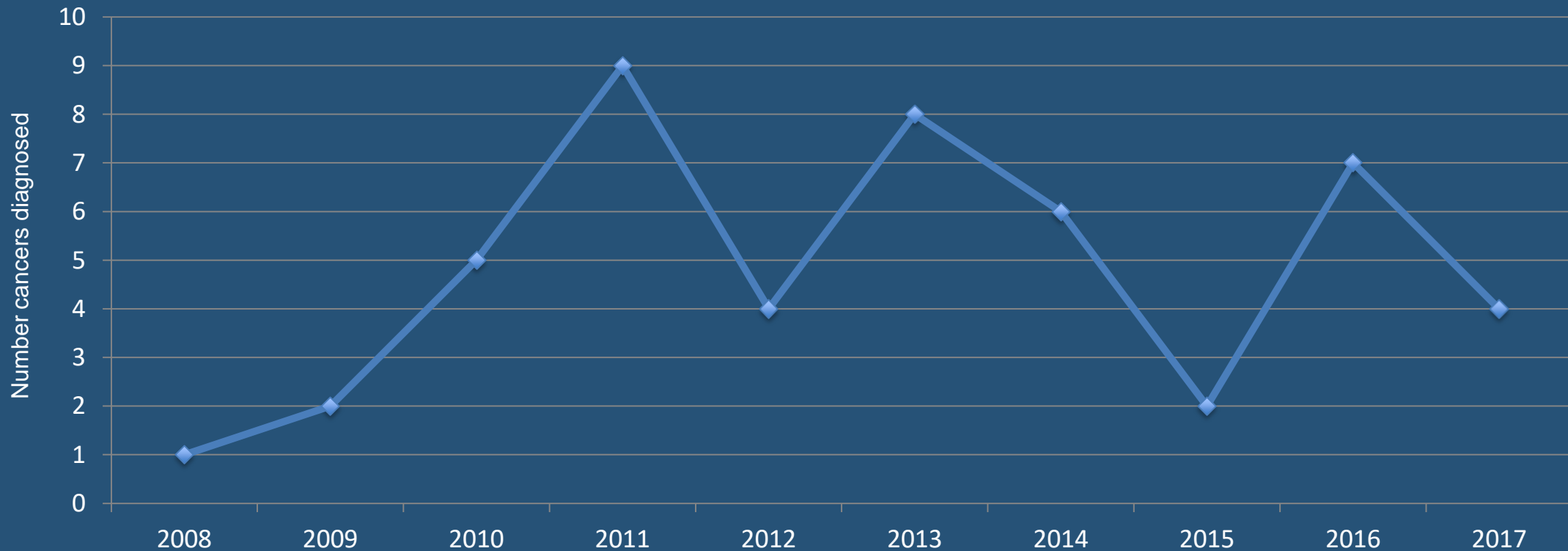
- There was a lower mean *number of LEEPs* performed per patient over time ( $p < 0.02$ ):





# New Cancer Diagnoses

- There was no increase in *new cancer diagnoses* during the study period ( $p=0.29$ ):



# Conclusions

- Fewer younger and pregnant patients were referred to clinic and subsequently underwent interventions.
- There was a lower rate of intervention (colposcopy, LEEP), but no apparent overall change in the number of cancers diagnosed.
- Findings suggest that guidelines have been successful in referring appropriate patients for evaluation, with on average fewer procedures performed.