

PATH →
to prevention

Preventing HPV Cancers with Rural Communities: Updates and Opportunities

Quarterly Updates Meeting

May 22, 2024

1:00 – 2:00 pm Central Time



**HPV Cancer
Prevention
Program**

stjude.org/hpvrural



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Welcome

Cristobal Valdebenito
Program Coordinator
HPV Cancer Prevention Program



**HPV Cancer
Prevention
Program**

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AGENDA

- Welcome
- Progress on Priority Action Steps to Increase HPV Vaccination Coverage with Rural Communities
- Best Practices, Challenges, and Solutions to HPV Vaccination in Rural Areas: A Qualitative Study from Three States
- Discussion
- Next meetings

Progress on Priority Action Steps to Increase HPV Vaccination Coverage with Rural Communities

Cristobal Valdebenito
Program Coordinator
HPV Cancer Prevention Program



**HPV Cancer
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Program**

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Rural HPV Vaccination Priorities



Start at Age 9

Promote starting HPV vaccination at age 9 in rural communities.



Existing Resources

Compile and share existing resources for addressing HPV vaccination with rural communities.



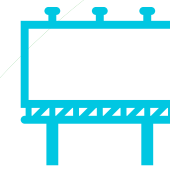
Training Providers

Develop or adapt health care provider and health care professional HPV vaccination training resources for those serving rural communities.



Advocacy and Policy

Explore policy influences on HPV vaccination in rural areas.



Communication

Develop, test, and disseminate easy-to-use messages for rural audiences.



Data

Review and update existing resources and data on HPV vaccination and HPV cancers in rural communities.

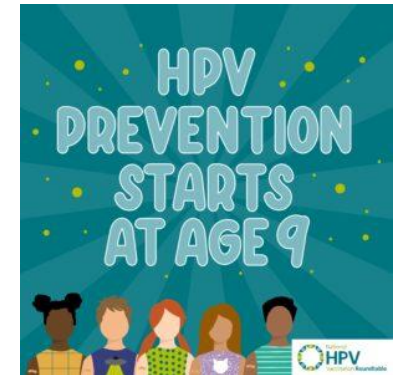
Rural Priority Action Steps: Start at Age 9

9

Start at Age 9

- ACS National HPV Vaccination Roundtable has many resources for starting HPV vaccination at age 9:
 - Amazing suite of resources already available
 - Access at: <https://hpvroundtable.org/start-hpv-vaccination-at-age-9/>
- Kentucky Public Health:
 - Provider and health system toolkit
 - Advocacy and parent toolkit
 - Start @ 9 HPV shareable graphics
- **Call to Action:**
 - **What adaptations are needed for start at age 9 HPV vaccination materials for rural settings specifically? Use the chat to weigh in.**

Promote starting HPV vaccination at age 9 in rural communities.



HPV START @9
Vaccination Toolkit

Human Papillomavirus or HPV is a common virus that can lead to many different types of cancer later in life.

Starting the 2 dose HPV vaccination series at age 9 is the best way to protect your child's body from serious diseases caused by HPV.

Learn more by reviewing the resources below.

[Click Here to View Shareable HPV Awareness Videos](#)

A photograph of five diverse children (three girls and two boys) standing together and smiling. They are wearing casual clothing like t-shirts and jeans.

Rural Priority Action Steps: Existing Resources and Training Providers

- Goal: assess and feature on St. Jude rural webpage and in rural communications
- Search Online: Identify resources for improving HPV vaccination with rural communities
- Encourage Partnership Sharing: Organizational partners to share relevant resources
- Assess Suitability: Evaluate existing resources for relevance and applicability
- Online Access: Create a hub for accessing suitable materials
- Promote Materials: Integrate suitable resources into rural HPV vaccination programming.
- **Call to Action:**
 - Do you have HPV Vaccination resources for rural U.S. communities?
 - Email us at PreventHPV@stjude.org



Existing
Resources

Compile and share existing resources for addressing HPV vaccination with rural communities.



Training
Providers

Develop or adapt health care provider and health care professional HPV vaccination training resources for those serving rural communities.

Rural Priority Action Steps: Existing Resources & Training Providers

- Search Process:

- Utilized various databases and association databases to gather existing resources.
- Resources ranked based on relevance and publication year.

Criteria Description
Addresses HPV vax in rural communities
HPV vax but not rural specific
General vax in rural communities

Publication Years
2023 - 2024
2021 - 2022
2019 - 2020
2017 - 2018



Existing
Resources

Compile and share existing resources for addressing HPV vaccination with rural communities.



Training
Providers

Develop or adapt health care provider and health care professional HPV vaccination training resources for those serving rural communities.

Rural Priority Action Steps: Training Evaluation Example



Resource Title:

Improving Cervical Cancer Prevention, Screening, and Management: A Toolkit to Build Provider Capacity

Relevance: Addresses HPV vax in rural communities

Publication Year: 2023

Comments

- Targeted Provider Education
- Comprehensive Resource Compilation
- Culturally Competent Strategies
- Practical Implementation Tools

<https://www.hrsa.gov/sites/default/files/hrsa/owh/fccc-toolkit-build-provider-capacity.pdf>



Rural Priority Action Steps: Training Evaluation Example



Resource Title:

WV Rural Health Association: HPV Resources for Health Care Providers

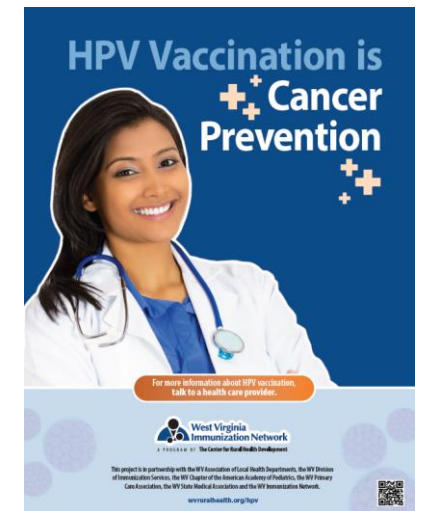
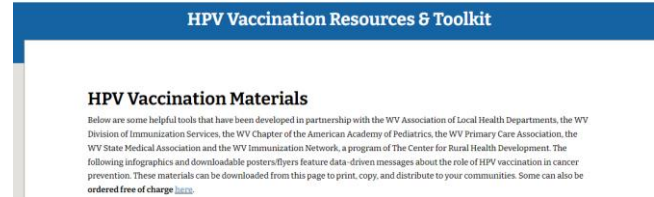
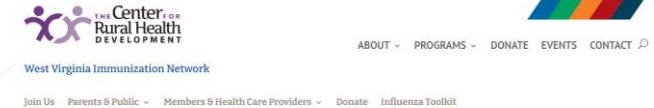
Relevance: Addresses HPV Vax in rural communities

Publication Year: 2023

Comments

- Rural-Specific Focus
- Comprehensive Educational Materials
- Community Engagement Strategies
- Practical Implementation Guides

<https://wvruralhealth.org/programs/win/members-health-care-providers/resources/hpv-resources/>



Rural Priority Action Steps: Existing Resources Example



Existing
Resources

Resource Title:

Addressing HPV Vaccination in Rural Communities

Relevance: Addresses HPV Vax in rural communities

Publication Year: 2023

Comments

- Visual and Engaging Education
- Clear and Concise Messaging
- Easily Shareable Resource
- Supplement to Provider Education

https://players.brightcove.net/6056665225001/default_default/index.html?videoId=6311436992112



healthychildren.org

Powered by pediatricians. Trusted by parents.
from the American Academy of Pediatrics

American Academy
of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN™

Rural Priority Action Steps: Existing Resources Example



Existing Resources

Resource Title:

American Academy of Pediatrics (AAP) HPV Campaign and Toolkit

Relevance: HPV Vax but not rural specific

Publication Year: 2023

Comments

- Expert-Backed Resources
- Support for Community Outreach
- Comprehensive Toolkit
- Focus on Pediatric Care

<https://www.aap.org/en/news-room/campaigns-and-toolkits/human-papillomavirus-hpv/>

American Academy of Pediatrics
ADVOCATING FOR THE HEALTH OF ALL CHILDREN

Home

Human Papillomavirus (HPV)

The American Academy of Pediatrics recommends that kids get the HPV vaccine starting at age 9 through 12 years. Pre-teens produce more antibodies after HPV vaccination than older teens. Vaccinating at a younger age can also protect kids before they are exposed to the virus.

Use these social media graphics, videos, [sample messages](#) and other resources to share information with families about HPV and how the vaccine gets kids' immune systems ready to resist the virus so they can live healthy lives.

HPV FACT
Your child's immune system learns how to resist the virus and knows how to stop more than 90% of HPV cancers after vaccination.

healthychildren.org American Academy of Pediatrics

HPV vaccination and cancer prevention

Select Platform

Download

HPV FACT
HPV vaccination prepares kids' immune systems to keep them thriving.

healthychildren.org American Academy of Pediatrics

Vaccination prepares the immune system

Select Platform

Download

Rural Priority Action Steps: St. Jude Existing Resources



Existing
Resources



St. Jude Children's
Research Hospital
**HPV Cancer
Prevention
Program**

May 16, 2024

Improving Rural HPV Vaccination Coverage

In this quarterly communication about our efforts to improve HPV vaccination with rural communities in the United States, we highlight the following:

- Upcoming virtual quarterly updates meeting on May 22 featuring a presentation from ACS Emerging Leaders Fellows, register [here](#);
- Watch and download the slides from the International HPV Awareness Day seminar "Rural Reach: Accelerating HPV Vaccination Coverage," [here](#);
- Recap of the February 2024 quarterly updates meeting; watch [here](#);
- Visit the Prevent HPV Cancers in Rural Communities website at stjude.org/hpvrural or sign up [here](#) to receive the latest information on our rural HPV coverage efforts and more!

Implementing a Mobile HPV Vaccination Program in South Carolina

In 2016, South Carolina had the lowest HPV vaccination rates in the United States. The Medical University of South Carolina Hollings Cancer Center (MUSC HCC) senior leaders subsequently identified suboptimal rates of HPV vaccination in medically underserved communities in South Carolina. To address this major public health problem, they applied for and received funding from the Healthy Me/Healthy South Carolina HCC to develop a statewide outreach and engagement HPV Vaccination Program.

By Julie HT Dang, PhD, MPH



Bridging the Gap in HPV Vaccinations: Community-driven Strategies in Rural Areas

"Mail, no. Telephone, no. Face to face is best"

This is a sentiment I often hear when I ask people living in rural areas about strategies to increase the HPV vaccination uptake in their community. Over the past five years, I have had the opportunity to engage in dialogue with diverse communities in rural areas within the University of California, Davis Comprehensive Cancer Center's 10-county catchment area exploring factors that influence their HPV vaccination decision-making process. In facilitators at the health system and primary care members, and clinic leadership, it became their own personal knowledge, attitudes, knowledge and awareness of HPV vaccines, and the latest HPV vaccination information available.

By Lisa Spees, PhD and Olufeyisayo "Feyi" Odebumi, MPH, BPharm

It is well-known that rural areas have lower rates of HPV vaccination and higher rates of HPV-related infections and cancers than non-rural areas. Some reasons for these rural disparities include low access to primary care clinics, limited health literacy and HPV awareness, and high HPV vaccine hesitancy. A provider-led HPV vaccine recommendation, like a presumptive recommendation, has achieved greater HPV vaccine uptake. A presumptive recommendation style involves a provider communicating their assumption that a parent or caregiver will get the HPV vaccine for their kids. For example, a statement like "Andrew is 11. He is due for three vaccines. Today, he will get vaccines against meningitis, HPV cancers, and whooping cough" can be very powerful.



Blowing Rock Medical Park (A division of Caldwell Memorial Hospital) in Blowing Rock, NC

Compile and share existing resources for addressing HPV vaccination with rural communities.

Retooling Provider HPV Vaccine Communication Styles to Increase Rural HPV Vaccine Coverage

Resources available at: stjude.org/HPVrural



Rural Priority Action Steps: Advocacy and Policy



Advocacy and Policy

Policy Analysis: Examining Regulation of Provider Reimbursement for HPV Vaccination:

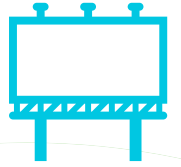
1. Building on the existing hypothesis from the Zhu et al. (2023) article, we anticipate that our study may uncover geographic disparities, particularly in HPV vaccine administration rates among rural populations where there is a stronger reliance on family physicians.
2. To assess long-term healthcare costs, we will conduct a cost-benefit analysis to demonstrate that to payers, reimbursing the family physicians with a lower rate generates modest savings short term, but could generate much higher long-term costs in treating HPV-related diseases.

Explore policy influences on HPV vaccination in rural areas.

Zhu Y et al. Reimbursement for HPV Vaccine Cost in the Private Sector: A Comparison Across Specialties. *Ann Fam Med*. 2023 Jul-Aug;21(4):344-346. doi: 10.1370/afm.2990.

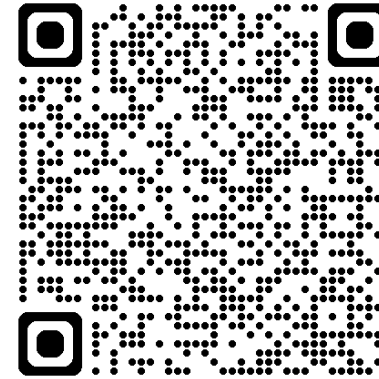
Access St. Jude HPV vaccination policy resources at stjude.org/hpv-policy-summary

International HPV Awareness Day 2024 Seminar Series



Communication

Recording and slides



Presentations included:

- Accelerating HPV Vaccination Coverage Through Provider Communications and Implementation Science
- HPV Vaccine Communication ECHO Study
- Improving Uptake of the HPV Vaccine in Appalachia: I Vaccinate

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Rural Reach: Accelerating HPV Vaccination Coverage:
Empowering Rural Communities for HPV Prevention

February 29, 2024

MARCH 4 IS INTERNATIONAL HPV AWARENESS DAY

HPV Cancer Prevention Program

St. Jude Children's Research Hospital

Welcome

MARCH 4 IS INTERNATIONAL HPV AWARENESS DAY



Electra Paskett, PhD
Director, Division of Cancer Prevention and Control,
Department of Internal Medicine,
The Ohio State University
College of Medicine



William Calo, PhD, JD
Associate Professor, Department of Public Health Sciences, Penn State College of Medicine
Co-Leader, Cancer Control Program,
Penn State Cancer Institute



Prajakta Adsul, PhD
Assistant Professor, Department of Internal Medicine,
Comprehensive Cancer Center,
University of New Mexico

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HPV Cancer Prevention Program

stjude.org/hpvrural

Rural Priority Action Steps: Data

- Update current estimates for rural HPV vaccination coverage and rural HPV cancers
 - Working with external consultant on this analysis
 - Peer-reviewed publications
 - Reports and infographics
 - Virtual seminars to review and share data/results



Data

Review and update existing resources and data on HPV vaccination and HPV cancers in rural communities.

2024 National Rural Health Association Conference

Prioritizing actions to improve HPV vaccination with rural U.S. communities.

Heather M. Brandt, PhD; Duha Magzoub, MPH; Cristóbal Valdebenito, MA; Julia Neely Brown, MPH; Andrea Stubbs, MPA; and the Rural HPV Vaccination Think Tank
 HPV Cancer Prevention Program
 St. Jude Children's Research Hospital



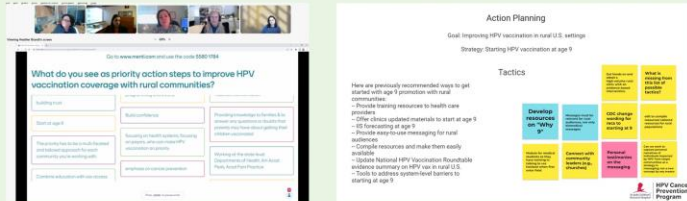
PreventHPV@stjude.org | stjude.org/hpvrural

PURPOSE

- **Challenge:** Since the HPV vaccine introduction in 2006, rural areas in the U.S. have lagged in HPV vaccination coverage and have increased HPV cancer rates.
- **Action Needed:** St. Jude and partners are focusing on actions to improve HPV prevention with rural partners, thought leaders, subject matter experts, and communities.

METHODS

- Convened a think tank of rural health and cancer prevention experts to identify and priority actions to mitigate HPV vaccination inequities.
- Conducted four interactive virtual meetings from March to August 2023, utilizing Google Jamboard for collaborative input and feedback.
- Synthesized data and discussed it iteratively to refine our approach.
- Employed a democratic process for members to vote on and prioritize impactful actions.



RESULTS

The following are six priority action steps identified by the think tank. These action steps provide guidance for the implementation of activities to improve rural HPV vaccination coverage.

1. **Initiate HPV Vaccination Early:** Start at age 9 in rural areas to boost coverage.
 - Start at Age 9
2. **Resource Sharing:** Utilize and adapt existing HPV vaccination materials specific to rural needs.
 - Existing Resources
3. **Training for Healthcare Providers:** Enhance and tailor HPV vaccination training for rural healthcare professionals.
 - Training Providers
4. **Policy Exploration:** Investigate the impact of policy on rural HPV vaccination and advocate for supportive measures.
 - Advocacy and Policy
5. **Tailored Messaging:** Create and distribute messages that resonate with the rural lifestyle.
 - Communication
6. **Continuous Review:** Regularly update resources and data to track HPV vaccination efforts in rural communities.
 - Data

CONCLUSION

- **Health and Economic Benefits:** Enhancing HPV vaccination in rural areas is projected to save lives and reduce healthcare costs by millions.
- **Action Imperative:** A strategic response to the HPV cancer burden is essential.
- **Collaborative Effort:** We're dedicated to these goals, working alongside thought leaders and partners.
- **Ongoing Evaluation:** The effectiveness of our actions will be continually tracked and assessed.



RESOURCES

Access the Rural HPV Webpage:



Wide Open Spaces newsletter, fact sheets, priorities, and upcoming events.

Join Quarterly Updates Meetings:



Wednesday, May 22, 2024
 2:00 – 3:00 PM ET / 1:00 PM – 2:00 PM CT



Upcoming Conferences



- August 12-14, 2024 in Atlanta, Georgia
- Abstract submitted describing the Rural HPV Vaccination Think Tank and the resulting six priority action steps
- Learn more at <https://www.tfghmeetings.org/event/NIC-2024/summary>

Save the Date

Addressing Cancer Control and Care in Rural Communities

A National Rural Cancer Control Conference

August 8th - 9th, 2024

Vanderbilt Ingram Cancer Center
Preston Research Building
2220 Pierce Avenue
PRB 898J
Nashville, TN 37232

Sessions will address the following topics:

- Strategies in conducting research in rural populations
- Workforce challenges in cancer screening and cancer care in rural communities
- Strategies to increase cancer screening in rural communities
- Cancer incidence and mortality in the post-COVID era
- Cancer care delivery and digital health in the post-COVID era

Presented by the Vanderbilt Ingram Cancer Center

 VANDERBILT-INGRAM CANCER CENTER

- **SAVE THE DATE: August 8-9, 2024 in Nashville, Tennessee**

Ongoing training:



Training
Providers

- ACS and ACS National HPV Vaccination Roundtable training program for rural-serving health care providers – first learning session on March 20

Develop or adapt health care provider and health care professional HPV vaccination training resources for those serving rural communities.

Partner with us in 2024 to Address HPV Vaccination Geographic Disparities
Protecting our children today for a healthier tomorrow

The American Cancer Society (ACS) and The National HPV Vaccination Roundtable (HPVRT) are seeking rural healthcare partners to join a learning community focused on improving HPV vaccination among 9–12-year-olds.

Through a series of virtual sessions and peer-based learning, the rural disparities HPV vaccination learning community will use quality improvement (QI) and evidence-based interventions to increase vaccine rates. This no-cost, practical how-to learning community will serve as a forum for health partners to gain knowledge, exchange promising practices, and talk through challenges to increasing HPV vaccinations in rural settings.

Why Prioritize HPV?

- Most patients will be exposed to HPV:** HPV is extremely common. The HPV vaccine provides protection from these infections and six types of cancer.
- Pandemic impact:** Nationally 6.4 million doses have been missed, leaving many children unprotected from future cancers. The impact on publicly insured children has been significant.
- Population health management:** Rural communities lag 10% behind the national average for HPV vaccination. HPV underperforms compared to other ACP recommended vaccines, including Tdap and MenACWY.
- Improve HEDIS IMA/CHIP metrics:** Payers may tie incentives to performance improvements on adolescent immunization measures.

Why partner with ACS?

- History of success:** Since 2014, ACS has partnered on 300+ HPV QI projects. Partners have rate improvements of 3–5%. Review our [2022–2023 HPV Impact Report](#) to learn more.
- Trusted global organization:** ACS is a leader in the HPV vaccination space. Participation includes access to thought leaders and experts.
- Mission HPV Cancer Free:** ACS set a goal to increase HPV vaccination rates and seeks to eliminate vaccine-preventable HPV cancers, as a public health problem starting with cervical cancer.
- Cancer prevention in action:** Attendees will learn and apply QI tools and best practices to increase vaccine delivery.

Participation Benefits:

- Access to ACS & HPVRT resources and materials
- Co-branding opportunities
- Data utilization best practices
- Networking with peer organizations
- Practical implementation tips
- Opportunity to showcase success
- QI coaching & support
- Learning from subject matter experts
- Social media toolkits (patient-facing)
- Preventing HPV-related cancers and pre-cancers

cancer.org | 1.800.227.2345 | 1.30.2024

Learning Outcomes

- Increase on-time HPV vaccination rates
- Expand knowledge around HPV infection, related-cancers, and vaccination rates
- Build awareness around the importance of HPV vaccination data
- Explore evidence-based interventions to increase HPV vaccinations in your community
- Discuss best practices and challenges increasing HPV vaccinations in rural settings

Learning Session Details

Dates	Topics
March 20, 2024	Setting the Stage: Networking & Orientation
April 10, 2024	A Deep Dive into HPV Vaccination Data
May 22, 2024	HPV Vaccination Starting at Age 9
June 19, 2024	The ABCs of Quality Improvement: AIM Statements & Building a Team
July 17, 2024	The ABCs of Quality Improvement: Process Mapping & Gap Analysis
August 14, 2024	Finding the Best Fit: Evidence-Based Interventions & HPV Vaccination
September 18, 2024	The ABC's of Quality Improvement: PDSA Cycle
October 16, 2024	Highlighting HPV Vaccination Best Practices
November 13, 2024	Highlighting HPV Vaccination Best Practices
December 4, 2024	Celebrating & Sustaining Success

Time: 2-3pm EST
Cost: Free to attend
Location: Virtual format via Zoom meeting

Registration Details

Registration is rolling and participants can join at any time throughout the year. Register using the following link: <https://forms.office.com/r/q8zfWncCgr> or scan the QR code.

Once registration has been completed, Zoom calendar invites will be sent for the monthly calls.

Questions? Please reach out to **Ashley Lach, HPV Program Manager**
Email: Ashley.Lach@cancer.org

This resource is supported by the Centers for Disease Control and Prevention of the U.S. Department of Health and Human Services (PHHS) as part of a financial assistance award funded by CDC/PHHS. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by CDC/PHHS, or the U.S. Government.

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Register at:

<https://forms.office.com/r/q8zfWncCgr>

Questions? Contact Ashley Lach, HPV Program Manager, American Cancer Society at ashley.lach@cancer.org

Understanding HPV Cancer Rural Disparities

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Jason Semprini, PhD
Postdoctoral Scholar
College of Public Health
University of Iowa



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Understanding HPV Cancer Rural Disparities

- Background – What do we know now?
 - HPV can cause certain cancers:

Understanding HPV Cancer Rural Disparities

- Background – What do we know now?
 - HPV can cause certain cancers:
 - cervix,
 - female and male genital cancers (vagina, vulvar, penile)
 - cancers of the anus/rectum, and
 - oropharyngeal

Understanding HPV Cancer Rural Disparities

- Background – What do we know now?
 - HPV can cause certain cancers:
 - **cervix – Highest incidence of HPVa cancers**
 - female and male genital cancers (vagina, vulvar, penile)
 - cancers of the anus/rectum, and
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Understanding HPV Cancer Rural Disparities

- Background – What do we know now?
 - HPV can cause certain cancers:
 - cervix – Highest incidence of HPV_a cancers
 - female and male genital cancers (vagina, vulvar, penile)
 - anus/rectum, and
 - **oropharyngeal (OPC) – Fastest growth since 2000s**

Understanding HPV Cancer Rural Disparities

- Background – What do we know now?
 - HPV can cause certain cancers:
 - cervix – Highest incidence of HPV_a cancers
 - female and male genital cancers (vagina, vulvar, penile)
 - anus/rectum, and
 - oropharyngeal (OPC) – Fastest growth since 2000's
 - Dynamic rural-urban disparities:

Understanding HPV Cancer Rural Disparities

- Background – What do we know now?
 - HPV can cause certain cancers:
 - cervix – Highest incidence of HPV_a cancers
 - female and male genital cancers (vagina, vulvar, penile)
 - anus/rectum, and
 - oropharyngeal (OPC) – Fastest growth since 2000's
 - Dynamic rural-urban disparities:
 - Urban incidence of HPV_a cancer was higher than rural incidence before mid-2010's.

Understanding HPV Cancer Rural Disparities

- Background – What do we know now?
 - HPV can cause certain cancers:
 - cervix – Highest incidence of HPV_a cancers
 - female and male genital cancers (vagina, vulvar, penile)
 - anus/rectum, and
 - oropharyngeal (OPC) – Fastest growth since 2000's
 - Dynamic rural-urban disparities:
 - Urban incidence of HPV_a cancer was higher than rural incidence before mid-2010s.
 - Rural incidence has since exceeded the urban rate

Understanding HPV Cancer Rural Disparities

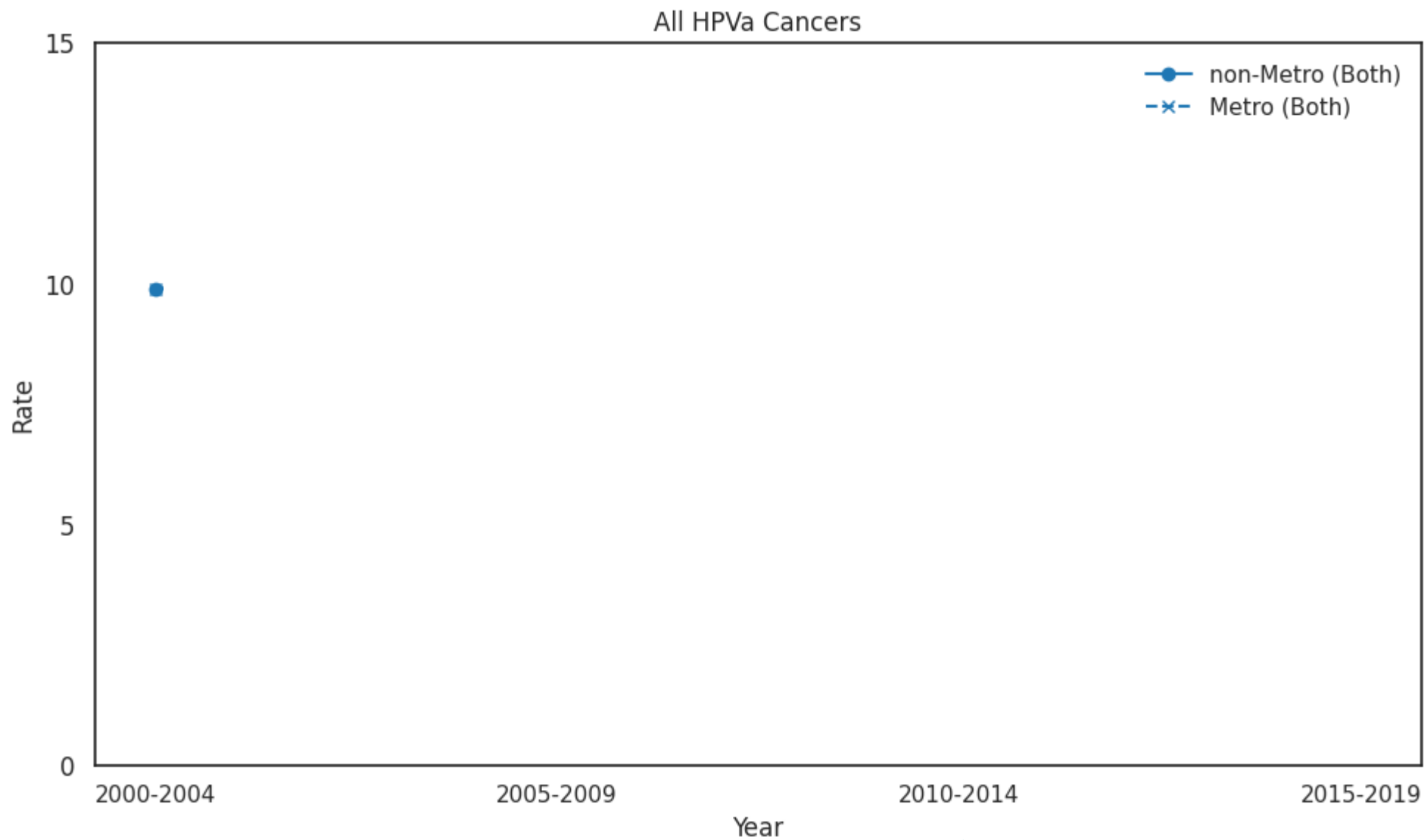
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 - Dynamic rural-urban disparities:
 - Urban incidence of HPV_a cancer was higher than rural incidence before mid-2010's.
 - Rural incidence has since exceeded the urban rate
 - ***Emerging trends suggest the rural-urban gap is widening***

Understanding HPV Cancer Rural Disparities

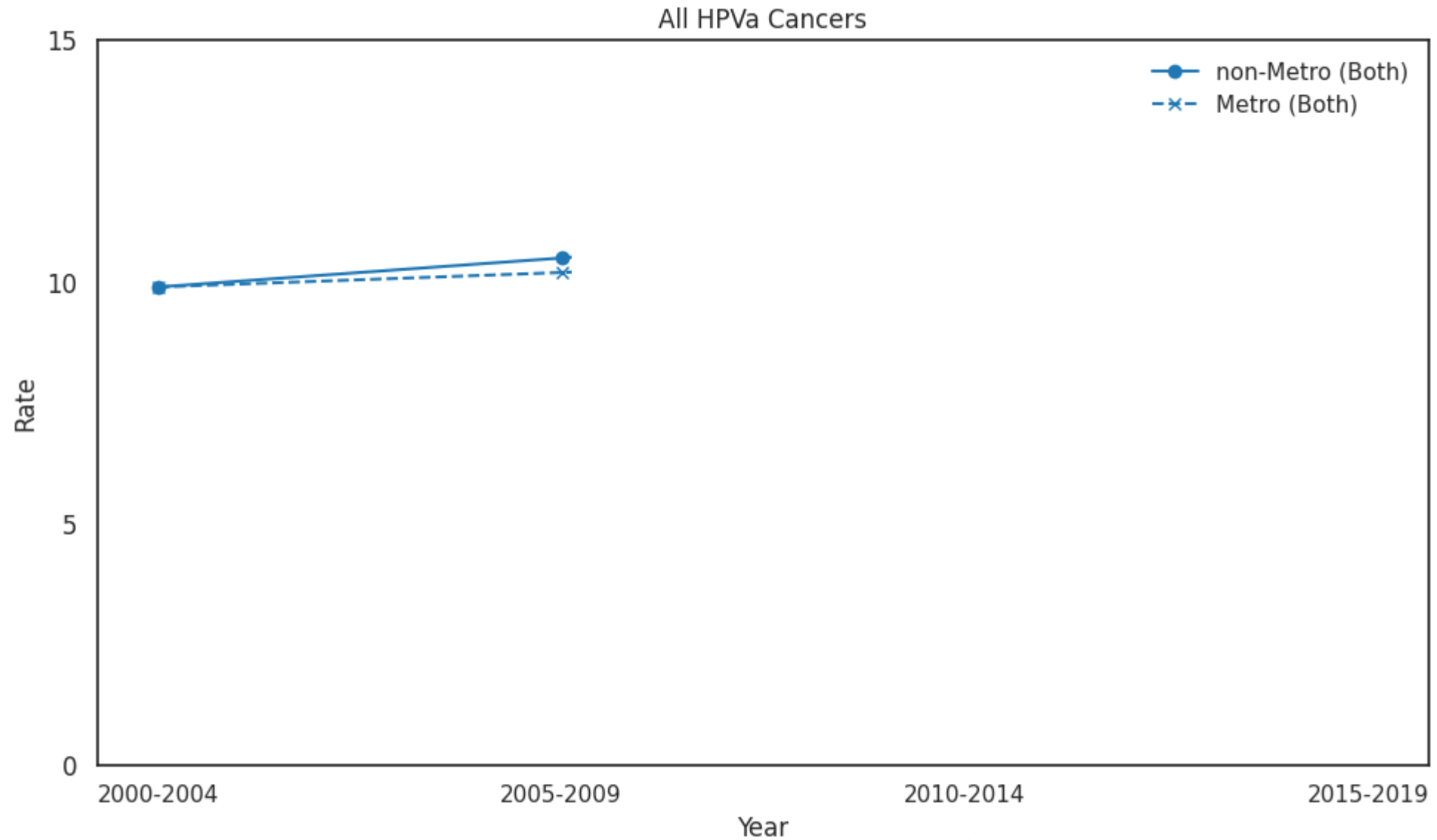
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 - Dynamic rural-urban disparities:
 - Urban incidence of HPV_a cancer was higher than rural incidence before mid-2010's.
 - Rural incidence has since exceeded the urban rate
 - ***Emerging trends suggest the rural-urban gap is widening***

We still need to know which cancers are driving the widening rural-urban disparity.

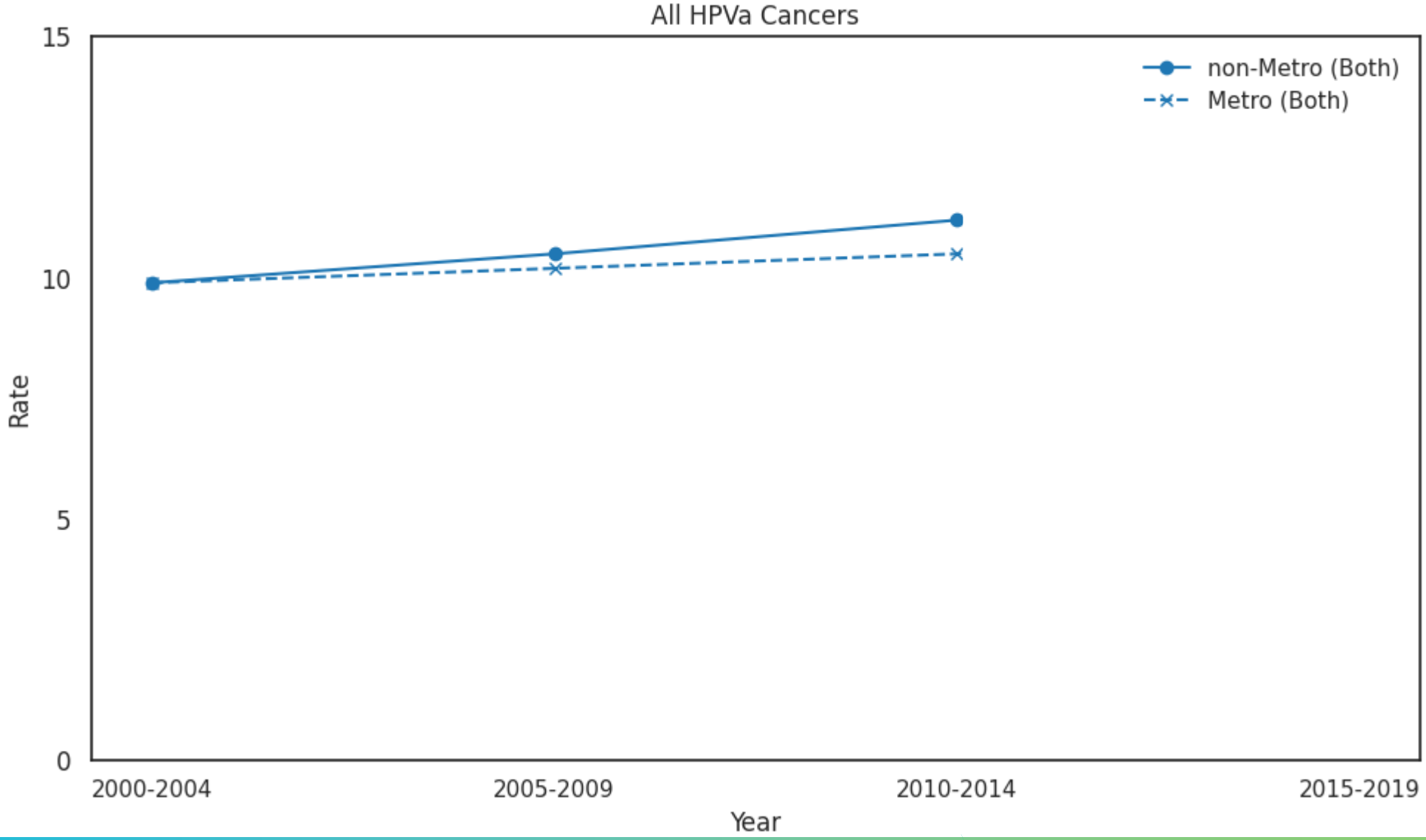
Widening rural-urban disparity over time (Both males & females)



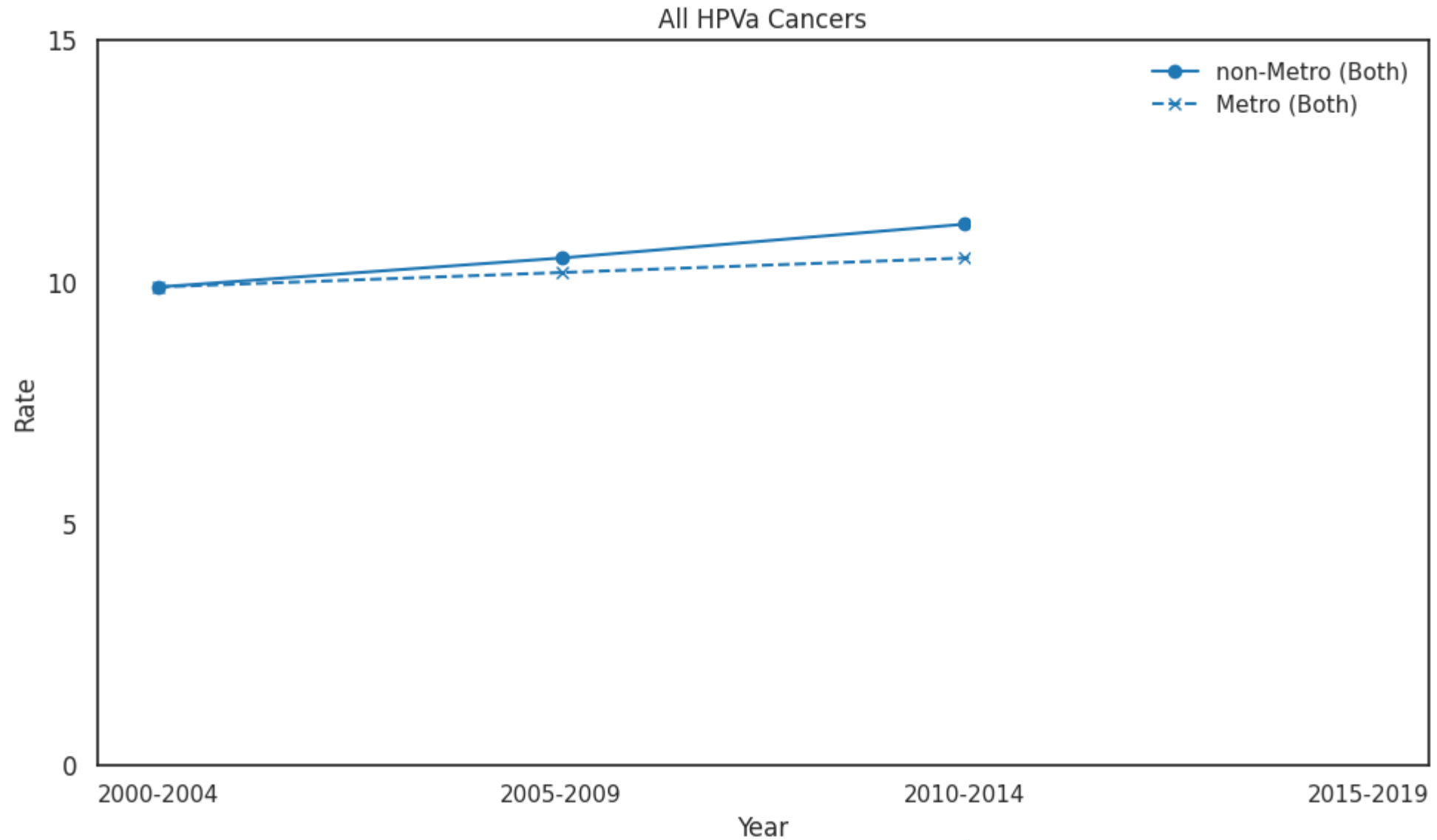
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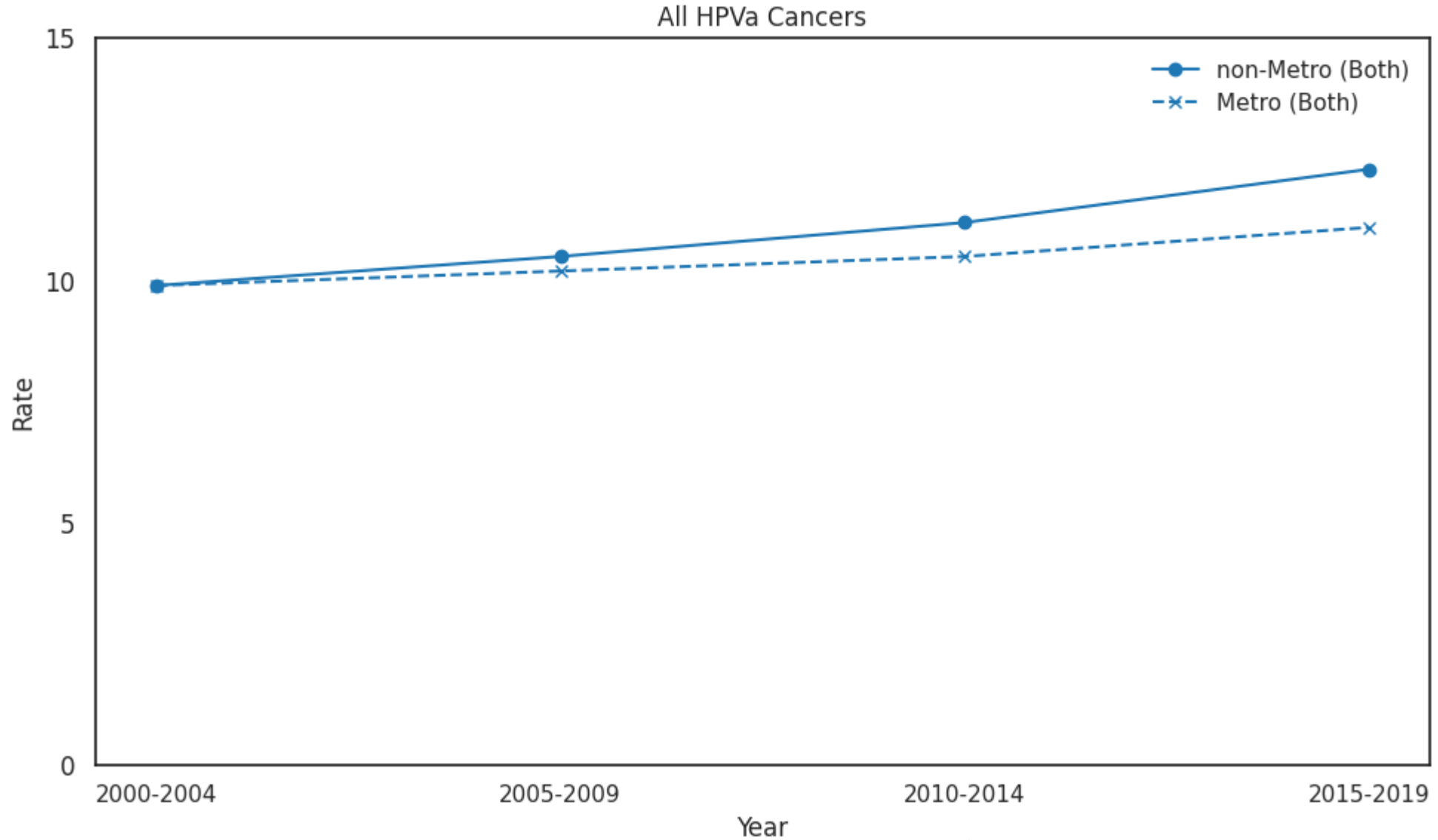
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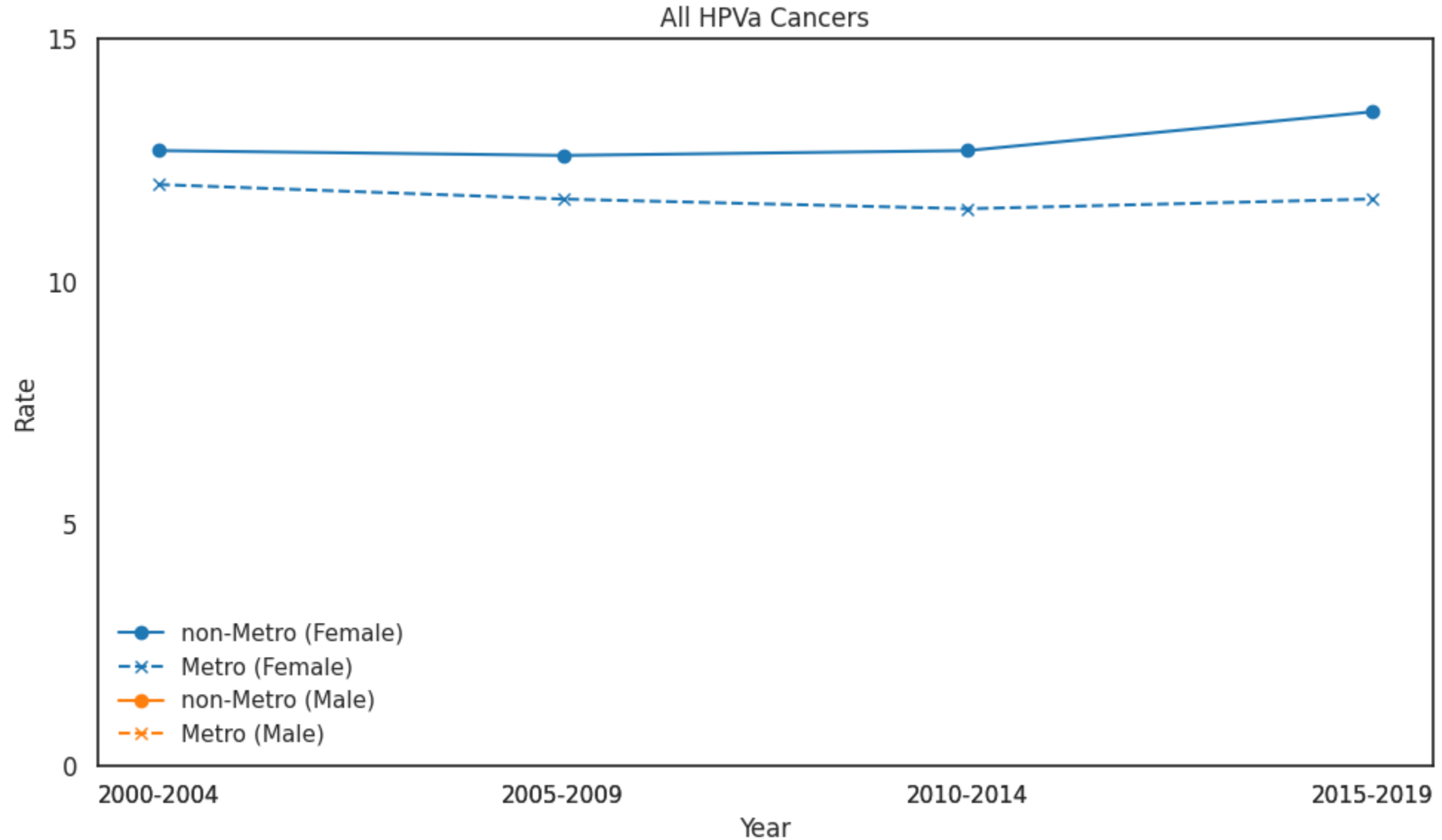
Widening rural-urban disparity over time (Both males & females)



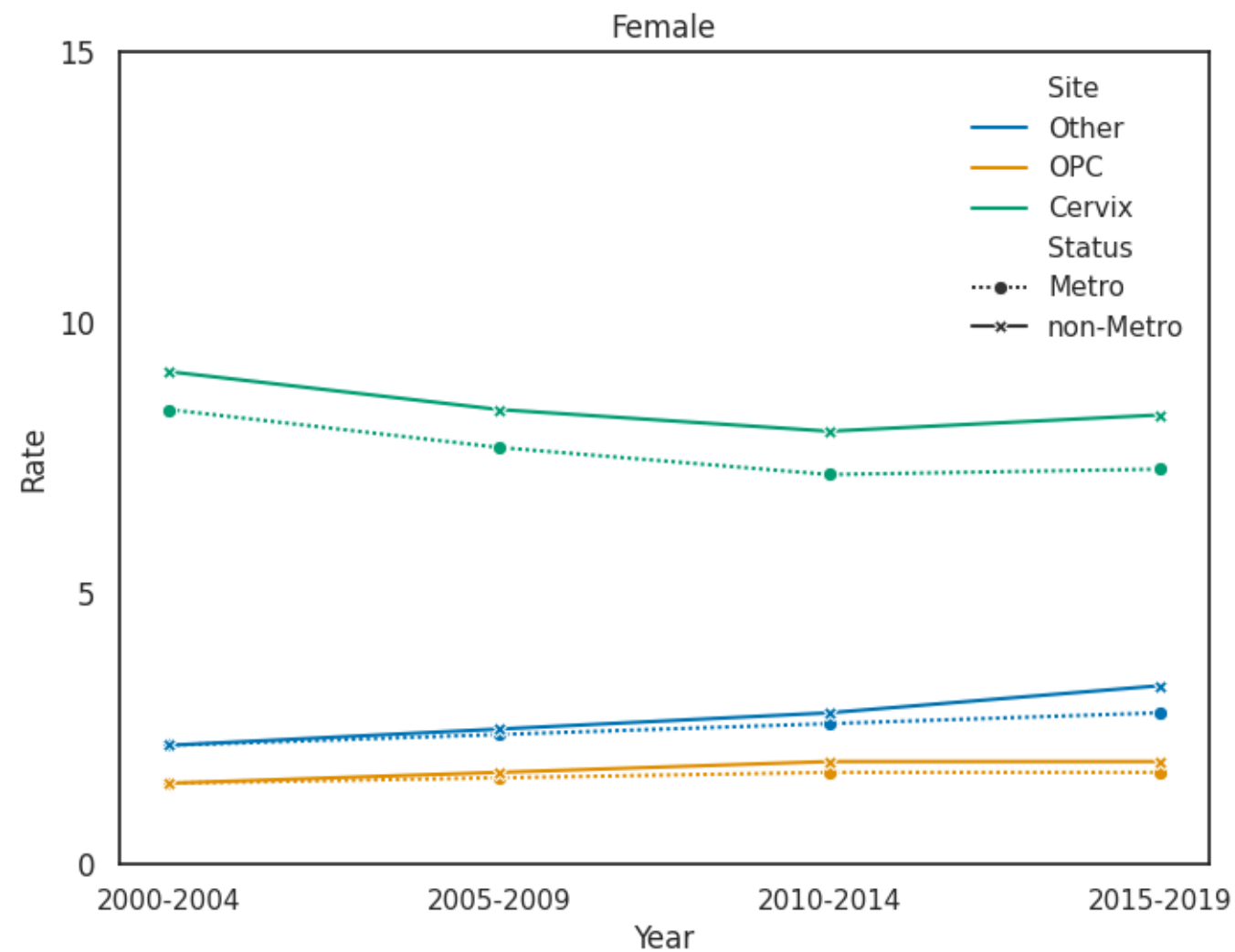
Widening rural-urban disparity over time (Both males & females)



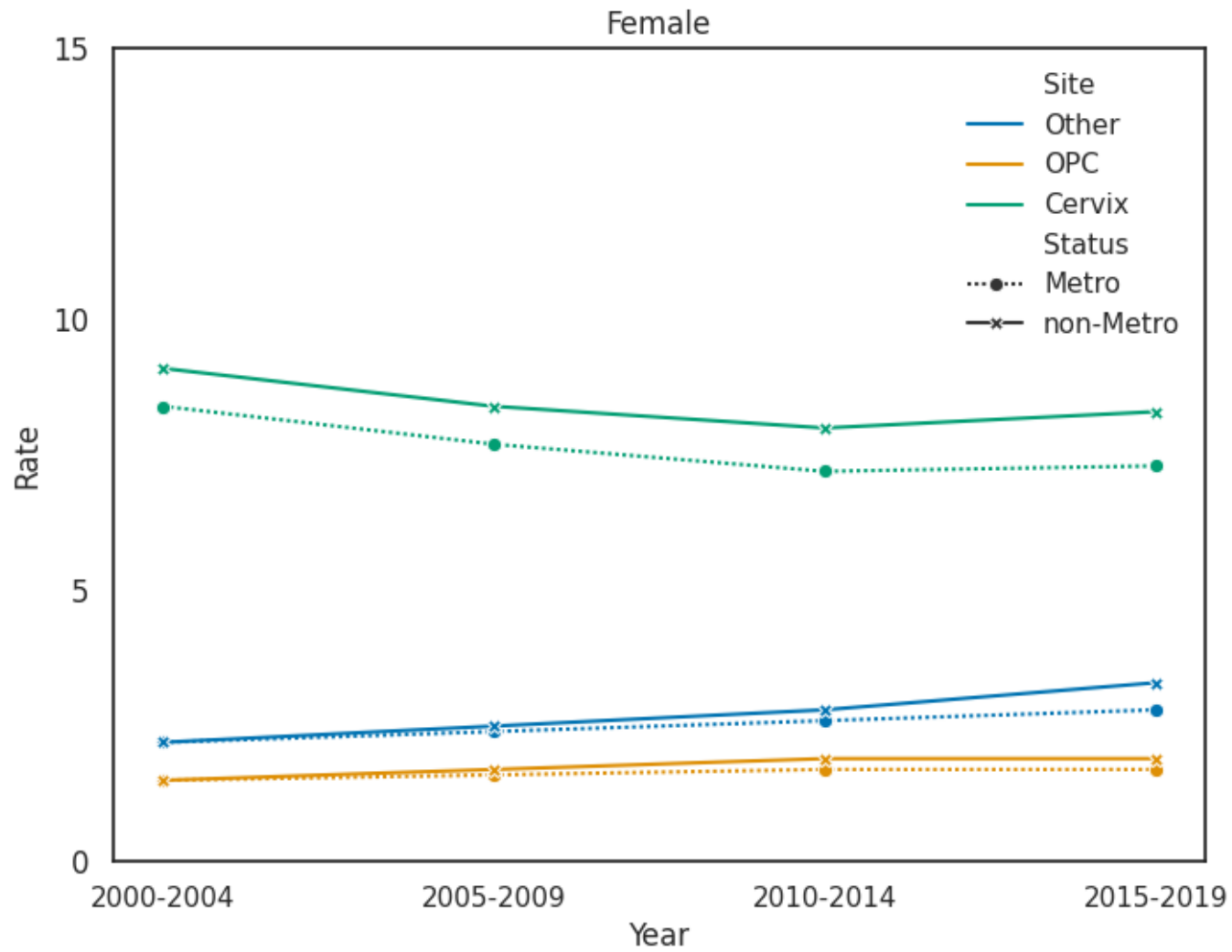
Widening rural-urban disparity over time (females)



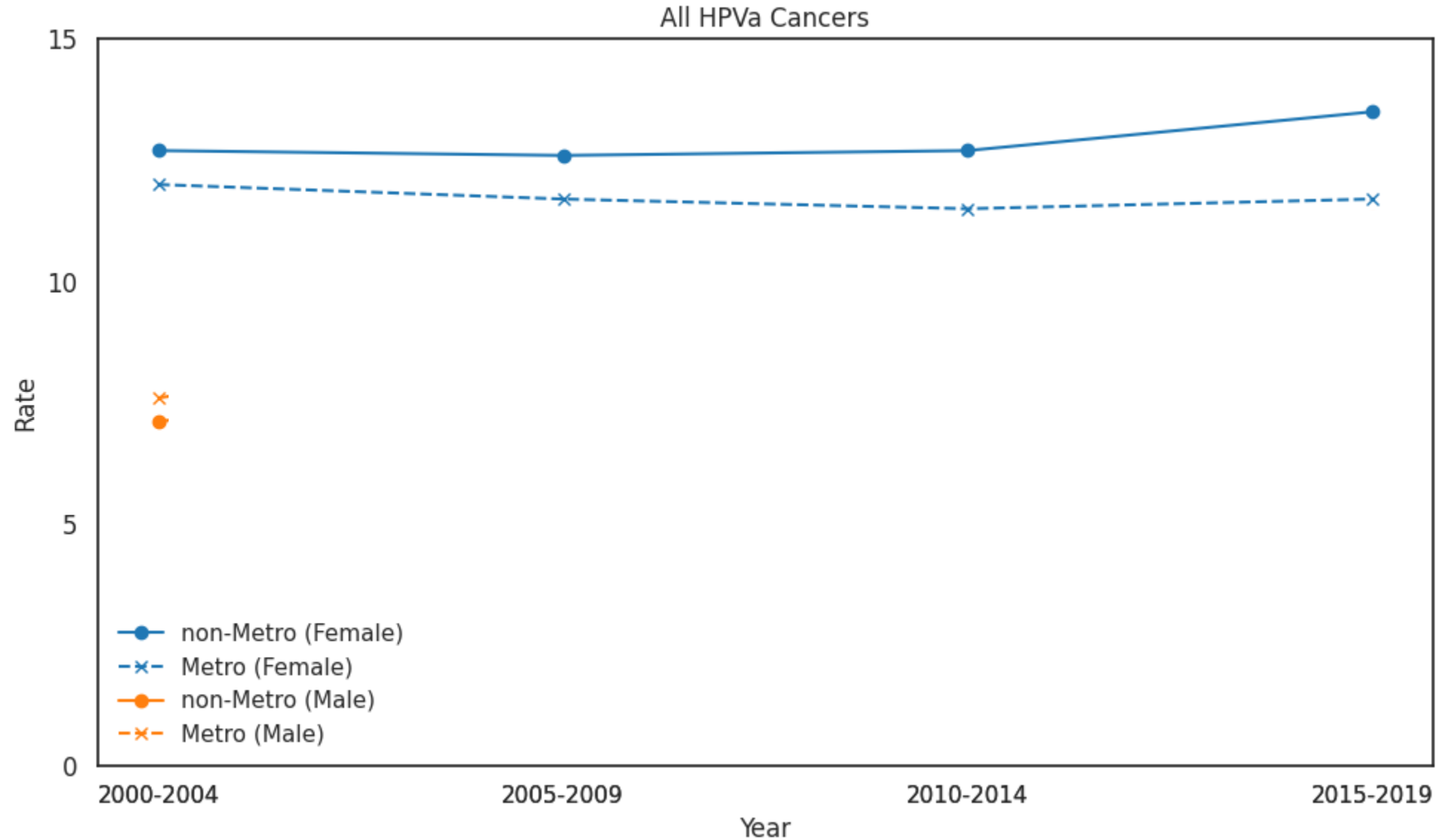
Widening rural-urban disparity over time (females, by site)



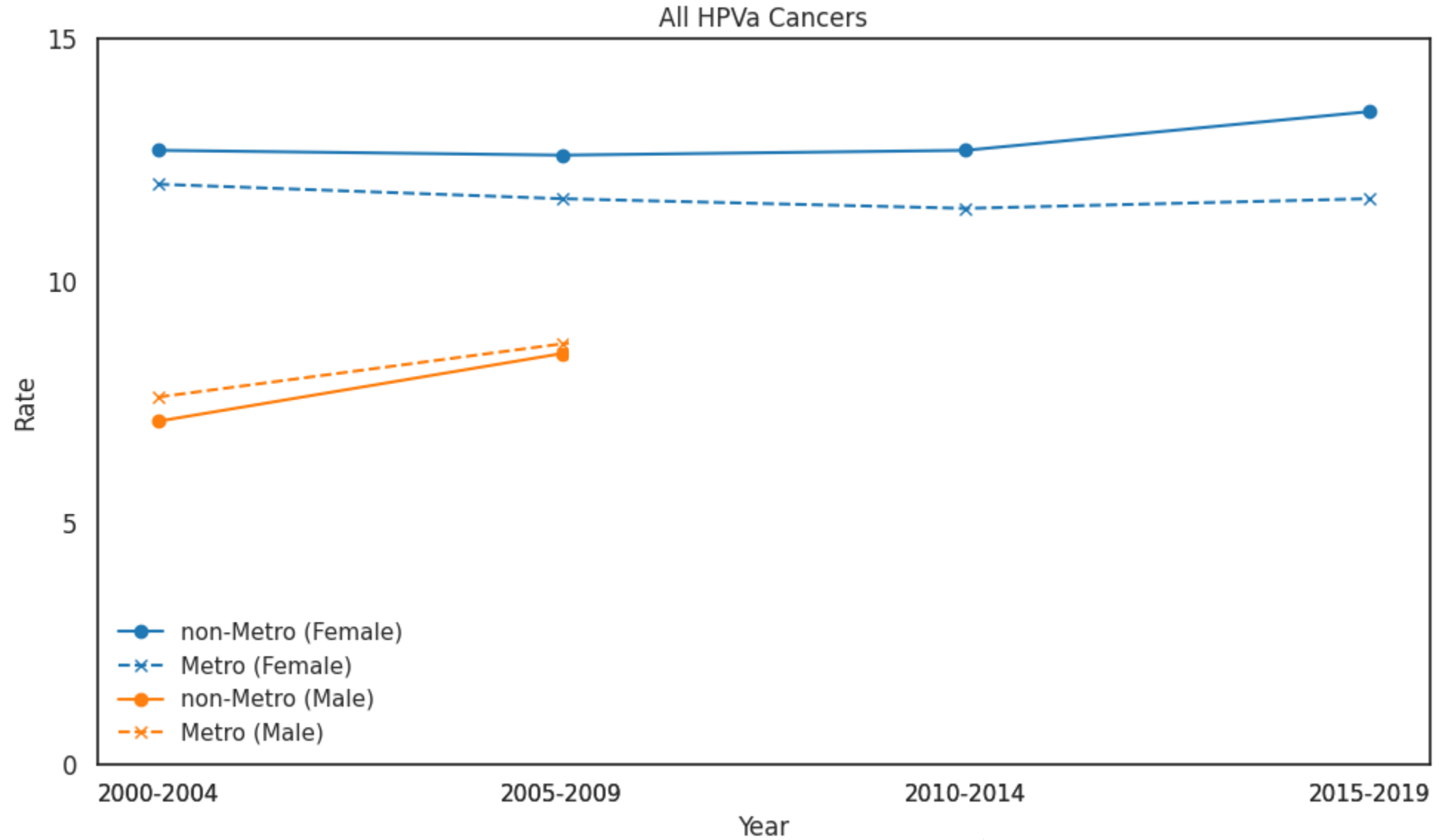
Stagnate decline in HPVa cervical cancer;



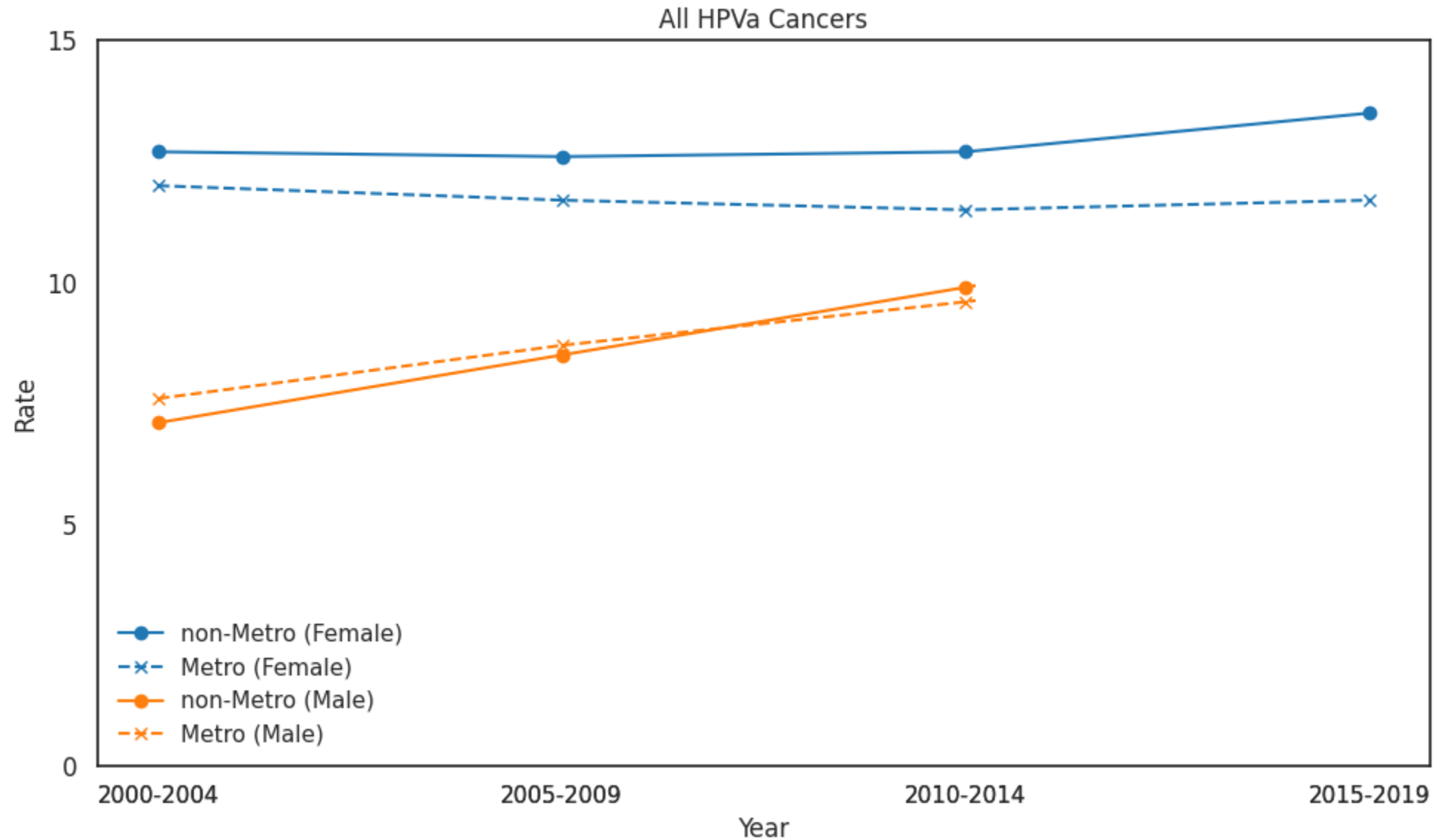
Widening rural-urban disparity over time (males)



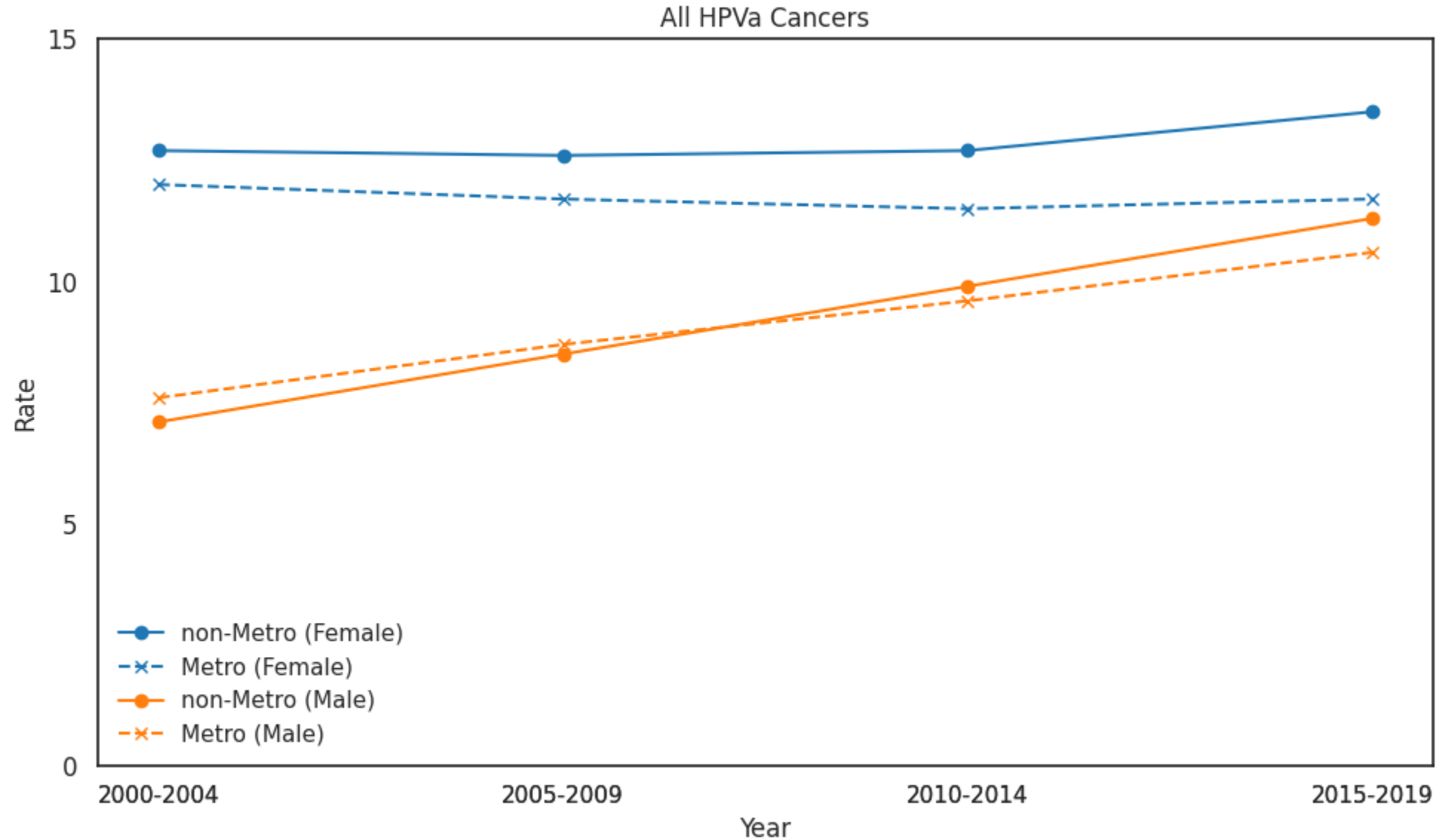
Widening rural-urban disparity over time (males)



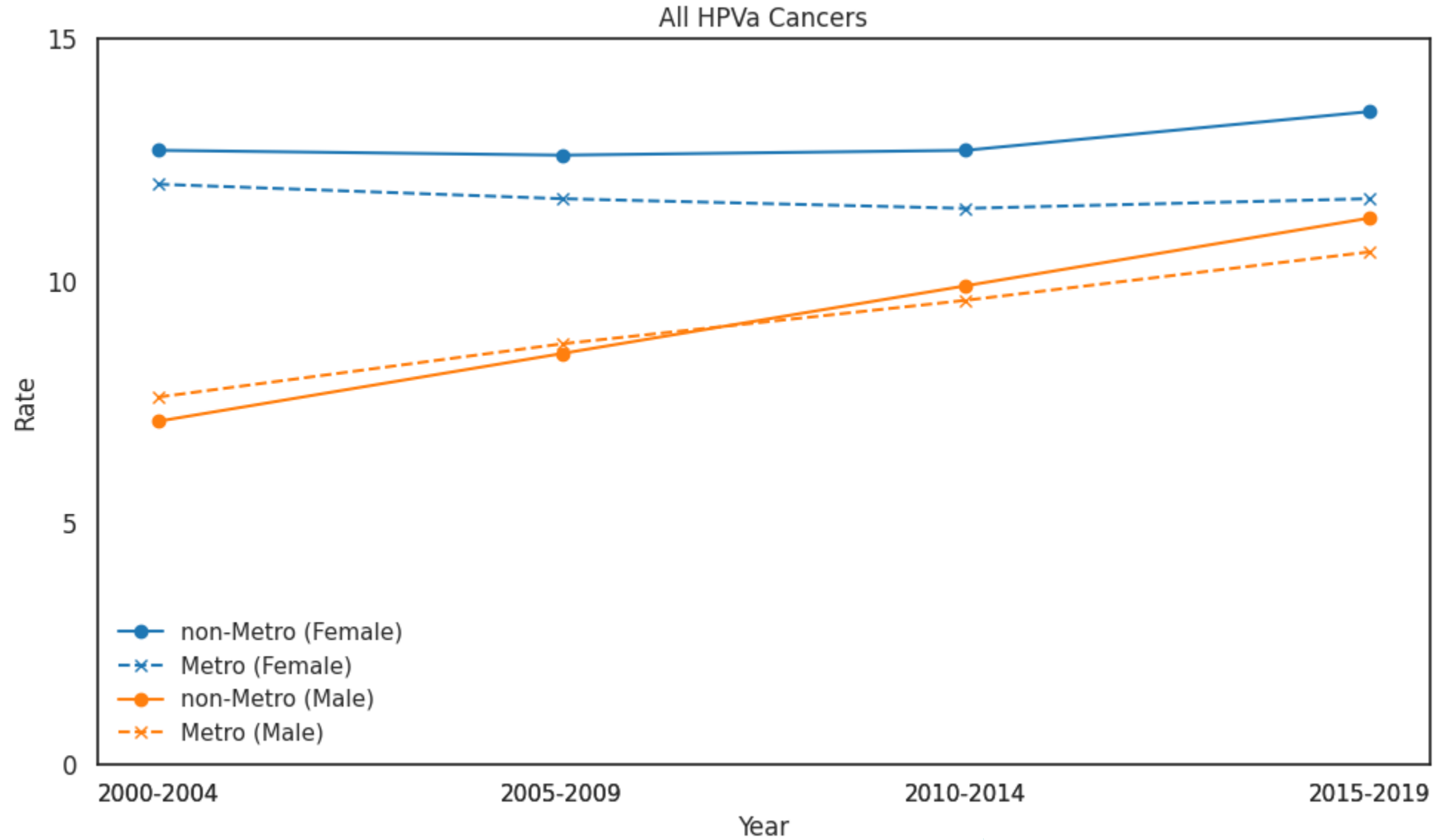
Widening rural-urban disparity over time (males)



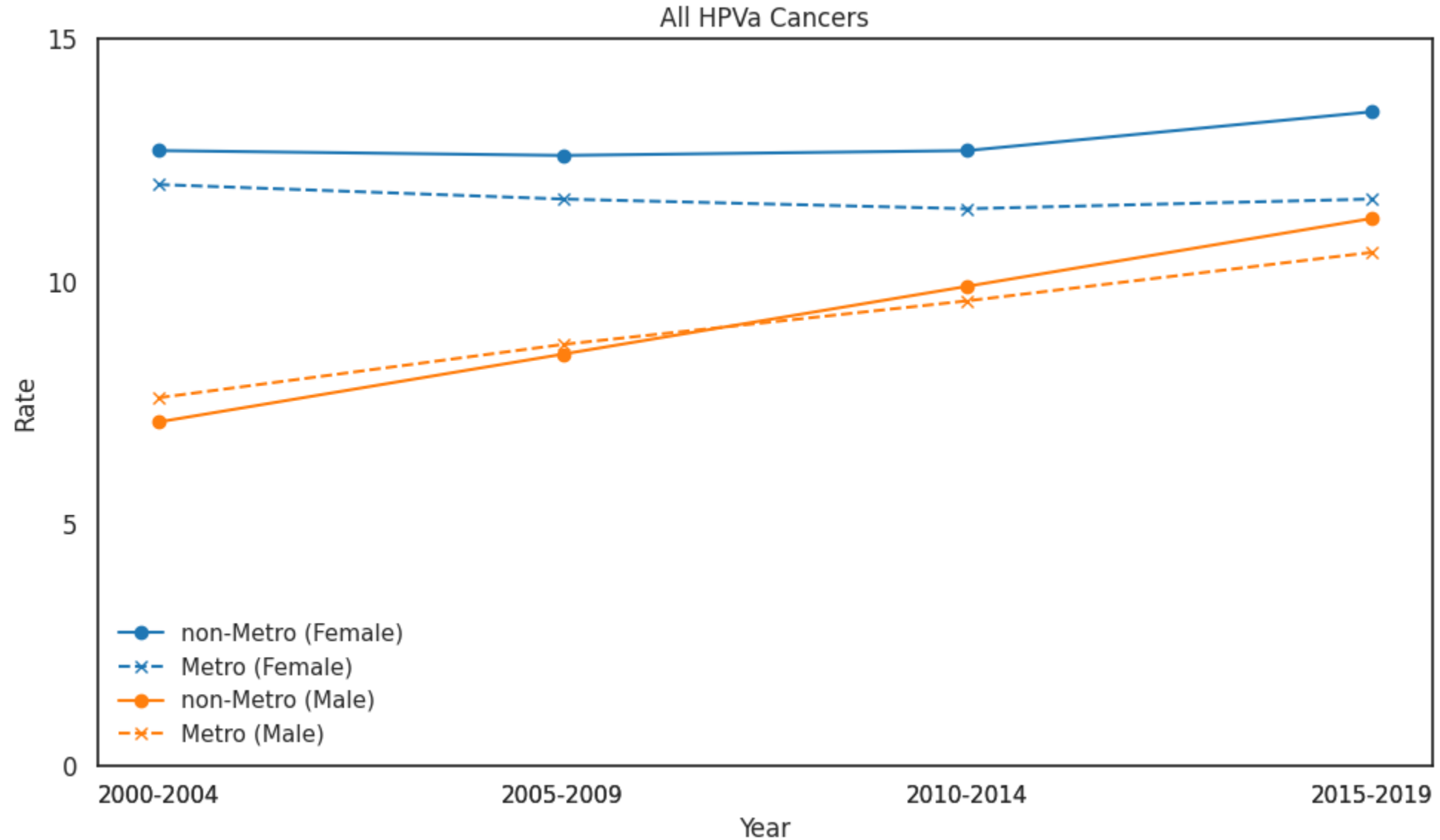
Widening rural-urban disparity over time (males)



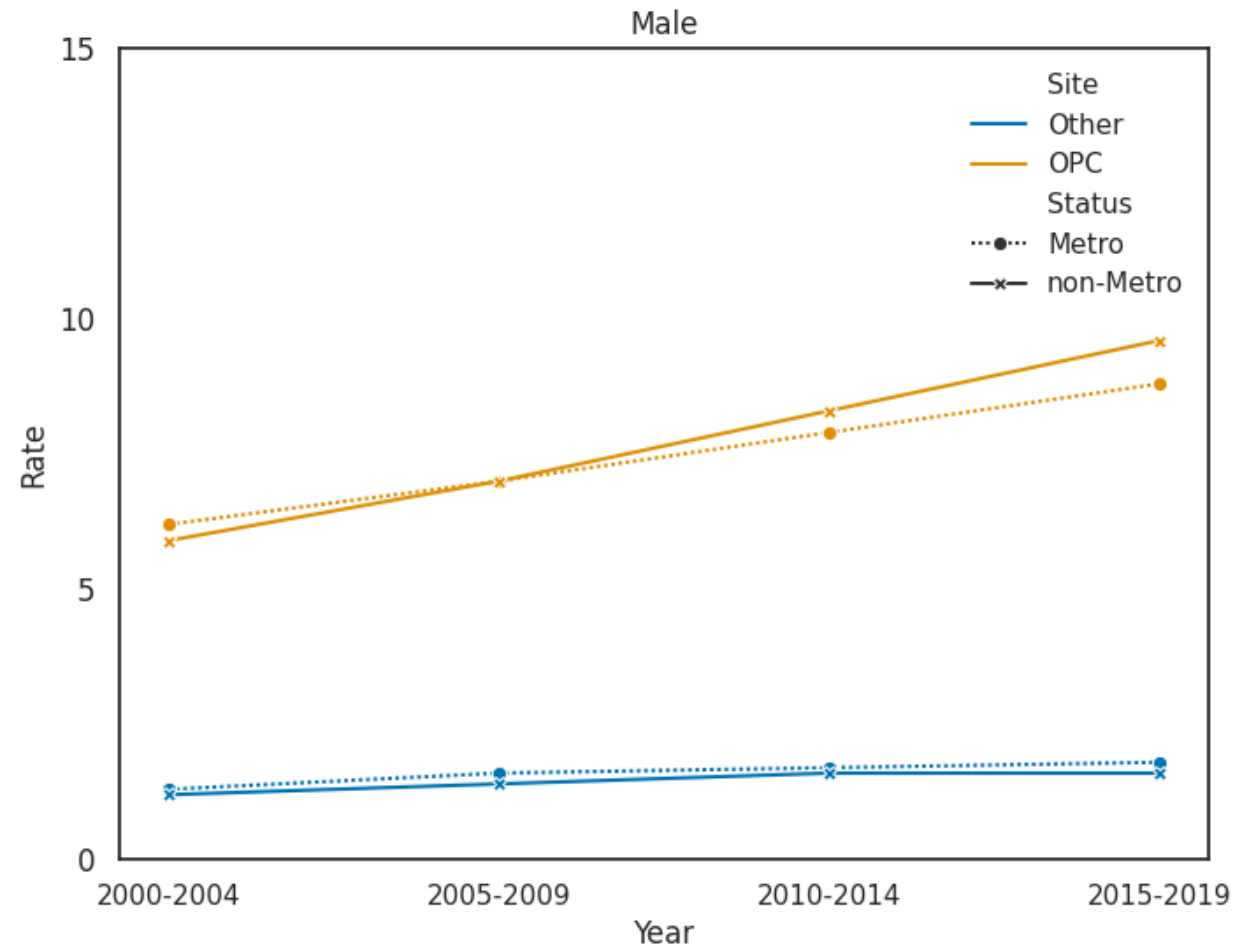
HPVa cancer incidence is highest in rural females...



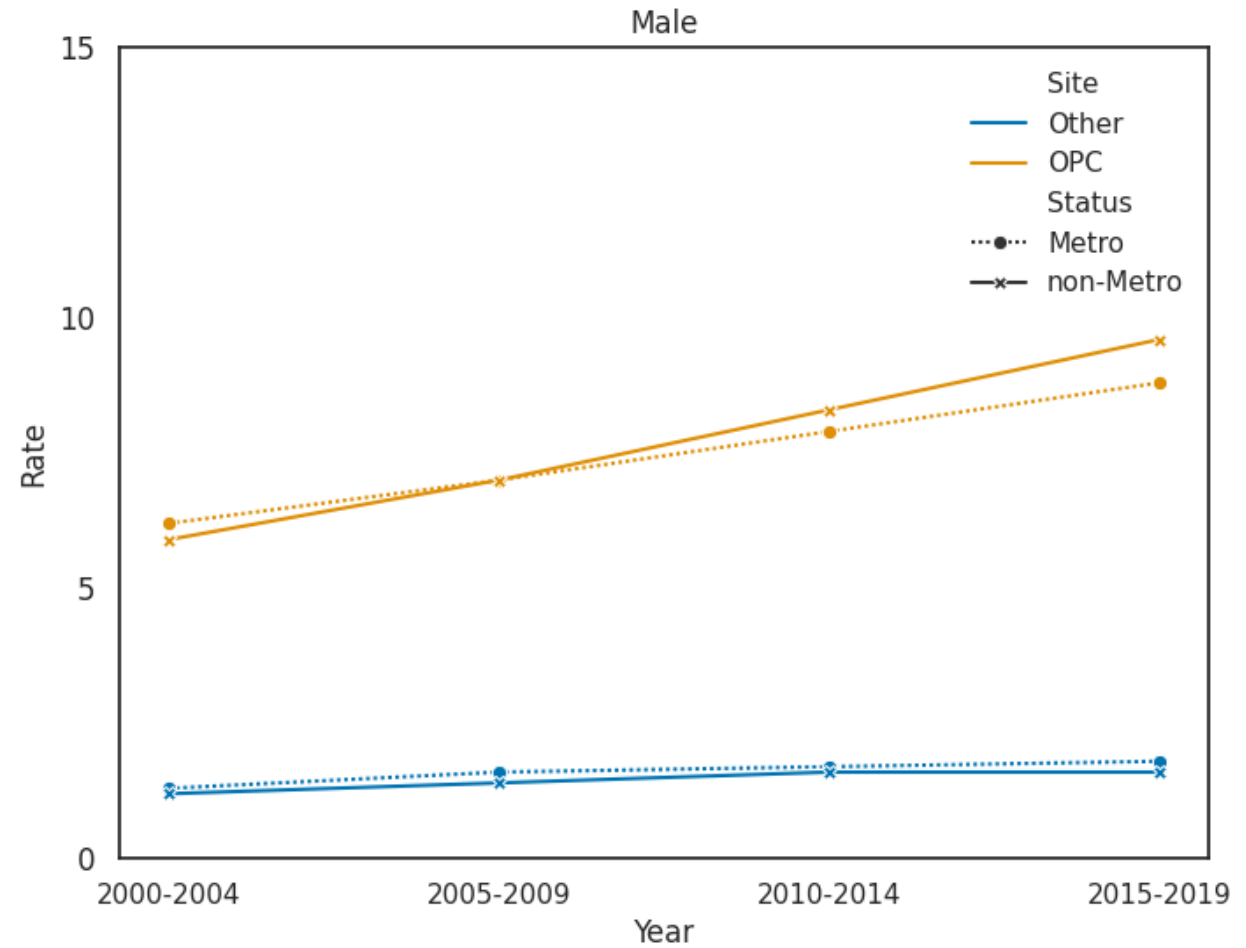
HPVa cancer incidence is highest in rural females...but *rising the fastest among rural males.*



Widening rural-urban disparity over time (males, by site)

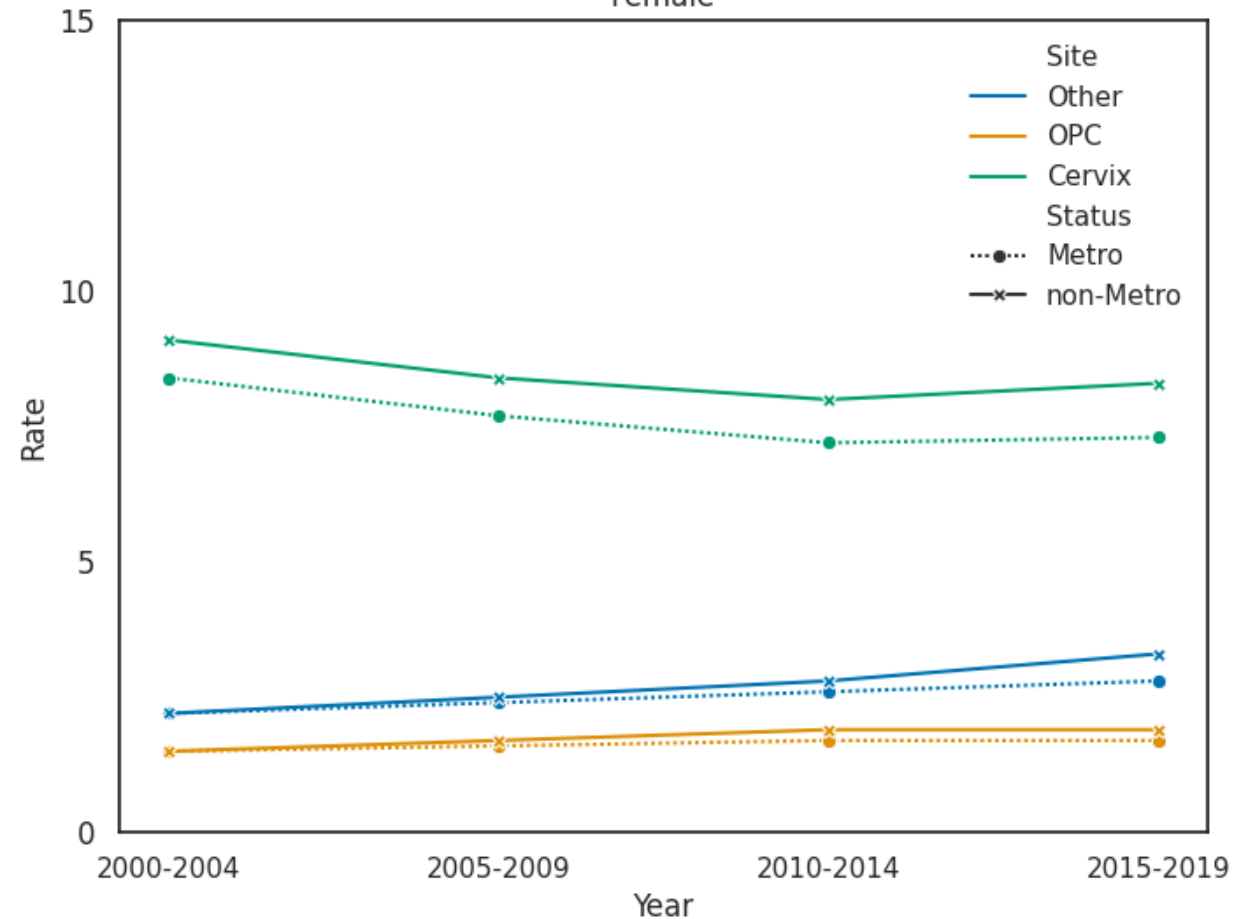


Faster increase in HPVa OPC cancer;

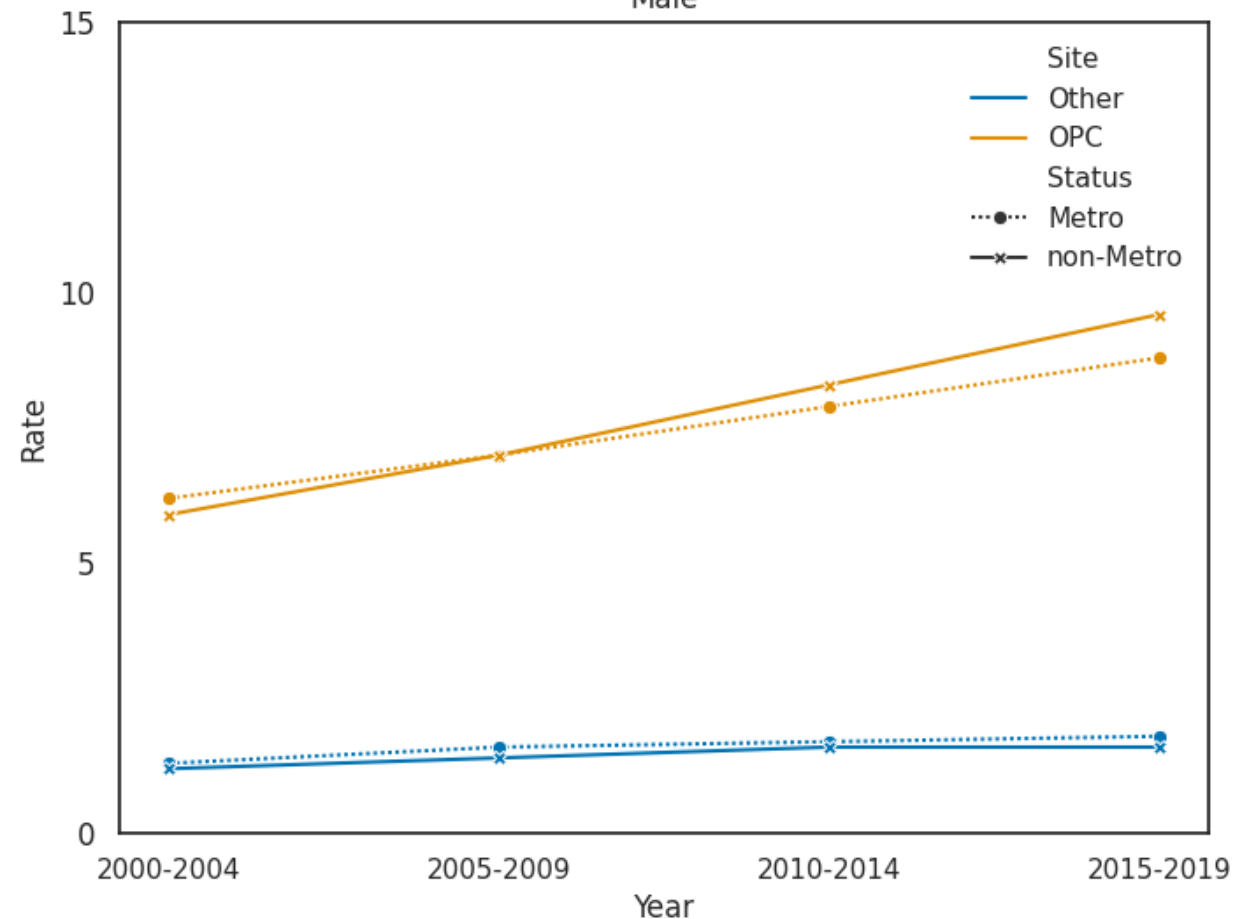


Widening rural-urban disparity over time

Female



Male



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Best Practices, Challenges, and Solutions to HPV Vaccination in Rural Areas: A Qualitative Study from Three States

Shillpa Naavaal, BDS, MS, MPH
Ha Ngan (Milkie) Vu, PhD, MA
Kiara Long, MPH, CHES

HPVRT Emerging Leaders Program



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Best Practices, Challenges, and Solutions to HPV Vaccination in Rural Areas: A Qualitative Study from Three States

Shillpa Naavaal, BDS, MS, MPH

Ha Ngan (Milkie) Vu, PhD, MA

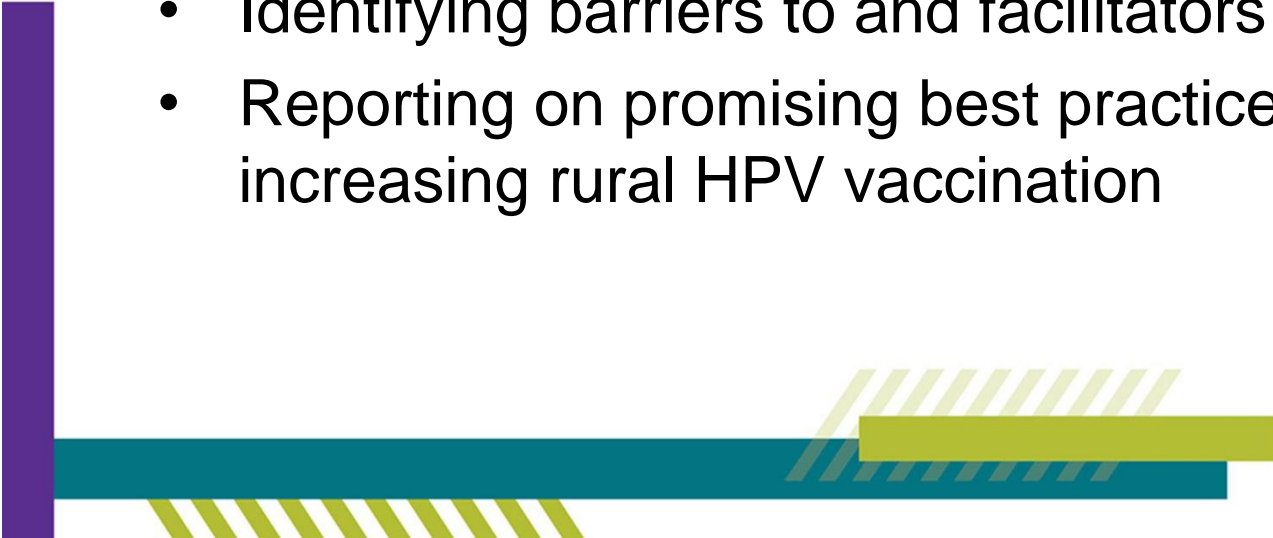
Kiara Long, MPH, CHES





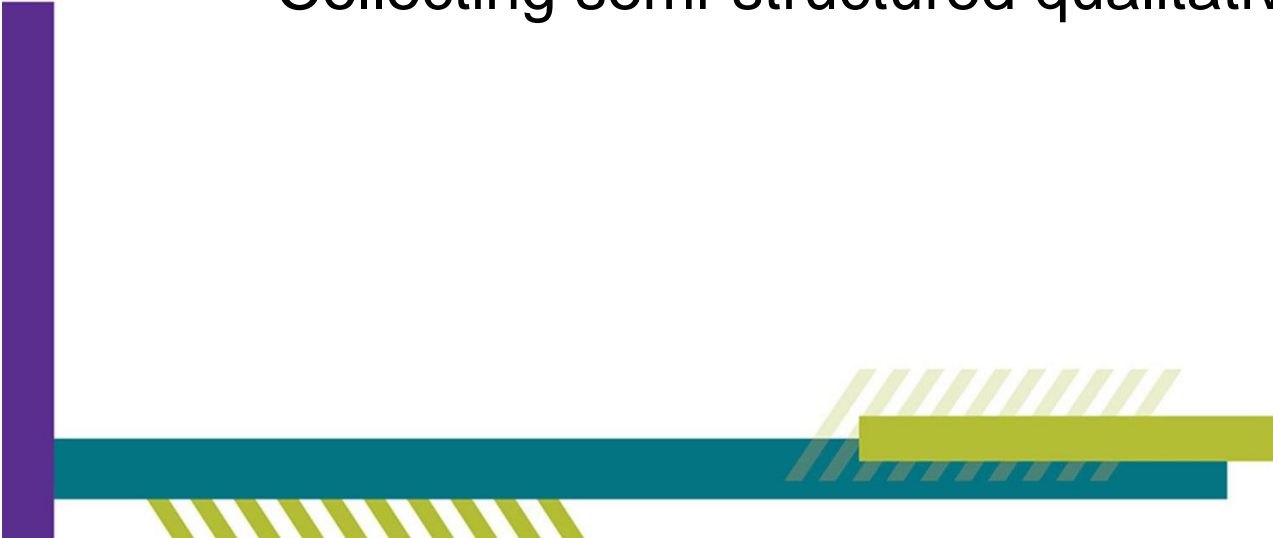
Project Goals

Understanding the challenges and solutions to HPV vaccination in rural areas

- Documenting policy, activities, or programs that have been implemented to increase rural HPV vaccination rates
 - Identifying barriers to and facilitators of HPV vaccination in rural areas
 - Reporting on promising best practices and future opportunities for increasing rural HPV vaccination
- 



Project Description

- Case study using three states
 - Virginia, Illinois, and South Carolina
 - Examining state cancer control plans, HPV cancer action plans, and other existing literature
 - Collecting semi-structured qualitative interviews with key informants
- 

Background: Virginia

- A total of 210,069 cancers were diagnosed in Virginia between 2016-2020 (VCR data)
 - 1,379 cervical cancers and 6,002 oral cavity and pharynx
 - Males had three times the number of oral cavity and pharynx cancers than females

2022 HPV vaccination rates among children aged 13-17 years

- Initiation: 77.5%
- Up-to-date: 62.7%

Virginia HPV Action Plan

Cancer Action Coalition

- The Virginia HPV Immunization Task Force (VHIT) Action Plan aims to provide a roadmap of priorities and strategies as we work to increase HPV immunization as identified in the Virginia Cancer Plan throughout the Commonwealth of Virginia.

Action Plan Priorities

- Decrease Community Disparities in HPV Vaccination
- Improve Delivery of Evidence-Based Strategies in Providing HPV Vaccine
- Increase/Compile HPV Data Quality and Sharing
- Increase Awareness of the Burden of HPV-Related Cancers in Men and Women
 - 15 goals
 - None specific on rural health

Virginia: Key HPV Policies

- HPV vaccine is a code-required vaccine for all students who attend public and private schools in Virginia.
 - Easy exemption: After reviewing educational materials approved by the Board of Health, the parent or guardian, at the parent's or guardian's sole discretion, may elect for the child not to receive the HPV vaccine.
- State law requires the development and distribution of materials regarding the HPV vaccination to parents.
- Pharmacist are allowed to administer HPV vaccine >18Yo (Younger Ages Under Rx/Protocol).
- Dentist are not allowed to administer HPV vaccine.



Background: Illinois

- 2022 HPV vaccine initiation rate is 80.7% and up-to-date is 65.7%
 - Initiation: 83.0% in Chicago, 79.7% rest of state
 - Up-to-date: 69.2% in Chicago, 64.9% rest of state
 - In 2017, the cervical cancer incidence rate in Illinois was 7.3 per 100,000, and the cervical cancer mortality rate was 2.1 per 100,000
- In the Illinois Comprehensive Cancer Control Plan, preventing human papillomavirus (HPV)-related cancers through vaccination is listed as a goal, but there is no distinct mentions of rural HPV vaccination focus or goals
- The IL HPV Action Plan recognizes some obstacles in healthcare services in rural locations, but did not specifically discuss implementation of best practices to increase HPV vaccination in rural areas



Illinois: Key HPV Policies

- Medicaid eligibility expansion (effective January 2014)
- Allowing pharmacists to administer HPV vaccination
- Public Act 102-1018 (starting July 2024), delivering HPV vaccine services pilot program to those enrolled in the Breast and Cervical Cancer Program who are eligible
- Minors who are 12 years or older do not need parental consent to receive the HPV vaccine




Background: South Carolina

- A total of 502,458 cases of invasive cancer among SC residents were reported to the South Carolina Central Cancer Registry (SCCCR) from 1996 to 2017, including 28,243 new cases reported in 2017.
 - In 2017, the cervical cancer incidence rate in SC was 7.7 per 100,000, and the cervical cancer mortality rate was 2.5 per 100,000
- 2022 HPV vaccine initiation rate is 69.9% and up-to-date is 54.4%.
- State Cancer Plan is not published for public viewing.



South Carolina: Key HPV Policies

- Age Limitations for HPV Vaccine: >18 Yo (Younger Ages Under Rx/Protocol)
 - Pharmacist are allowed to administer HPV vaccine >18Yo (Younger Ages Under Rx/Protocol).
 - Almost all SC adolescents can receive HPV vaccine through
 - Vaccines for Children (VFC) Program – provides all childhood and adolescent vaccines to children 0 to 18 years who have Medicaid, don't have health insurance, or are American Indian/Alaska Native.
 - SC State Vaccine Program - provides all childhood and adolescent vaccines (except meningococcal B vaccine) to children 0 to 18 years who are underinsured or have an insured hardship.
- 



Methods: Semi-structured Interviews

- We developed an interview guide with questions focusing on rural HPV vaccination, related barriers, facilitators, existing policies and programs, and future opportunities
- For each state, we conducted 2-3 key informant interviews with participants from state level organizations and agencies who can share information on rural HPV vaccination programs, activities and policies
- Data collection: September 2023 to February 2024
- Interviews were conducted via Zoom, audio-recorded, transcribed, and validated.
- Each interview lasted between 45-60 minutes.
- Data was qualitatively analyzed, and common and unique themes were identified.

Rural HPV vaccination: Barriers



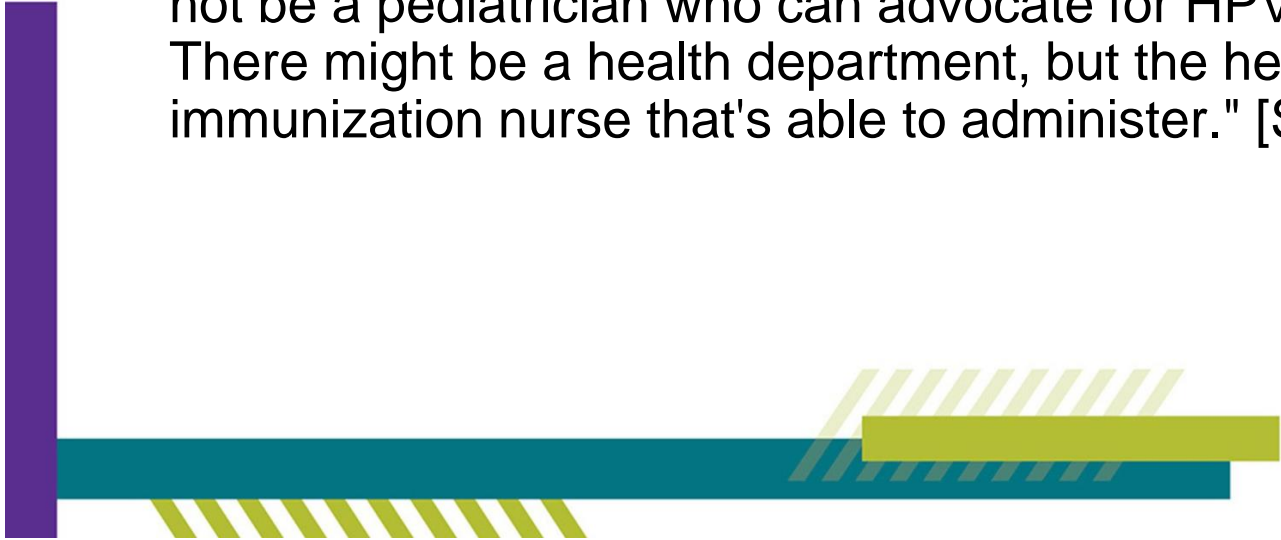
Barriers	VA	IL	SC
Lack of publicly accessible, large-scale data specific to HPV vaccination in rural areas (e.g., state registry)	X	X	X
Lack of pediatricians in rural areas	X	X	X
Long distance to health clinics; transportation barriers	X	X	X
Financial barriers; insurance	X	X	X
Lack of awareness of the HPV vaccine	X	X	X
Spread of misinformation about vaccine	X	X	X
Concerns about vaccine side effects	X	X	X
Low perceived susceptibility to HPV-related diseases		X	X
Poor Medicaid reimbursement rates		X	X
Vaccine cost for providers and storage concerns	X		X
School policy with no enforcement	X		
Political divide	X		
HPV vaccine hesitancy	X		X





"So that [partnership] would be a great way to reach a lot of those Medicaid patients and help them understand what resources that they may be available to help get vaccinated because we know Medicaid patients are going to face more barriers with cost, transportation, and other disparities." [VA]

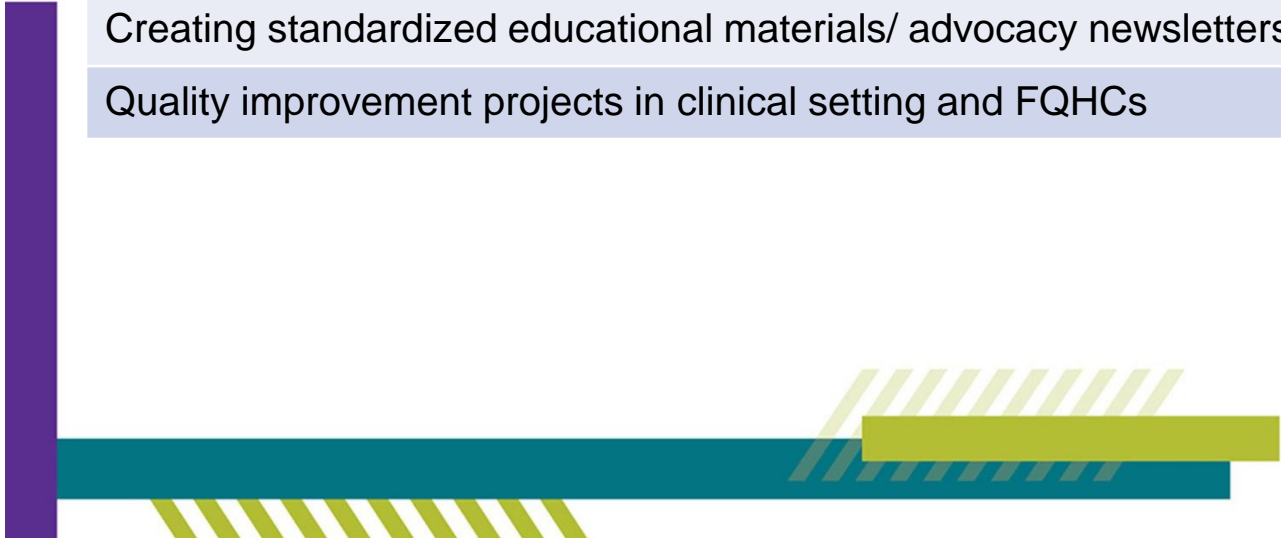
"Our rural areas typically will lack providers or people who can even administer. There may not be a pediatrician who can advocate for HPV vaccination. There might be a health department, but the health department might not have an immunization nurse that's able to administer." [SC]



Rural HPV vaccination: Current programs, activities, and policy



Current programs, activities, and policy	VA	IL	SC
Creatively leveraging different sources for the collection of data for rural HPV vaccination		X	
Social media and outreach campaigns targeting rural areas/Sign on letters for providers	X	X	
Organizations/health systems working in partnerships with one another	X	X	X
Ongoing state-level HPV/Immunization Advisory Committee/immunization Plan development	X	X	X
Webinar and education/training for clinicians and providers in rural areas	X	X	X
Collaborating with health professional programs to implement HPV education into classroom curriculum			X
Educating traditional/non-traditional providers to engage in HPV vaccine promotion/vaccination	X	X	X
Creating standardized educational materials/ advocacy newsletters	X	X	
Quality improvement projects in clinical setting and FQHCs	X		X





“The best example for me to discuss is the social media and outreach campaign. We shared physical materials with 190 clinics in 16 rural counties in Illinois. We also utilize data on other vaccine coverage to determine who our priority counties with lower routine immunization rates. And also examine cancer incidence data from IDPH, looking at data for 2 HPV-related cancers... counties with rates of these higher cancers compared to the state average. And that's what we used as our proxy for vaccine coverage and selecting the list for those different areas... And then we did the paid social media campaign on Instagram, where certain areas of the state were targeted with those images around HPV vaccination, and included links to where they could find more information about HPV vaccines... We were sure to include some imaging that was specific or spoke to the populations in the rural areas of the state to ensure that they were culturally appropriate for those areas.” [IL]

"It's not happening yet, but it's something that we're planning. And that is to fund FQHCs to do dedicated quality improvement work and implement those evidence-based interventions that we know work or are most likely to work in order to improve HPV immunization rates. That would be working with the VDH quality improvement program." [VA]

"We really try to bring everybody to the table because we think it's really important that everybody's represented and that everybody has a voice and that everybody has the opportunity to ask questions and give input" [SC]

Key organizations

Virginia

Cancer Coalition of Virginia
Virginia HPV Immunization Taskforce
Immunize VA
Virginia State Department of Health
Virginia Rural Health Association
American Academy of Pediatrics
Virginia Chapter
Virginia Commonwealth University
University of Virginia
Dentist and Dental Hygienist
Association of Virginia
Health systems and insurance groups
School Nurse Association

Illinois

Illinois Chapter of the American
Academy of Pediatrics
Illinois Public Health Association
Illinois Department of Public Health
Illinois HPV Workgroup
Illinois Rural Health Association
Illinois Primary Healthcare Association
Siteman Cancer Center (Washington
University in St. Louis)
Southern Illinois University

South Carolina

South Carolina Department of
Health and Environmental Control
South Carolina Adolescent
Immunization Taskforce
South Carolina Cancer Alliance
American Academy of Pediatrics
South Carolina Chapter
Medical University of South Carolina
University of South Carolina
Presbyterian College


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Rural HPV vaccination: Future opportunities

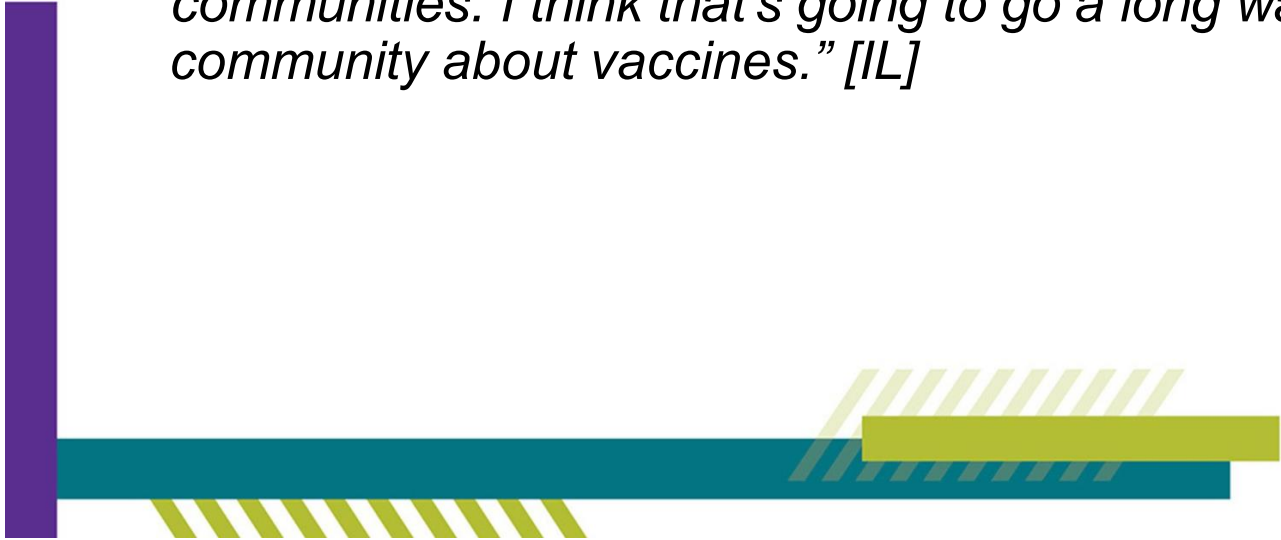


Opportunities	VA	IL	SC
Advocacy for better reimbursement rates for Medicaid		X	
Engage with trusted leaders and groups or non-traditional partners (e.g., libraries, local YMCAs, religious orgs)	X	X	
Engage with dental health and oral health providers	X	X	X
Engage with pharmacist and school nurses	X		X
Promote HPV vaccination in locations beyond primary care/pediatricians (e.g., pharmacies)	X	X	X
Peer to peer education	X	X	X
Mobile van for HPV vaccination		X	X
Partnerships and alignment of immunization and cancer action plan goals	X		
Better ways to capture immunization data in rural areas	X	X	X



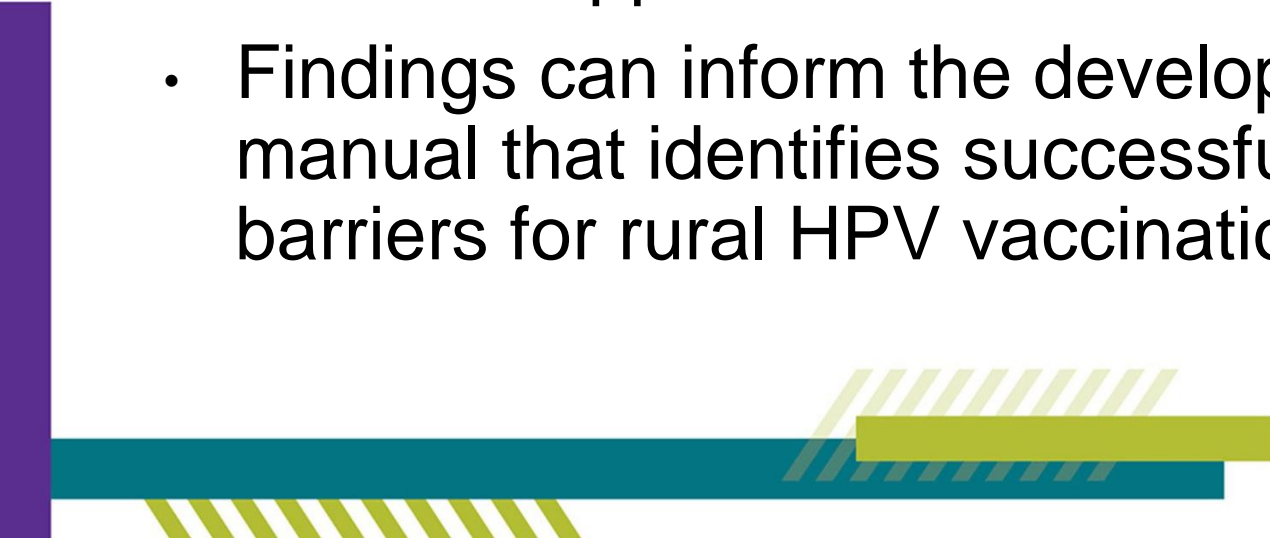


“It really is that rural culture, you know. When you think about the role the schools in rural communities, the community centers, just sort of the places that people congregate and what keeps them tied to those rural communities. Those are our main assets there. It's that sense of, I wanna look out for my friends and my neighbors. Generally speaking, I'm finding a lot of folks in the rural communities are very health conscious. They want to eat food that came from their land or from their neighbors. So if we can loop in this vaccination is just sort of one piece of that. I really do think we'll get a lot of buy in, because it just sort of shows that you're trying to, promote long-term health and wellness... I think you know, if we can get that message across and find some advocates from within the rural communities. I think that's going to go a long way towards like building that trust within the community about vaccines.” [IL]





Implications

- This project identified commonalities and unique aspects of each of the three states (VA, IL, and SC) regarding barriers to and facilitators of HPV vaccination in rural areas
 - We also identified promising programs and activities as well as future opportunities to increase rural HPV vaccination
 - Findings can inform the development of a "best practice" manual that identifies successful approaches to overcoming barriers for rural HPV vaccination
- 

Next steps

- Further analyze data
- Create open-access report

Acknowledgement

- Virginia HPV Immunization Taskforce, Richmond VA
- Immunize VA, Richmond VA.
- Stephanie Atella: Chief Program Officer, Illinois Chapter of the American Academy of Pediatrics
- Sarah Chavez: Co-Chair, Illinois Cancer Partnership Prevention Subcommittee; Senior Scientist, Community Outreach and Engagement at Alvin J. Siteman Cancer Center, Washington University School of Medicine
- Eric Adjei Boakye: Co-Chair, Illinois Cancer Partnership Prevention Subcommittee; Assistant Scientist, Hendry Ford Health System
- Kim Hale: Associate Director of State Partnerships, American Cancer Society
- Beth Poore: Outreach and Education Coordinator, South Carolina Department of Health and Environmental Control, Immunization Division

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Discussion



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Upcoming Events

- Send resources to PreventHPV@stjude.org



- Achieving Cervical Cancer Elimination in the Southeast webinar. Registration in chat and in today's summary.
- Next Rural Quarterly Update Meeting on August 14:
 - Communication: August 7. By August 5, Share with us your resources, manuscripts, projects to increase vaccination with rural communities.
 - Meeting: August 14. Progress updates, AAP – Influencers Campaign, Rural Cancer Disparities.
- *Vacunación Sin Barreras*: Addressing HPV Vaccination Inequities and HPV Cancer Disparities in Hispanic and Latino Communities. October 2, 12 – 1:15 PM CT.



Achieving Cervical Cancer Elimination in the Southeast

June 06, 2024 | 10 AM - 12 PM CST

This virtual seminar will explore Operation Wipe Out, Alabama's statewide action plan to eliminate cervical cancer, as a model for implementing policy to eliminate cervical cancer in the Southeast.

- What cervical cancer elimination planning models currently exist?
- What can we learn and share from existing cervical cancer elimination planning models?
- How can we adapt and implement existing cervical cancer elimination planning models to achieve cervical cancer elimination across the Southeast?

This interactive training experience will include presentations, facilitated breakout room discussions, and large group sharing.

Register to participate live or access the recording following the conclusion of the training.

[Register today](#)

To learn more about the Southeast Roundtable and access resources, visit the website at stjude.org/southeast-roundtable.

Moderator:

Julia Brown, MPH
Program Manager, HPV Cancer Prevention Program
St. Jude Children's Research Hospital



Presenters:

Isabel C. Scarinci, PhD, MPH
Professor, Vice-Chair for Global and Rural Women's Health, Department of Obstetrics and Gynecology, Senior Advisor for Globalization and Cancer, O'Neal Comprehensive Cancer Center, University of Alabama at Birmingham



Nancy Wright, MPH
Director, Cancer Prevention and Control Division, Alabama Department of Health



Email PreventHPV@stjude.org with questions

Next Quarterly Updates Meetings

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August 14, 2024, 1:00 – 2:00 PM CT

November 20, 2024 – 1:00 – 2:00 PM CT



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Thank you!

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