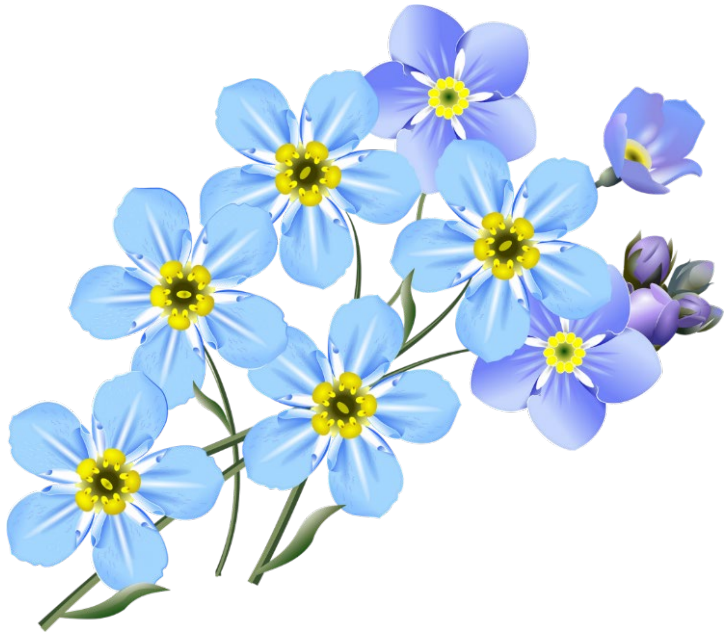

HPV Self-Collection to Increase Cervical Cancer Screening Participation

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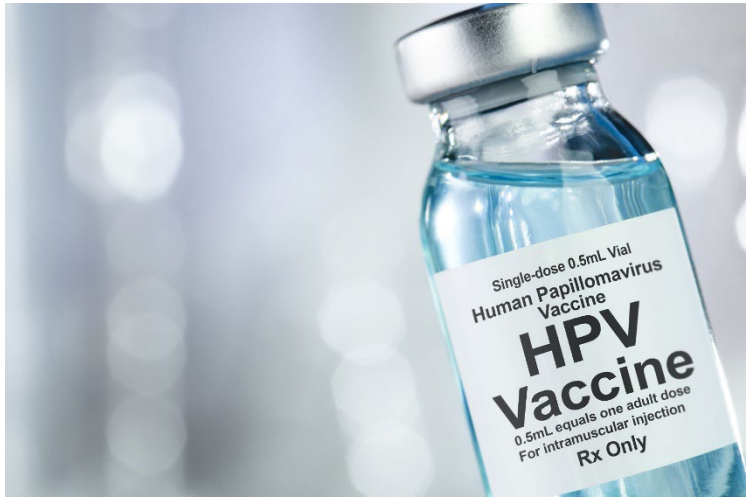
Baylor College of Medicine

Disclosure

I have no financial relationships or conflicts of interest to disclose.

Cervical cancer: Almost entirely preventable…

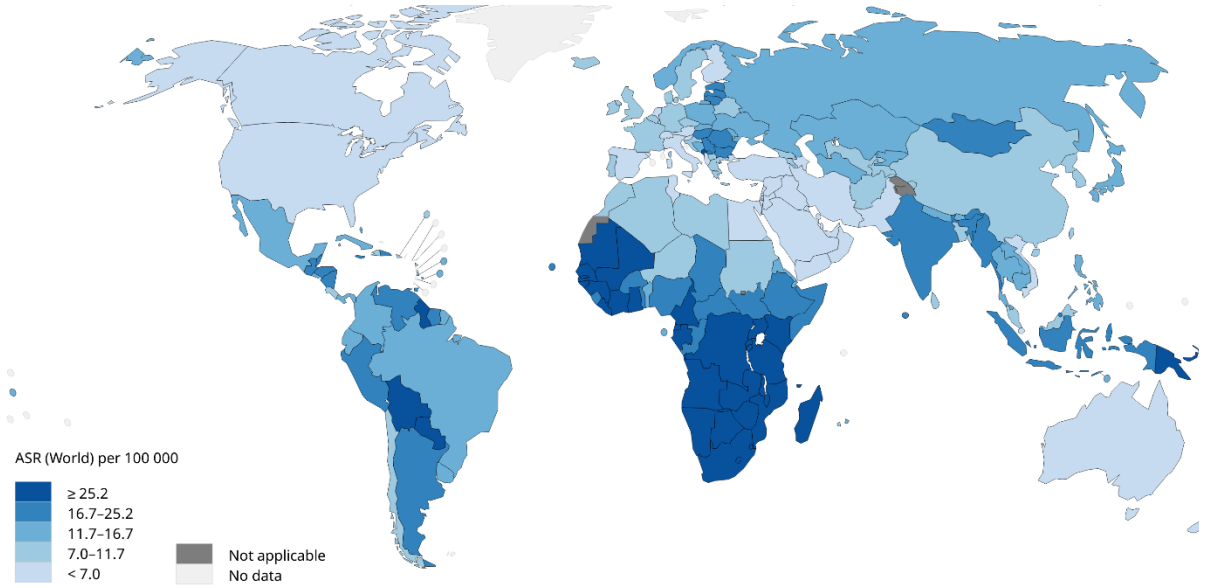


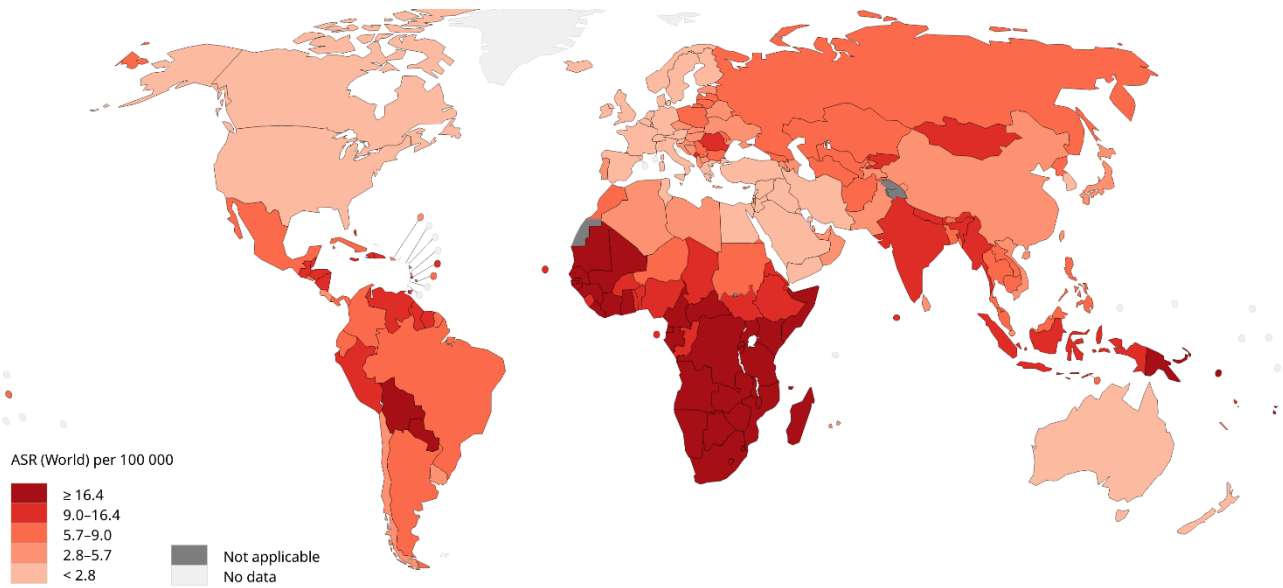
And yet….

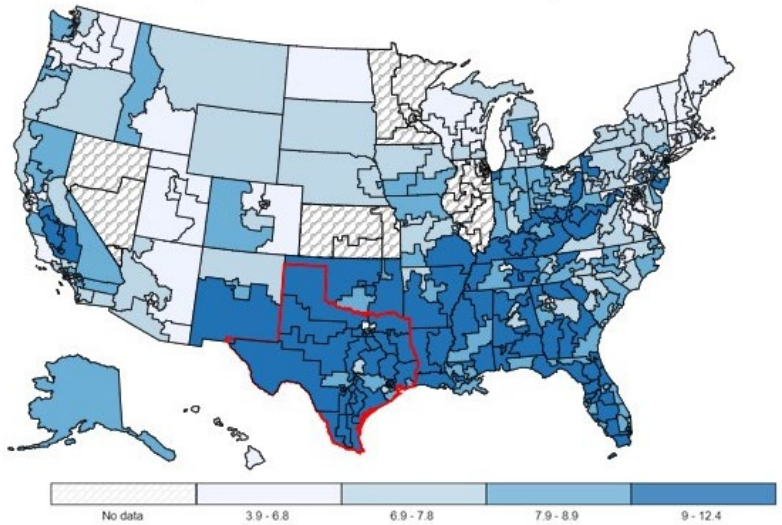
1 woman diagnosed with cervical cancer every minute

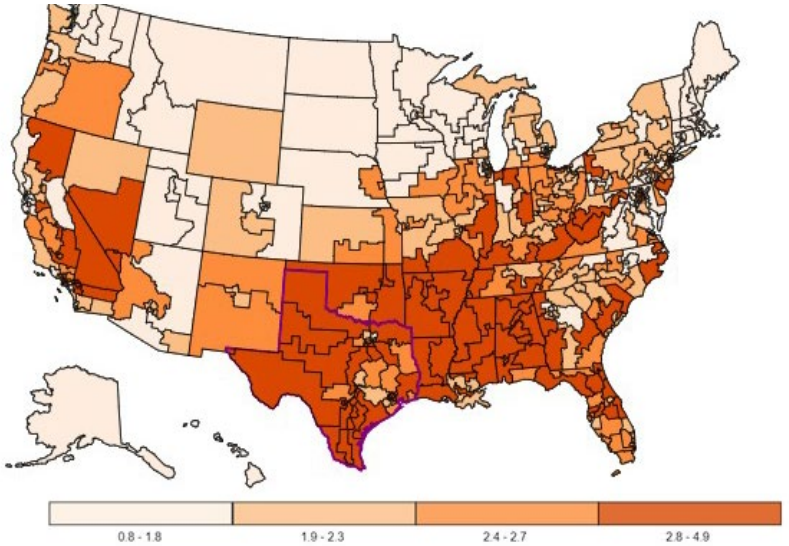
1 woman dies of cervical cancer every 2 minutes

Global patterns of inequity persist in the U.S.



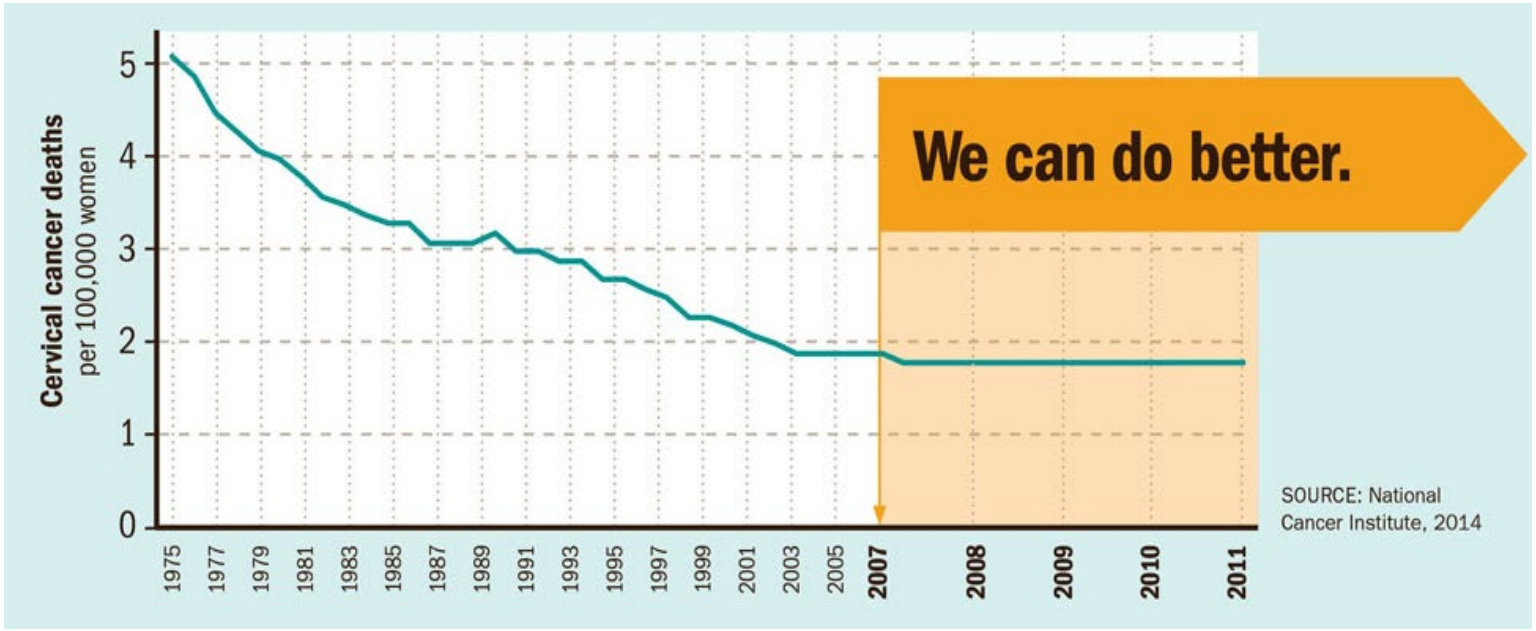




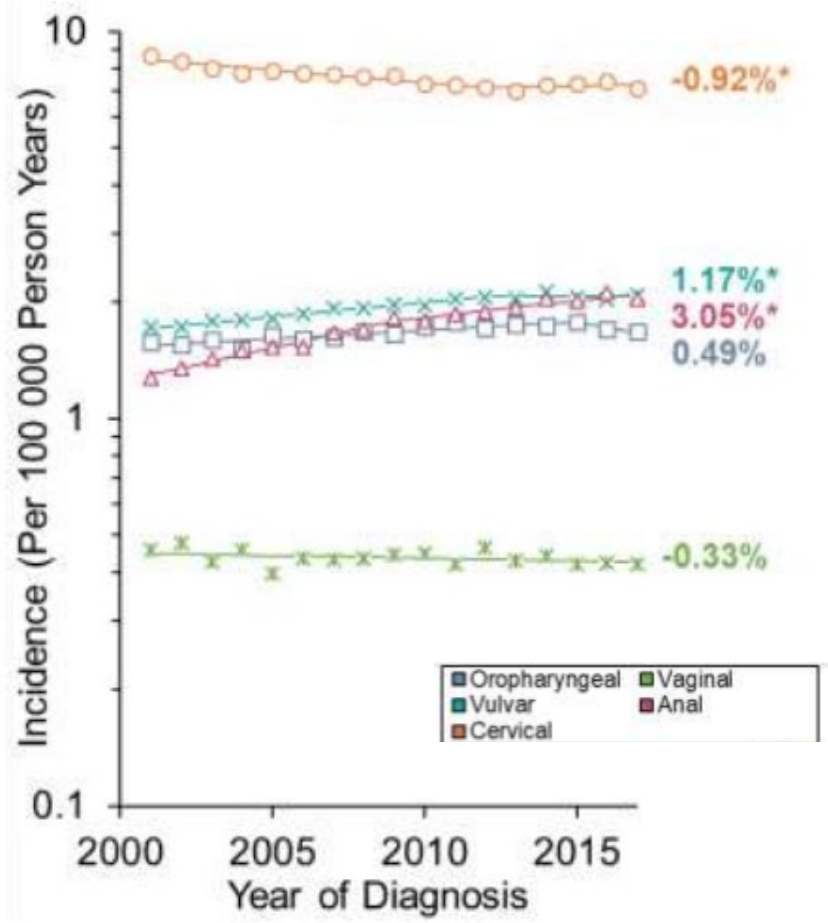


GLOBOCAN 2020, CDC 2020

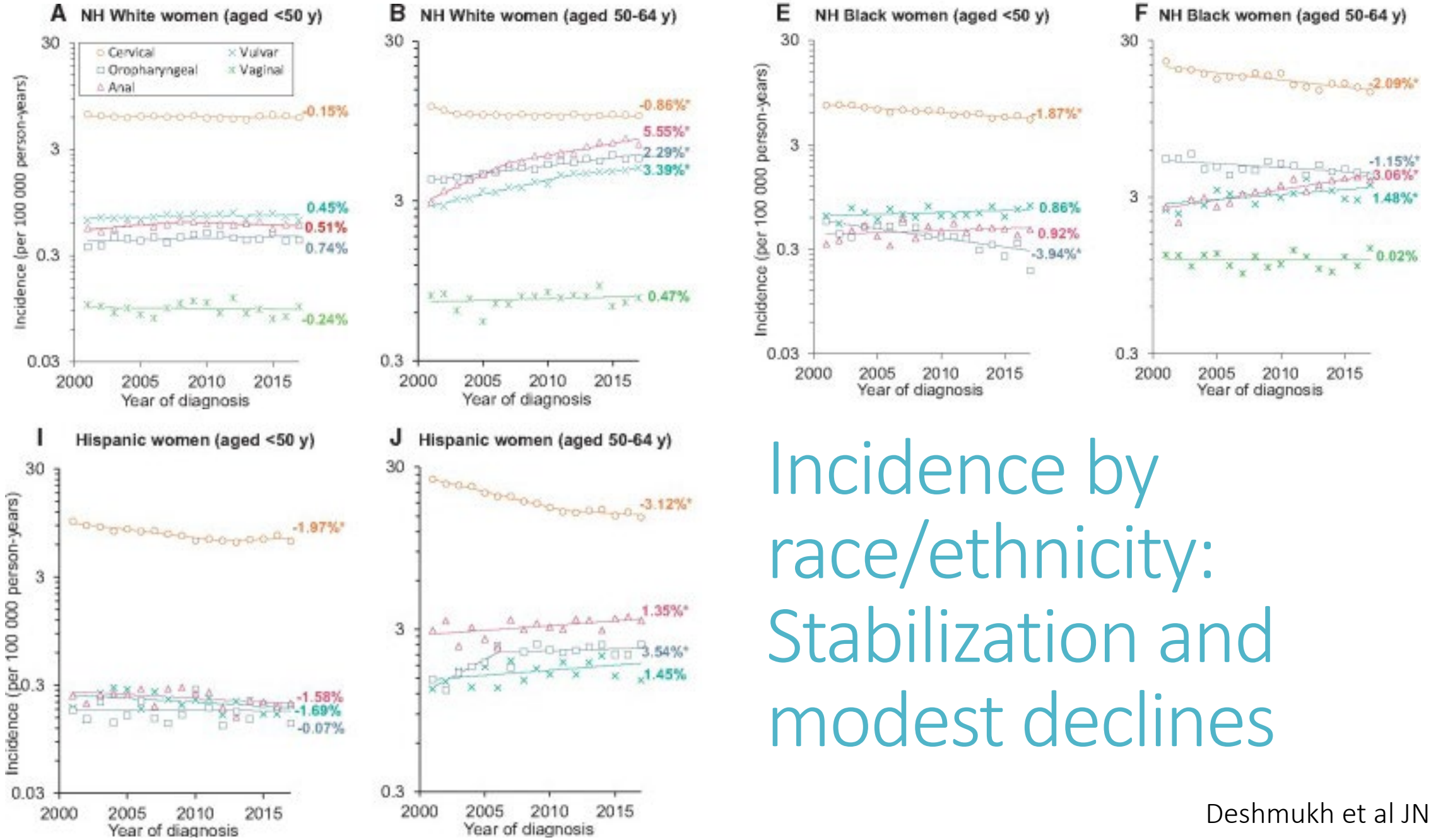
Little progress in reducing cervical cancer incidence and mortality rates in last two decades.



NCI, 2014

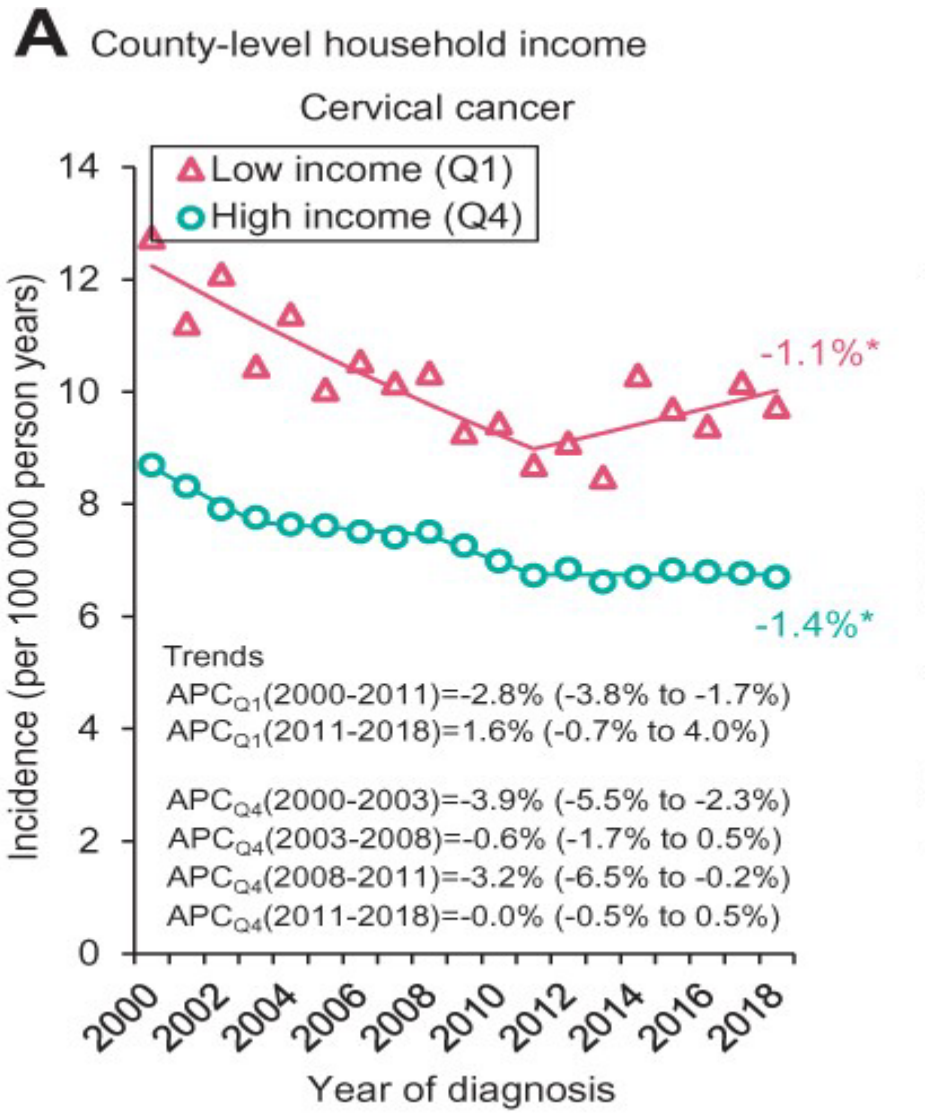


Deshmukh et al JNCI 2021



Incidence by race/ethnicity: Stabilization and modest declines

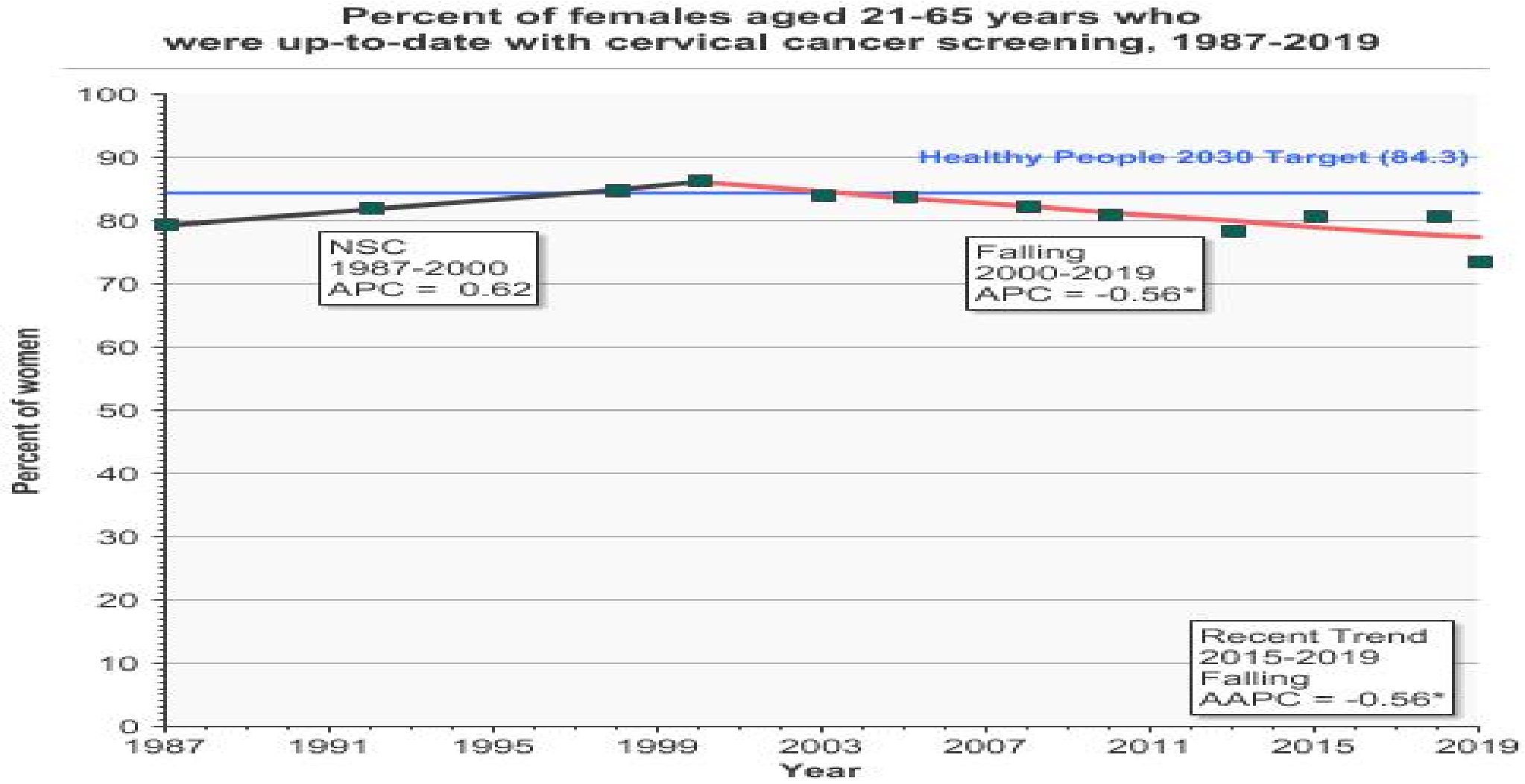
Deshmukh et al JNCI 2021



Incidence by area-level SES: Reversal of progress in low-income counties

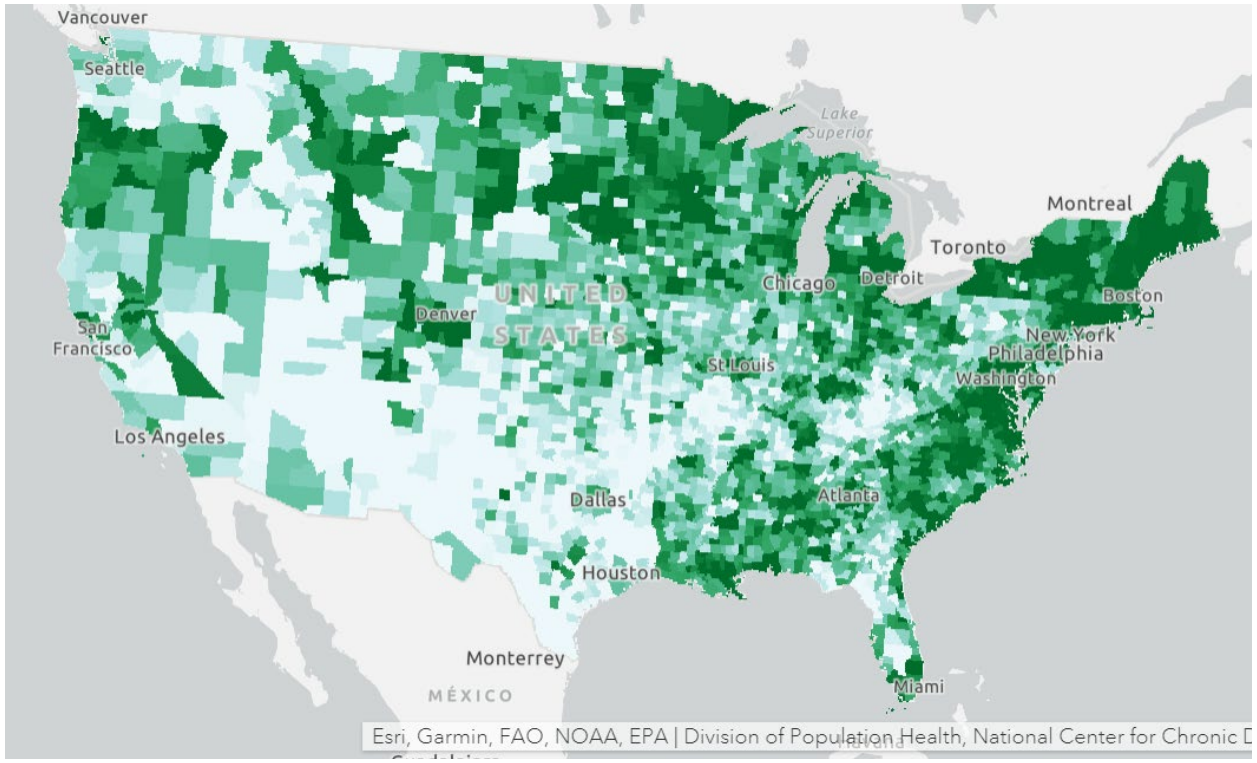
Lin, Damgacioglu…. Deshmukh et al, JNCI Cancer Spectrum, 2022

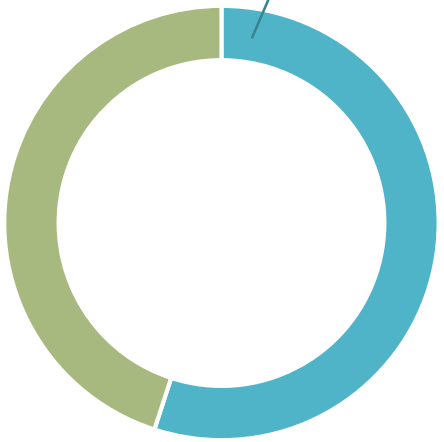
Declining Cervical Cancer Screening Coverage



NCI, 2021

Pronounced Disparities in Cervical Cancer Screening

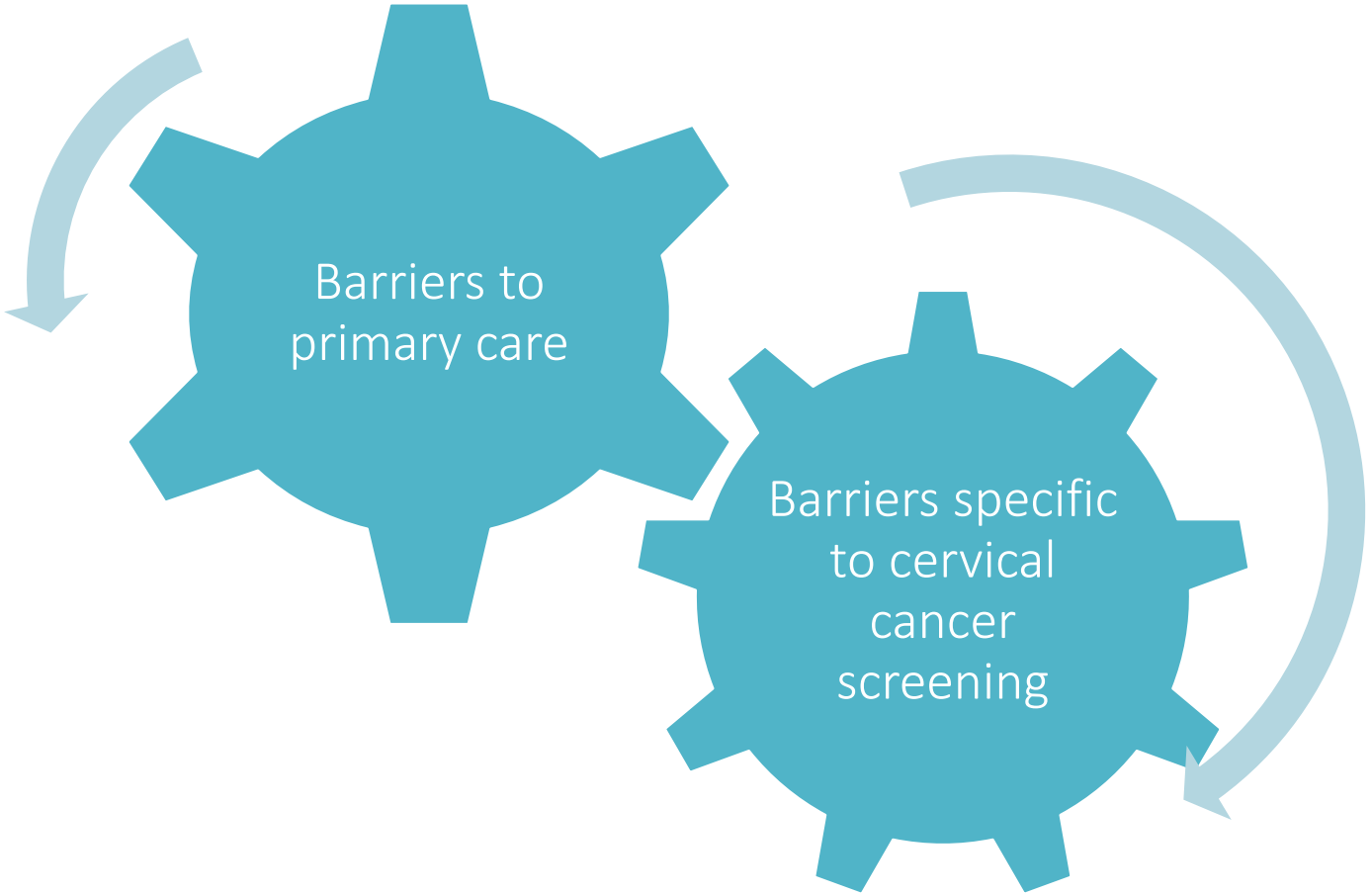




Un/under-screened women account for over 50% of new cervical cancer cases in the U.S

CDC Cancer Statistics Visualizations, 2022

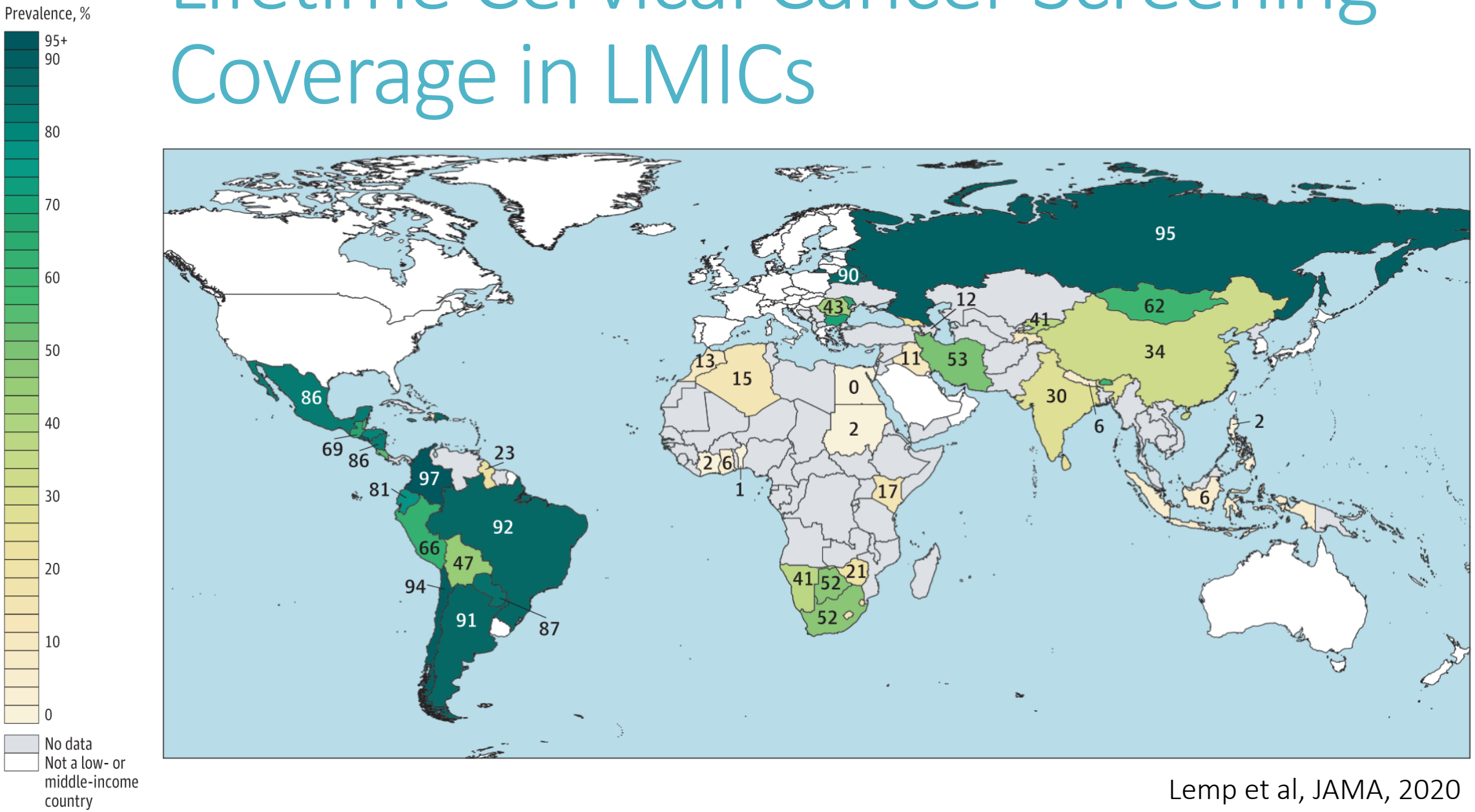
Barriers to Cervical Cancer Screening



Current interventions to increase provider-delivered screening are insufficient and inadequate to address existing barriers.

Suk et al, JAMA Network Open, 2022
Montealegre et al, Gyn Onc 2014

Lifetime Cervical Cancer Screening Coverage in LMICs



Lemp et al, JAMA, 2020

90%

of girls fully vaccinated with HPV vaccine by age 15

70%

of women screened with a high-performance test by 35 years of age and again by 45 years of age

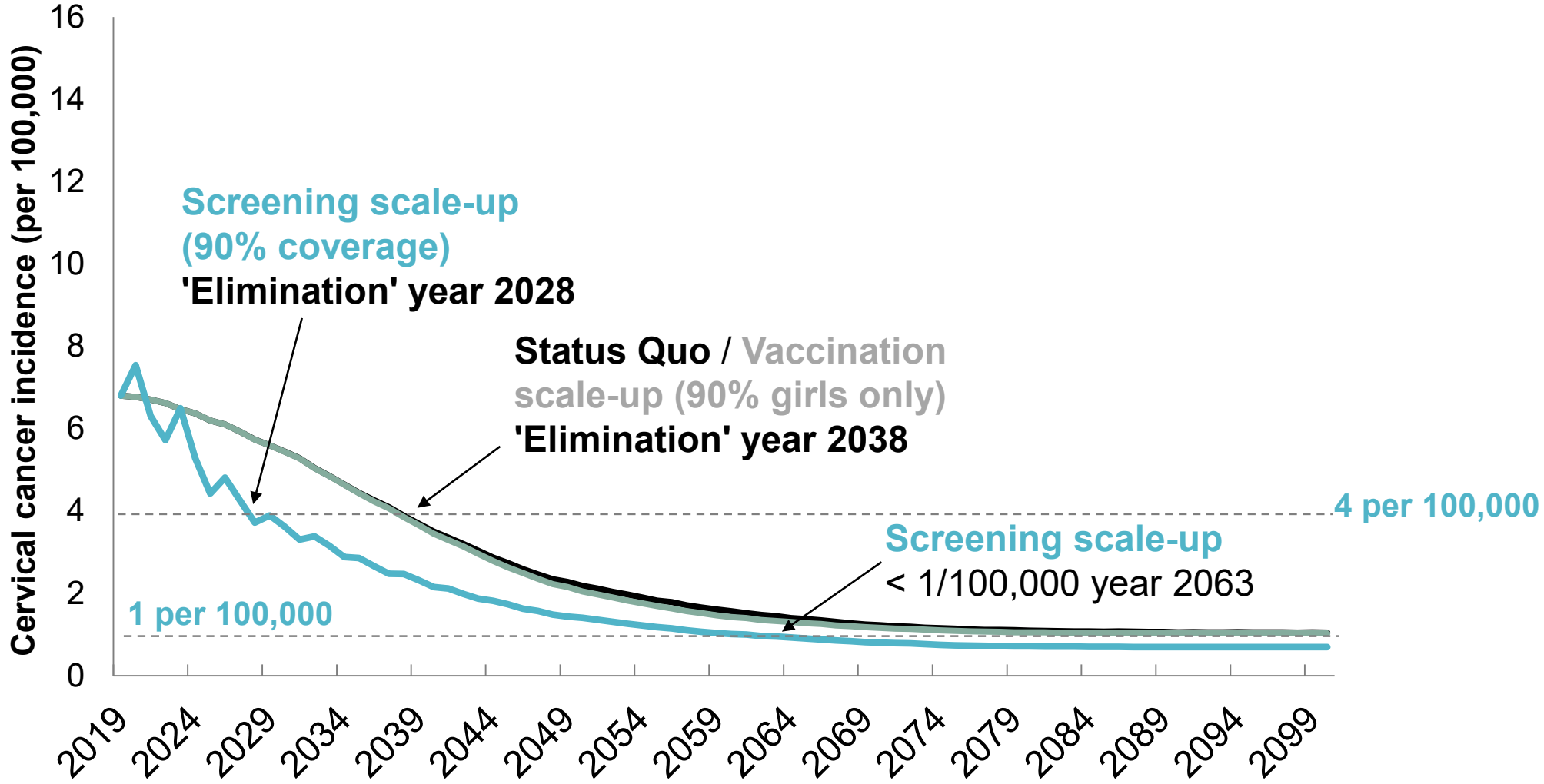
90%

of women identified with cervical disease receive treatment

Global strategy to eliminate cervical cancer as a public health problem (incidence ≤ 4 per 100,000 women-years)

World Health Organization, 2020

Cervical cancer incidence in U.S. will decline more rapidly by increasing screening than by increasing HPV vaccination



Burger et al, Lancet Public Health, 2020

Shifting Paradigms: Pap to high-risk HPV testing

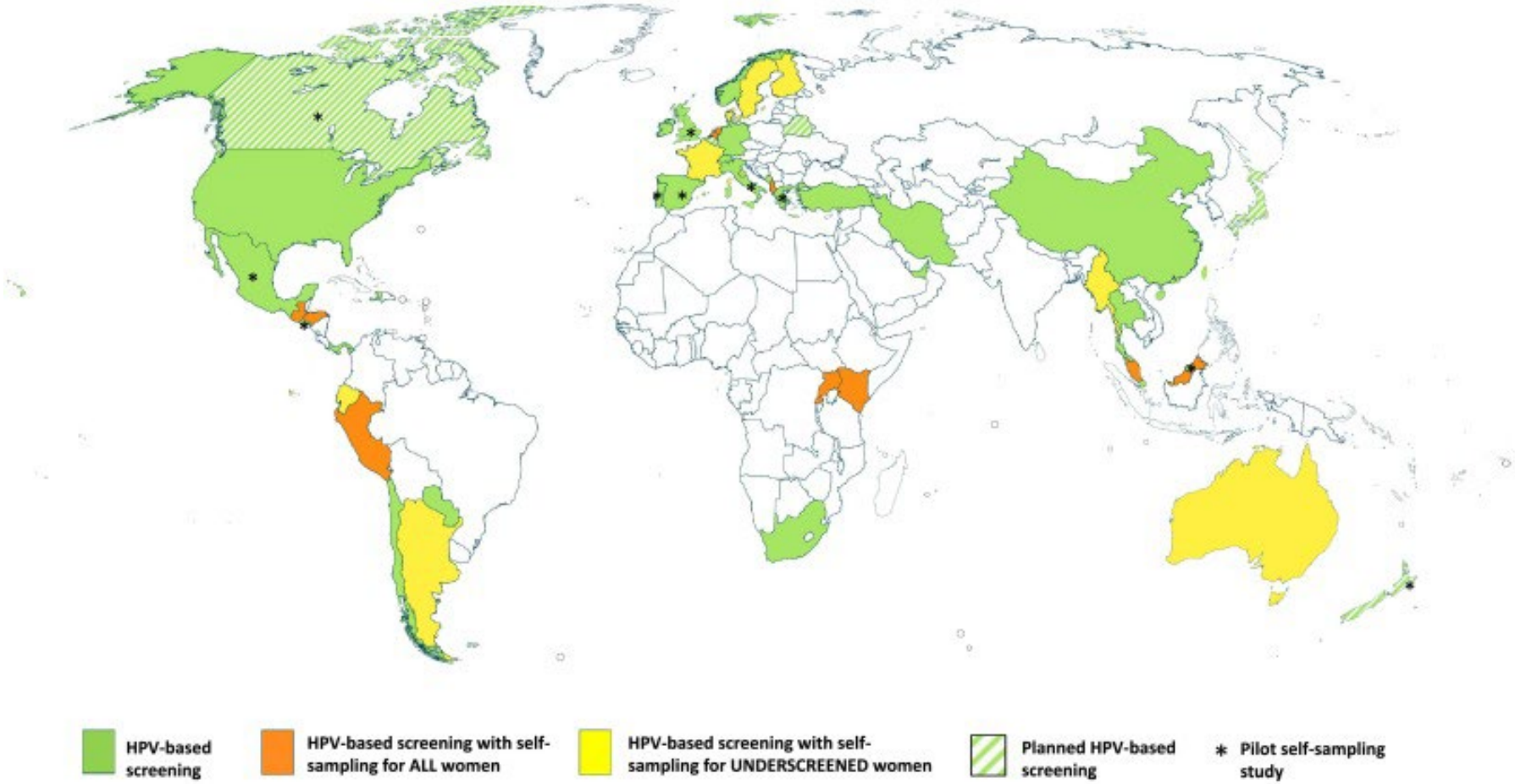
High-risk (HR-) HPV Testing is superior to Pap testing in terms of:

- High sensitivity
- High negative predictive value → high reassurance rate for women with a negative HR-HPV test
- Ability to be conducted on self-collected samples with:
  - Similar sensitivity and specificity to provider collected samples
  - High acceptability among women

Arbyn et al, Lancet Oncol, 2018; Nelson et al, Sex Trans Dis, 2017

Shifting Paradigms: Provider- to self-collection

Self-Sampling in National Cervical Cancer Screening Programs



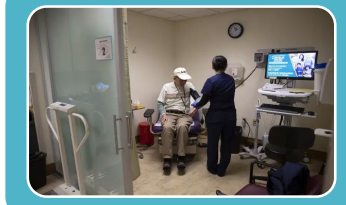
Serrano et al, Prev Med, 2022

Self-Sampling in Safety Net Health Systems

- At-home self-sample HPV testing increases cervical cancer screening among underscreened women in high-resource integrated health systems.
- What about safety net systems?

Serve a large proportion of socioeconomically disadvantaged individuals in the U.S.

Often serve predominantly racial/ethnic minority populations



Socioeconomically disadvantaged, racial/ethnic minority women shoulder a disproportionate burden of cervical disease.

Safety net patients may face barriers that hinder effectiveness of mailed self-sample HPV testing kits:

- ❖ Language barriers
- ❖ Low literacy
- ❖ Unstable housing
- ❖ Distrust of healthcare system
- ❖ Access and economic barriers

Winer et al, JAMA Network Open 2019, Arbyn et al Lancet Oncol, 2018; Montealegre et al, Trials 2020

Adaptations for Safety Net Health Settings

Patient Navigation

Patient-centered service delivery intervention help guide patients through the healthcare system by:

- ❖ Addressing barriers to care
- ❖ Defragmenting health care processes

Hypothesis: Patient navigation may be an effective strategy to increase reach, adoption, acceptability, and use of mailed kits.

Patient education that is linguistically and culturally-concordant and adapted for low-literacy populations

Montealegre et al. Trials 2020

The PRESTIS Trial:
Prospective Evaluation of Self-Testing to Increase Screening

Can mailing and testing self-sampled kits for high-risk HPV increase screening participation among underserved minority women in a safety-net health system?

Can patient education and navigation optimize participation in home-based screening?

What are the experiences of women who utilize mailed self-sampling kits? What are the experiences of HR-HPV positive women?

Is the intervention cost-effective?

PRESTIS Trial

Underscreened patients

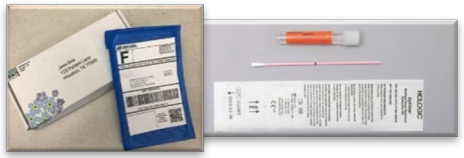
(n=2,268)

n=768

Educational phone call to encourage cervical cancer screening

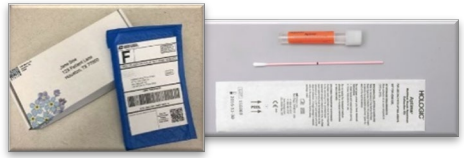
n=768

Educational call + Mailed self-sample HPV test kit



n=768

Educational call + Mailed kit + Telephone assistance from Patient Navigator

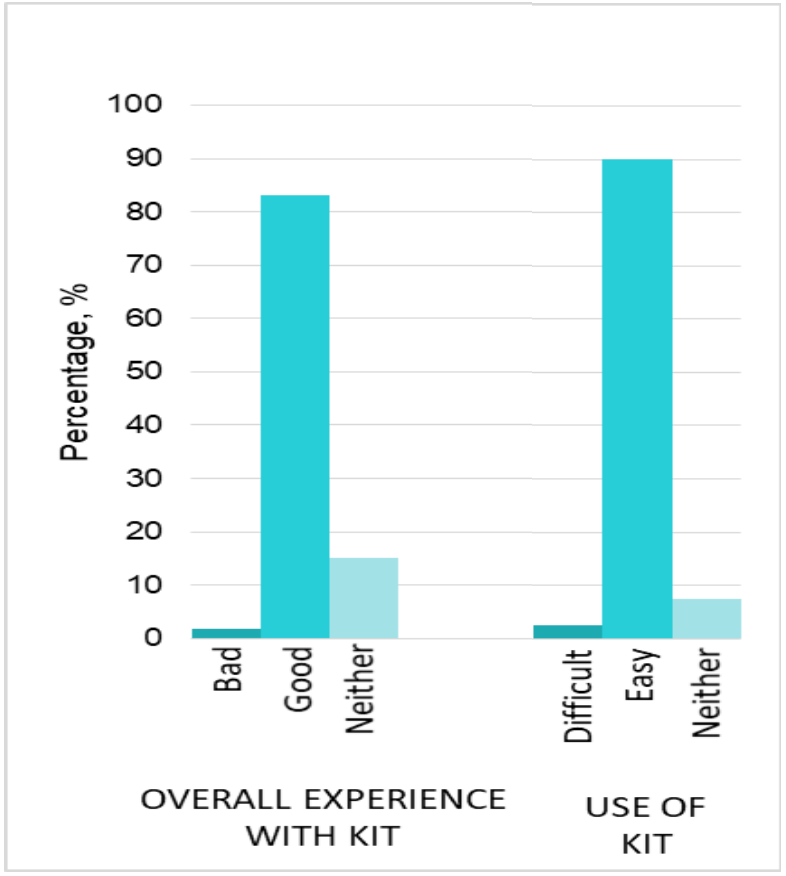


PRESTIS Study

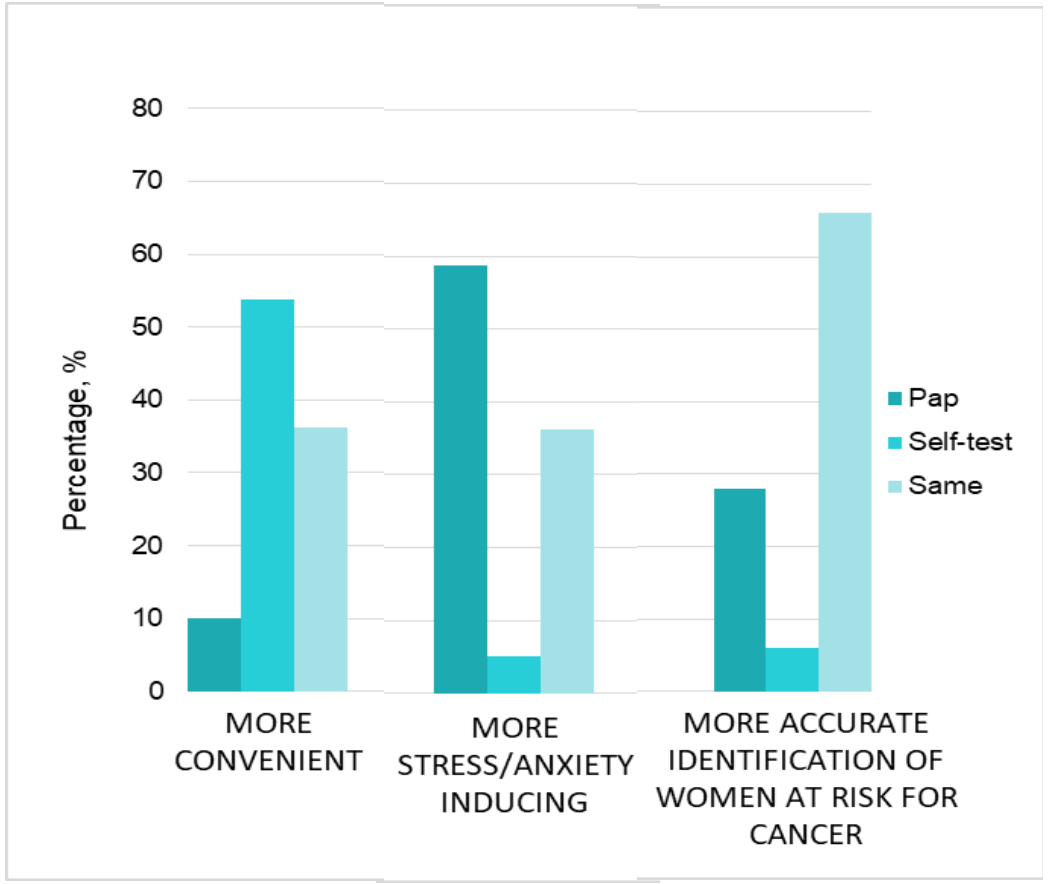
Montealegre et al. Trials 2020

Preliminary Data from Nested Telephone Survey (n=185)

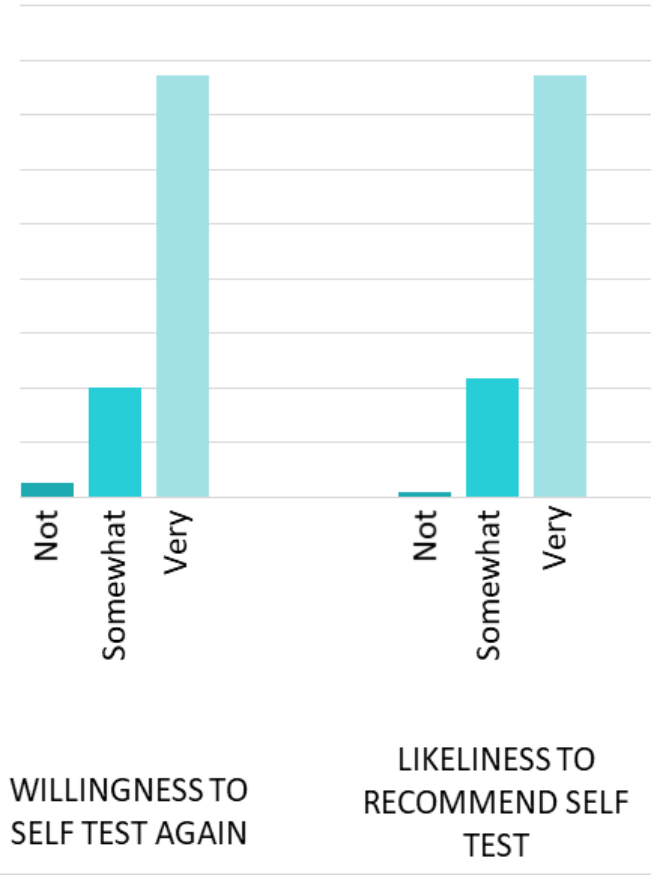
Experiences with self-sampling kit



Perceptions of self-sampling compared to Pap testing



Intentions for future screening



Thank you!

TEAM PRESTIS

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