Should Women Continue Screening After the Age 65?

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ABSOLUTELY!!!!

Disclosures

- None, as it pertains to this topic
- Consultant: InCellDx, Antiva, Altum, and PathoVax

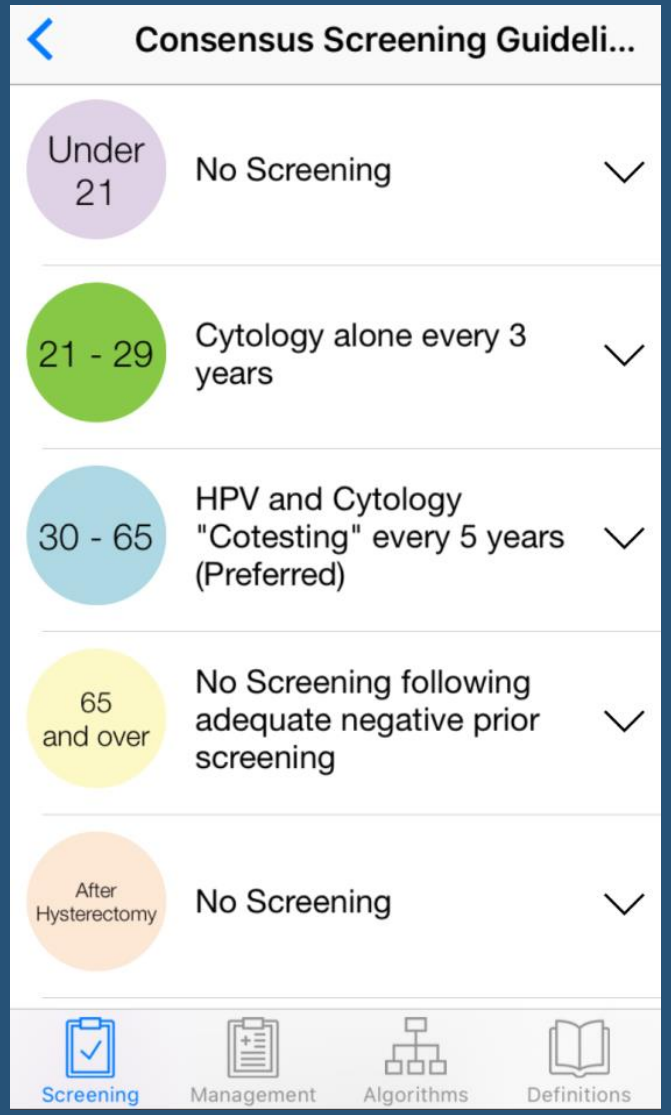
Background

- >12,000 cases and >4,000 deaths annually in the US[1]
- Incidence and mortality rates have been historically underestimated[2,3,4]
- Racial disparities are larger when accounting for hysterectomy

1. Siegel et al. 2017, 2. Rositch et al. 2014, 3. Beavis et al. 2017, 4. Yoo et al. 2017

Background

- ACS, ACOG, ASCCP and USPSTF currently recommend cessation of cervical cancer screening after 65 years of age
- Based on modeling, expert opinion



Cervical Cancer Screening Guidelines for Average-Risk Women[a]

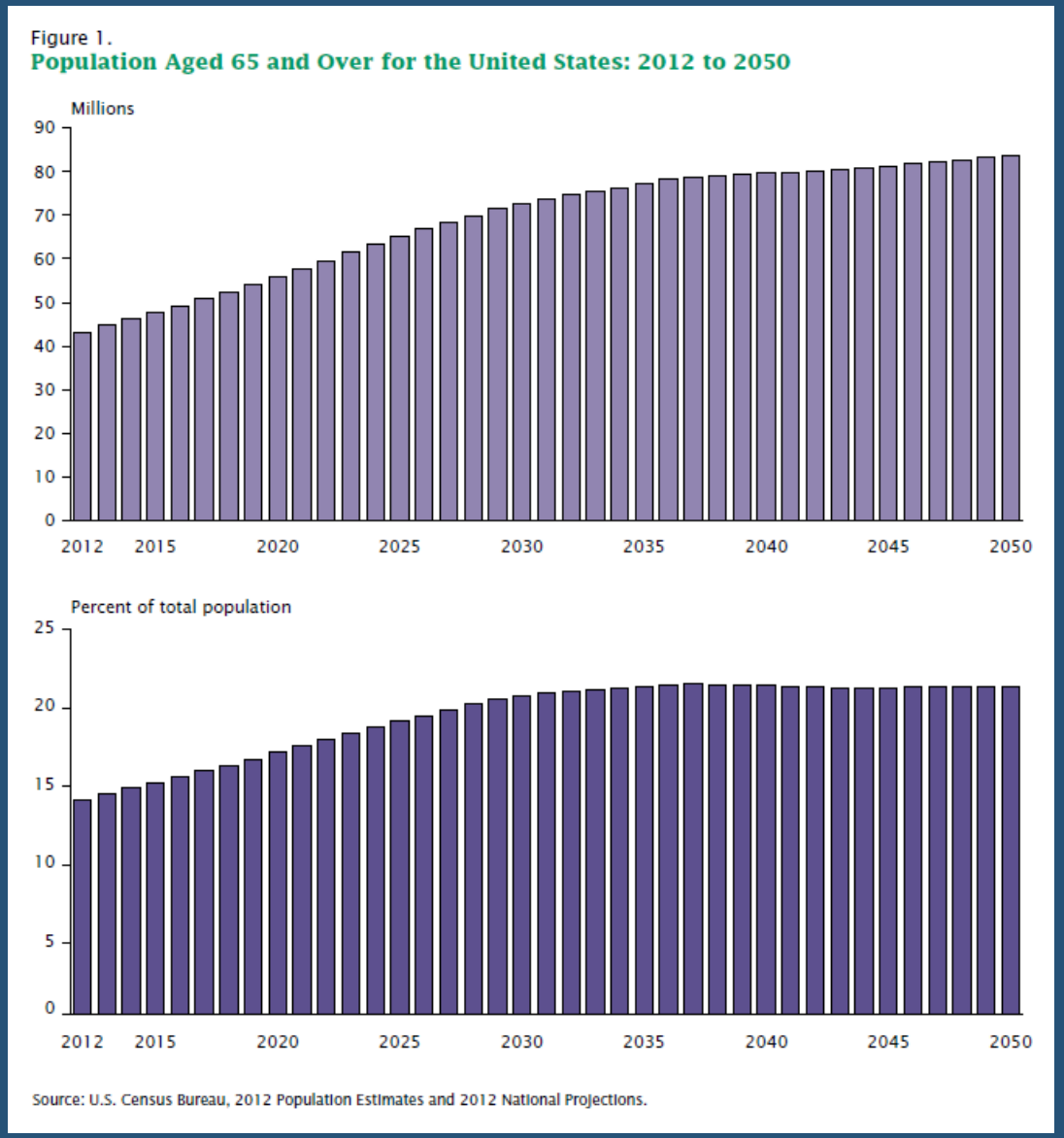
	American Cancer Society (ACS), American Society for Colposcopy and Cervical Pathology (ASCCP), and American Society for Clinical Pathology (ASCP)[1] 2012	U.S. Preventive Services Task Force (USPSTF)[2] 2012	American College of Obstetricians and Gynecologists (ACOG)[3] 2012	Society of Gynecologic Oncology (SGO) and the American Society for Colposcopy and Cervical Pathology (ASCCP): Interim clinical guidance for primary hrHPV testing[4] 2015
When to start screening[b]	Age 21. Women aged <21 years should not be screened regardless of the age of sexual initiation or other risk factors.	Age 21. *(A recommendation)* Recommend against screening women aged <21 years *(D recommendation).*	Age 21 regardless of the age of onset of sexual activity. Women aged <21 years should not be screened regardless of age at sexual initiation and other behavior-related risk factors *(Level A evidence).*	Refer to major guidelines.
Statement about annual screening	Women of any age should not be screened annually by any screening method.	Individuals and clinicians can use the annual Pap test screening visit as an opportunity to discuss other health problems and preventive measures. Individuals, clinicians, and health systems should seek effective ways to facilitate the receipt of recommended preventive services at intervals that are beneficial to the patient. Efforts also should be made to ensure that individuals are able to seek care for additional health concerns as they present.	In women aged 30–65 years, annual cervical cancer screening should not be performed. *(Level A evidence)* Patients should be counseled that annual well-woman visits are recommended even if cervical cancer screening is not performed at each visit.	Not addressed.
Screening method and intervals				
Cytology (conventional or liquid based)[c] 21–29 years of age	Every 3 years.[d]	Every 3 years *(A recommendation).*	Every 3 years *(Level A evidence).*	Not addressed.
Cytology (conventional or liquid based)[c] 30–65 years of age	Every 3 years.[d]	Every 3 years *(A recommendation).*	Every 3 years *(Level A evidence).*	Not addressed.
HPV co-test (cytology + HPV test administered together) 21–29 years of age	HPV co-testing should not be used for women aged <30 years.	Recommend against HPV co-testing in women aged <30 years *(D recommendation).*	HPV co-testing[e] should not be performed in women aged <30 years. *(Level A evidence)*	Not addressed.
HPV co-test (cytology + HPV test administered together) 30–65 years of age	Every 5 years; this is the preferred method.	For women who want to extend their screening interval, HPV co-testing every 5 years is an option *(A recommendation).*	Every 5 years; this is the preferred method *(Level A evidence).*	Not addressed.
Primary hrHPV testing[f] (as an alternative to cotesting or cytology alone)[g]	For women aged 30–65 years, screening by HPV testing alone is not recommended in most clinical settings.[h]	Recommend against screening for cervical cancer with HPV testing (alone or in combination with cytology) in women aged [illegible] years *(D recommendation).*	Not addressed.	Every 3 years. Recommend against primary hrHPV screening in women aged <25 years of age.[i]
When to stop screening	Aged >65 years with adequate negative prior screening* and no history of CIN2 or higher within the last 20 years.[j] **Adequate negative prior screening results are defined as 3 consecutive negative cytology results or 2 consecutive negative co-test results within the previous 10 years, with the most recent test performed within the past 5 years.*	Aged >65 years with adequate screening history* and are not otherwise at high risk for cervical cancer[j] *(D recommendation).*	Aged >65 years with adequate negative prior screening* results and no history of CIN 2 or higher[j] *(Level A evidence).*	Not addressed.

harms from screening of this population, in addition to those already specified, include discomfort during cytology sampling and false-positive screening tests. Based on the extended natural history of the disease, it is improbable that incident HPV infections and newly detected CIN3 after the age of 65 will have sufficient time to progress to invasive cancer in the woman's lifetime but it is unlikely that there will ever be a clinical trial to demonstrate this directly. Finally, one modeling study concluded that for women who have been screened every 3 years prior to age 65 years, the ratio of colposcopies to years of life gained associated with further screening was large (or the years of life gained per colposcopy small) because of the small gains in life expectancy [63].

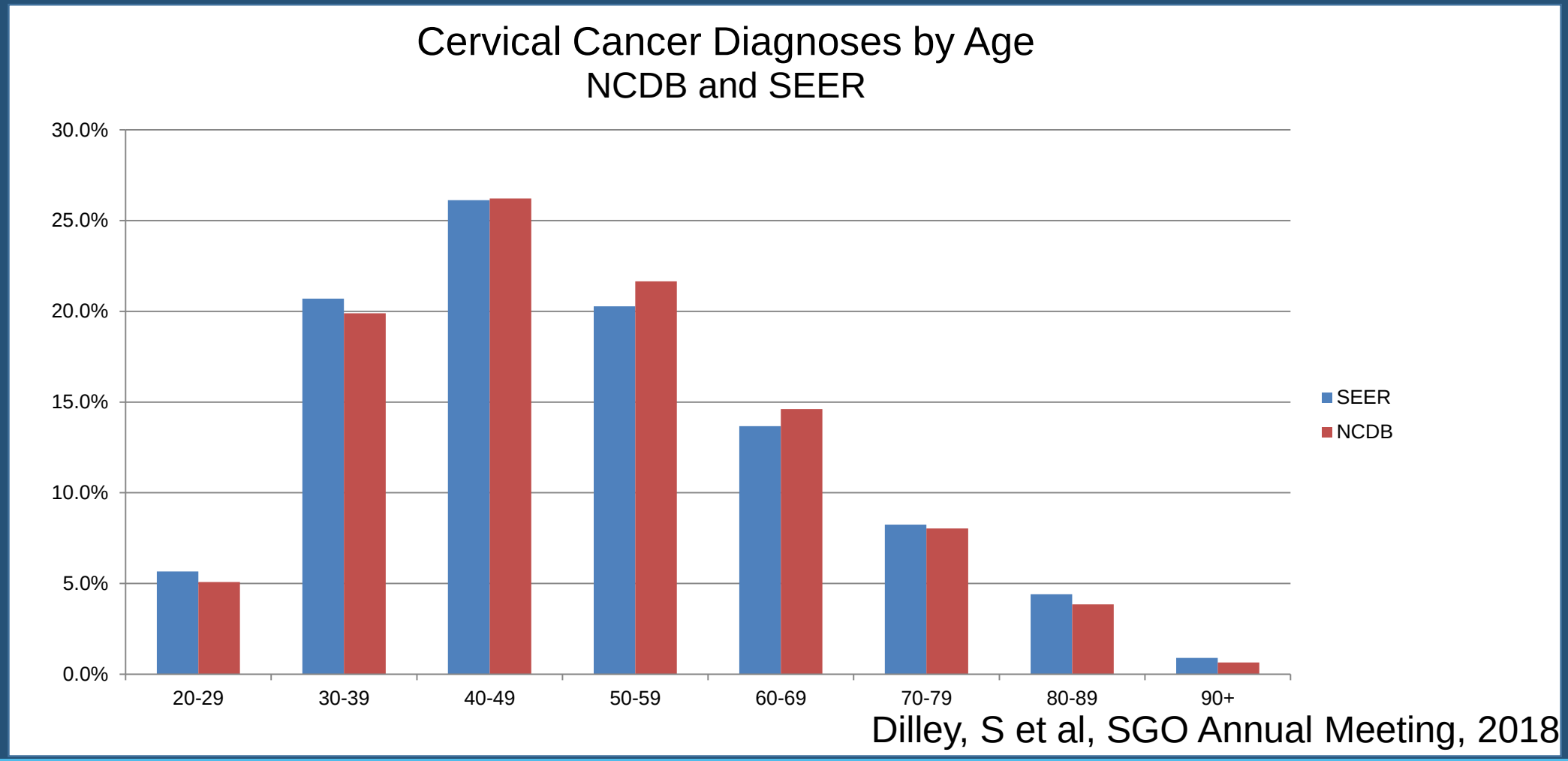
Saslow, D et al, 2012

Background

- US Census Bureau projected percent of persons aged 65+:
  - 2010: 13%
  - 2016: 15.2%
  - 2030: 20.3%



Results



Dilley, S et al, SGO Annual Meeting, 2018

Results

- **NCDB**: 18.9% of cervical cancer cases were diagnosed in women over age 65 from 2004-2014
- SEER-18: 19.7% of cervical cancer cases were diagnosed in women age 65 or older from 2000-2014

Dilley, S et al, SGO Annual Meeting, 2018

Proportion of cervical cancer cases diagnosed by age group and race		
	NCDB 2004-2014 n (%)	SEER 2000-2014 n (%)
Age 65+	**20,213 (18.9%)**	10,360 (19.7%)
Non-Hispanic Black	3,723 (22.1%)	1,680 (22.9%)
Non-Hispanic White	13,188 (19.0%)	5,807 (20.5%)
Hispanic	1,935 (14%)	1,704 (14.8%)
Other/Unknown	1,357 (19.9%)	1,167 (21.9%)

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Results

- When stratified by race, a higher proportion of non-Hispanic black women are diagnosed after age 65 compared to other racial/ethnic groups
  - NCDB: 22.1%
  - SEER: 22.9%

Dilley, S et al, SGO Annual Meeting, 2018

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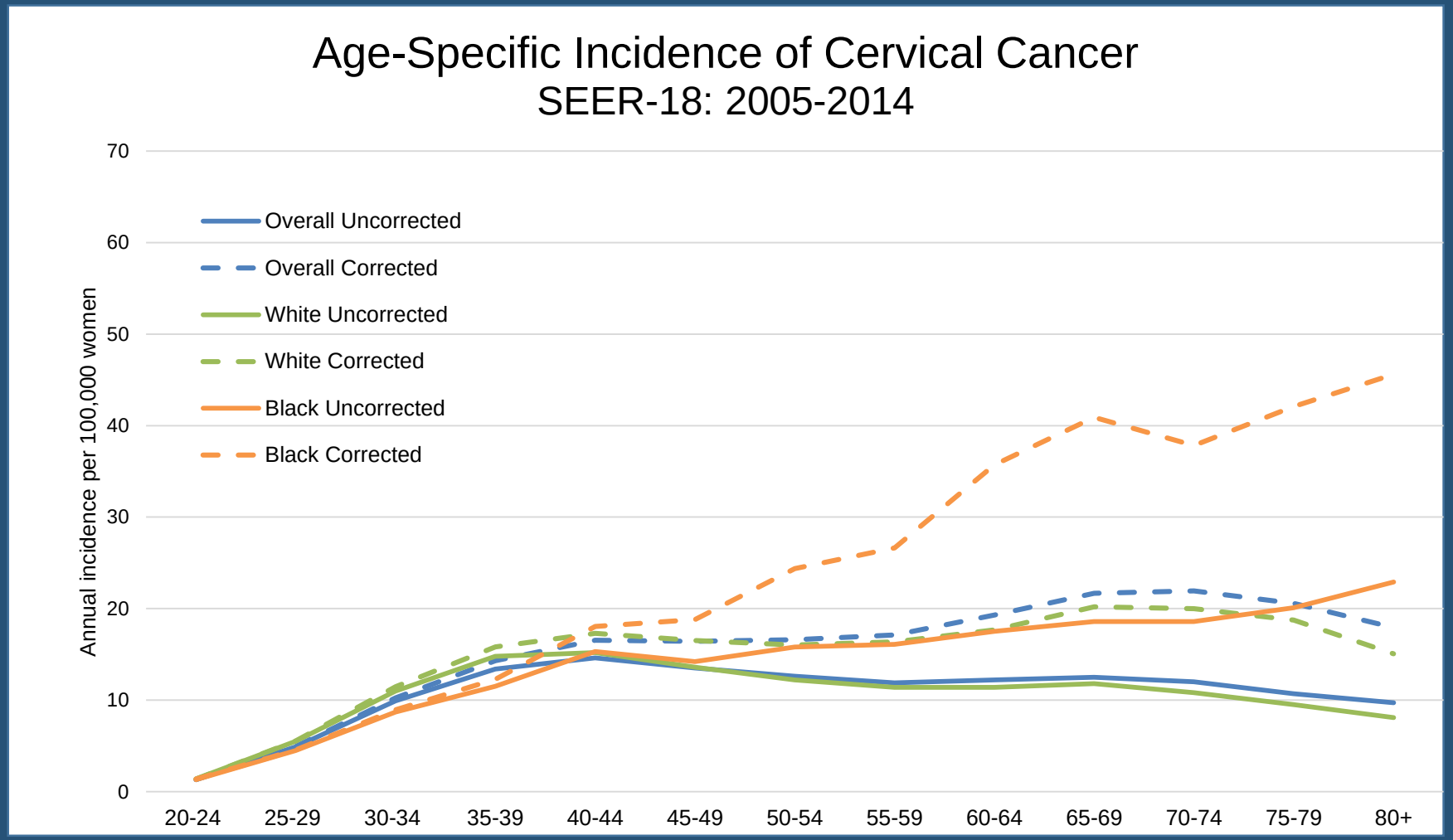

P<.001 for all comparisons

Discussion

- Twenty percent of women with cervical cancer are diagnosed after age 65.
- Incidence rates increase with age when rates of hysterectomy are taken into account.
- An age-related disparity is especially present in non-Hispanic black women.

Limitations

- SEER – population-based
- NCDB – hospital-based
- Unable to censor women who inappropriately exited screening

Conclusion

- Cervical cancer rates in elderly women are clinically significant & women are living longer (two immutable facts)
- “Adequate prior screening” as a mechanism to exit screening is impractical and hard to do in the US healthcare system
- Current recommendations affect reimbursement and screening coverage in women >65 years of age
- Why 65? Why not 70, 75, or 80? It’s arbitrary and we shouldn’t draw a line in the sand.