Reducing Cancer Disparities to Achieve Equity

Tuesday, February 15, 2022 | 4:30pm-6pm

Part of *Bridging the Gap from Healthcare Disparities to Anti-Racist Clinical Encounters,* a healthcare equity learning series

Kentuckiana Health Collaborative
Building a Bridge to Better Health, Better Care and Better Value

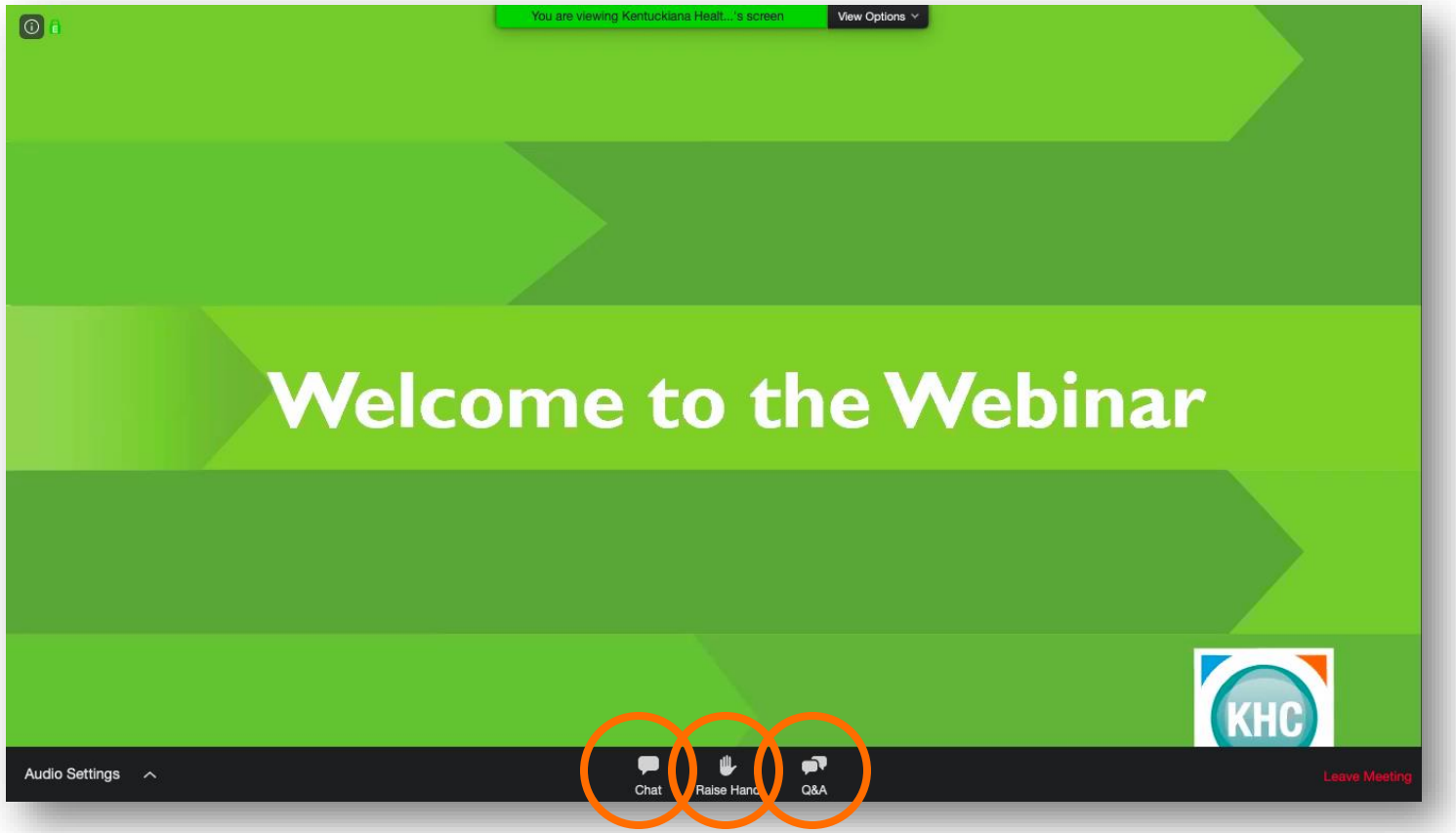
Have a Heart Clinic

American Nurses Association Kentucky

LOGISTICS

Select "Q&A" to type a question.

Select "Raise Hand" to speak to the speaker.



SOCIAL MEDIA

Twitter: @KHCollaborative
LinkedIn: www.linkedin.com/company/Kentuckiana-Health-Collaborative
Facebook: www.facebook.com/KentuckianaHealthCollaborative

#KHC

THANK YOU TO OUR SPONSOR

Genentech

Cancer Control in the 21st Century

Otis Brawley, MD, MACP, FRCP(L), FASCO, FACE

Bloomberg Distinguished Professor of Oncology and Epidemiology
Johns Hopkins University

Cancer Control in the 21st Century

With An Emphasis on Risk Reduction

Otis W. Brawley, MD, MACP, FRCP(L), FASCO, FACE

Bloomberg Distinguished Professor

of

Oncology and Epidemiology

JOHNS HOPKINS

MEDICINE

Disclosure Information

Dr. Otis W. Brawley

I have the following financial relationships to disclose:

Genentech/Roche, Grail, PDS Biotech, Lyell Immunopharma, Incyte, and EQRX

– *and* –

I will not discuss off label use and/or investigational use in my presentation.

JOHNS HOPKINS MEDICINE

Objectives

- Discuss trends in cancer death rate over past three decades
- Define reasons for those trends and opportunities to reduce risk even more.
- Discuss disparities as they exist today and the solution.
- Overall make a few observations about medicine.

An Emotional Conflict of Interest (a philosophy)

- I am a critic of traditional medicine
- I write books about how we did not respect the science and people got hurt.
- I have always advocated that healthcare providers keep an open mind and respect the science.
- Respect the scientific process and respect scientific findings.

An Emotional Conflict of Interest (a philosophy)

- I was thought from an early age that one should label things:
  - What you know
  - What you do not know
  - What you believe
- Question all things, but question what you know more so than anything else.
- These are good rules in the assessment of healthcare.

An Emotional Conflict of Interest (a philosophy)

- The Scientific Method is a legitimate search for truth and reality
- It is asking a question in a rigorous thought-out process
- It is also realizing that your assumption of truth or reality may change as additional information is elicited
- Science evolves!!!

Disparities in Health

Of all the forms of inequality, injustice in health care is the most shocking and inhumane

- ML King, Jr. Presentation at: The Second National Convention of the Medical Committee for Human Rights; March 25, 1966; Chicago, IL.

THE COST OF AMERICAN HEALTHCARE

U.S. Health Care Spending (2019)

$3.8 TRILLION

17.7% of US GDP ($21.43 Trillion)

Martin, Hartman, Lassman, et al. Health Aff, 2021

JOHNS HOPKINS MEDICINE

3.8 Trillion Dollars

A Trillion is a big number!!!

- One million seconds ago is about 11 days, 14 hours
  (Saturday of week before last)
- One billion seconds ago is approximately 31 years, 8 months
  (The second year of George H.W. Bush's presidency)
- One trillion seconds ago is approximately 31,689 years
  (24,000 before the earliest recorded civilization)

Health Expenditure as a percentage of Gross Domestic Product (GDP) 2019

• United States	17.7%
• Germany	11.7%
• Switzerland	11.3%
• France	11.1%
• Japan	11.0%
• Sweden	10.9%
• Canada	10.8%
• Belgium	10.7%
• Norway	10.5%
• United Kingdom	10.2%
• Netherlands	10.2%
• Finland	9.2%
• Israel	7.5%

Health expenditure as share of GDP by country | Statista

JOHNS HOPKINS MEDICINE

Disparities in Health

The Concept of Medical Gluttony

- Some consume too much
  - (Unnecessary care is given and increased risk of medical error)
- Some consume too little
  - (Necessary care not given and harm results)
- We could decrease the waste and improve overall health!!!!

JOHNS HOPKINS MEDICINE

The American Healthcare System

Inefficient!!!

We often do not follow the science

- We often use treatments and interventions that are lucrative to the providers but not proven effective.
- We often ignore and fail to use simple, inexpensive, and effective interventions.

JOHNS HOPKINS MEDICINE

The American Healthcare System

Medical Gluttony

- Screening tests of no proven value.
- Treatments that are unnecessary or of no proven value.
- Expensive treatments that are equivalent to older cheaper ones.
- Laboratory and radiologic imaging done for convenience.
  - -Cannot find original.
  - -Legal defense (real or imagined).
  - -Tradition.

The American Healthcare System

Inefficient!!!

- The emphasis is too much on diagnosis and treatment and not enough on prevention (or risk reduction).
- It is estimated that 30 to 40% of American medical costs are waste or fraud.*
- This is a plea for evidence based rational medicine.

"Rational not Rationing"

* Berwick DM, Hackbarth AD, Eliminating waste in US healthcare. JAMA 2012

JOHNS HOPKINS MEDICINE

Rational Use of Medicine
vs.
Rationing of Medicine

JOHNS HOPKINS
MEDICINE

True Healthcare Reform

- The scientific method must be used to assess proposed interventions
- Rigorous evaluation can prove the benefit of beneficial interventions and help retire the non-beneficial

True Healthcare Reform

Requires:

An appreciation of science and the scientific method

That is:

- A rejection of “faith-based medicine”
- Acceptance of science and reality

JOHNS HOPKINS MEDICINE

The Leading Causes of Death in US in 2019 (Normal Times)

1)	Heart disease:	647,457	23.1%
2)	Cancer:	599,108	21.7%
3)	Accidents (unintentional injuries):	169,936	5.9%
4)	Chronic lower respiratory diseases:	160,201	5.6%
5)	Stroke (cerebrovascular diseases):	146,383	5.2%
6)	Alzheimer's disease:	121,404	4.2%
7)	Diabetes:	83,564	2.9%
8)	Influenza and pneumonia:	55,672	1.9%
9)	Renal disease:	50,633	1.8%
10)	Intentional self-harm (suicide):	47,173	1.6%

CDC Vital Statistics Report
https://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm

2020 and 2021 (not Normal Times)

- There were more than 400,000 in 2020
- As of 2/14/2022 there are more than 922,000 COVID related deaths in the US

COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU)

A Challenge for Medicine and Society

- The COVID-19 vaccine has prevented more than 200,000 deaths in the past six months.
- We cannot get a large proportion of Americans to take one of the most, if not the most, effective drugs in history!!!
- It is also one of the most scrutinized drugs in history with trials involving more than 40,000 subjects.

The Leading Causes of Death in US in 2019 (Normal Times)

1)	Heart disease:	647,457	23.1%
2)	Cancer:	599,108	21.7%
3)	Accidents (unintentional injuries):	169,936	5.9%
4)	Chronic lower respiratory diseases:	160,201	5.6%
5)	Stroke (cerebrovascular diseases):	146,383	5.2%
6)	Alzheimer's disease:	121,404	4.2%
7)	Diabetes:	83,564	2.9%
8)	Influenza and pneumonia:	55,672	1.9%
9)	Renal disease:	50,633	1.8%
10)	Intentional self-harm (suicide):	47,173	1.6%

CDC Vital Statistics Report
https://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm

JOHNS HOPKINS MEDICINE

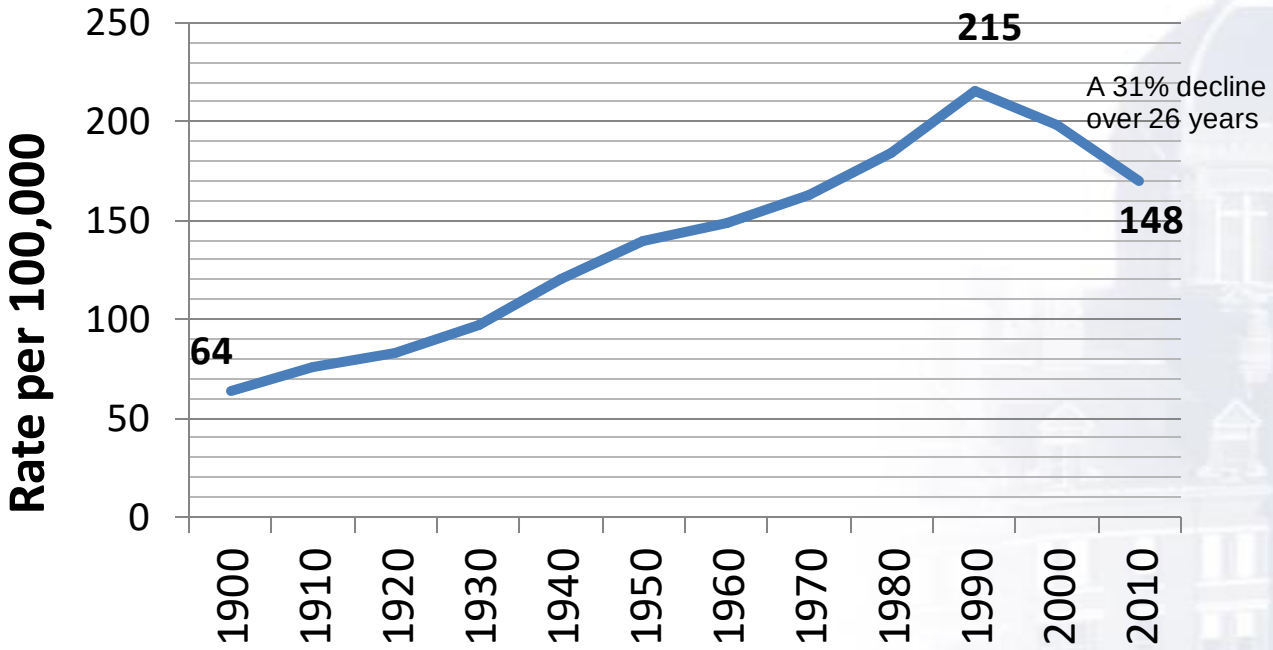
The Leading Causes of Death in US

- Cardiovascular death rates have been declining faster than cancer death rates.
- Cancer will become the most common cause of death in the US within the next five to ten years.

CDC Vital Statistics Report
https://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm

US Cancer Death Rate

1900 to 2018

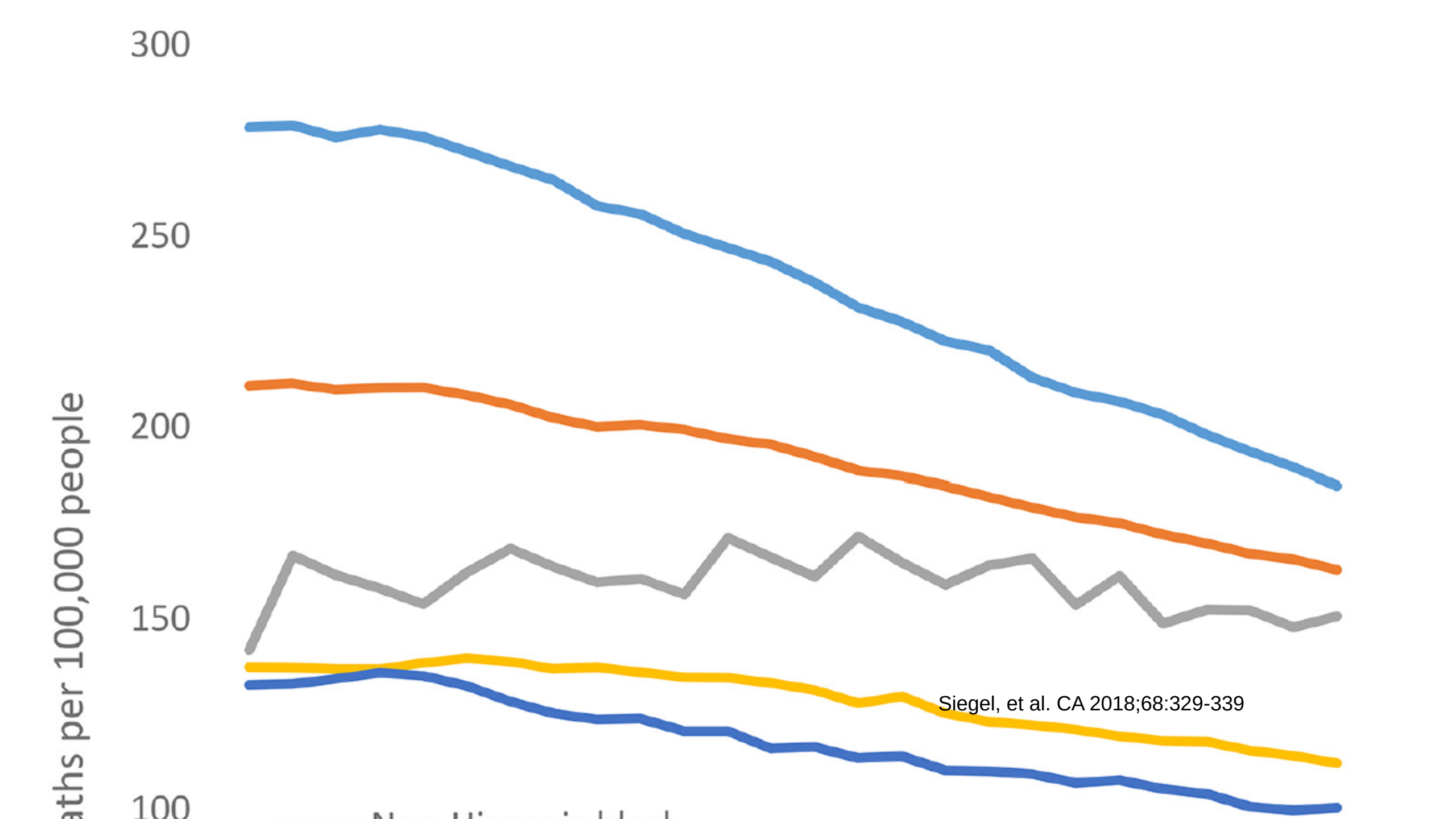


Age Adjusted to 2000 Standard
1900-1970, US Public Health Service, Vital Statistics of the US, Vol. 1 and Vol 2;
1971-2020, US National Center for Health Statistics, Vital Statistics of the U.S

JOHNS HOPKINS MEDICINE

Why the Decline in Cancer Death Rates?

- Wise early detection (especially colorectal, breast, cervix)
- Improvements in cancer treatment
- Prevention/Risk Reduction (especially tobacco control)


300
250
200
150
100
ths per 100,000 people
Siegel, et al. CA 2018;68:329-339

Race

Defined by US Office of Management and Budget before every decennial census.

- White
- Black
- Asian
- Pacific Islander
- Native American/Alaskan Native

In US population data Ethnicity is defined as Hispanic or non-Hispanic

Race

Defined by US Office of Management and Budget every ten years.

- Sociopolitical and not biologic according to OMB definition
- Rejected by Anthropological community as non-scientific
- Race changes over time*

Population Categorization

- Race is broad
- Area of geographic origin is more specific and scientific, although still broad
- Admixture complicates both

Area of Geographic Origin

Black or African comprises 109 regions such as:

- Benin and Togo
- Cameroon, Congo and West Bantu
- Ivory Coast and Ghana
- Mali
- Nigeria
- Senegal
- Eastern Bantu
- Ethiopia and Eritrea
- Mali
- Nigeria
- Senegal
- Southern Bantu

A Note on Clinical Variation

There is genetic variation among populations, but race is not the appropriate way to categorize populations, e.g.:

- Forms of G6PD deficiency is more common amongst people originating in the Mediterranean, certain areas of Africa, India and the middle east.
- The HLA-B*1502 allele is common among people living within 150 kilometers of the Thai-Burmese border. They have a Stevens-Johnson reaction to Carbamazepine (Tegretol).
- The sickle cell mutation has a prevalence among people originating in southern Greece, Southern Italy, the middle east and has a higher prevalence in Sub Saharan Africa.

Clinical Trials

-Much discussion of diversity in clinical trials

-Much (not all) of this discussion is political and not scientific

- NIH Revitalization of 1993 calls for valid subset analysis among the races and ethnicities
- The authors of the law seem to not realize that subset analysis are not statistically significant by nature.

-Clinical trials participation should be encouraged as especially participation in NCI sponsored clinical trials provides greater assurance of high-quality care.

The Most Important Question in Cancer Control

How can we provide adequate high-quality care (to include preventive services) to populations that so often do not receive it?

- Unnecessary care interferes with abilities to provide necessary care.

- The provision of unnecessary care is a cause of health disparities.

JOHNS HOPKINS MEDICINE

BREAST CANCER

JOHNS HOPKINS
MEDICINE

Breast Cancer

In 2019,

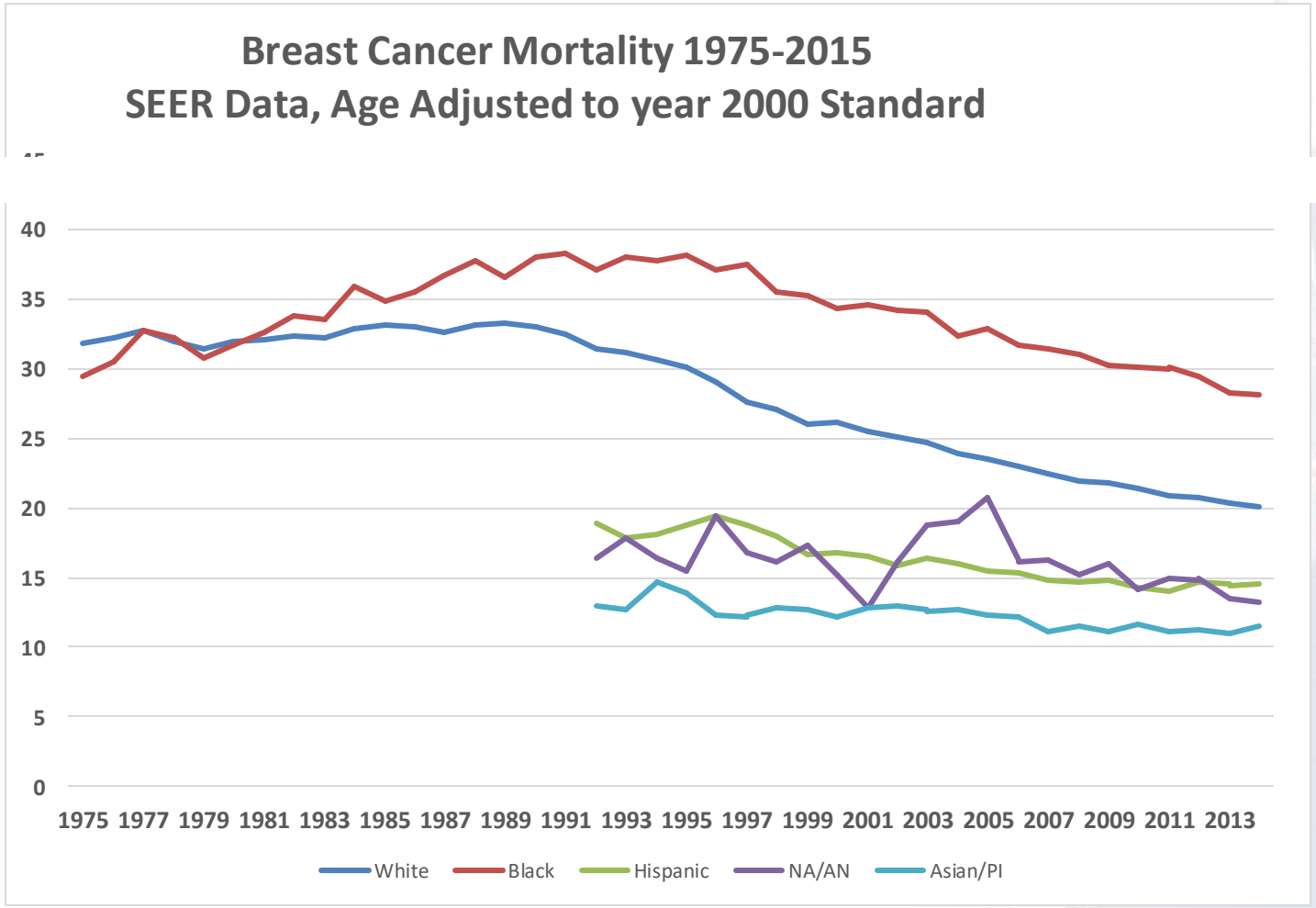
269,000 Diagnosed and 42,300 Deaths

There has been a 40% decline in age-adjusted female mortality from 1990 to 2016

Screening is attributed with 40% to 50% of the decline.

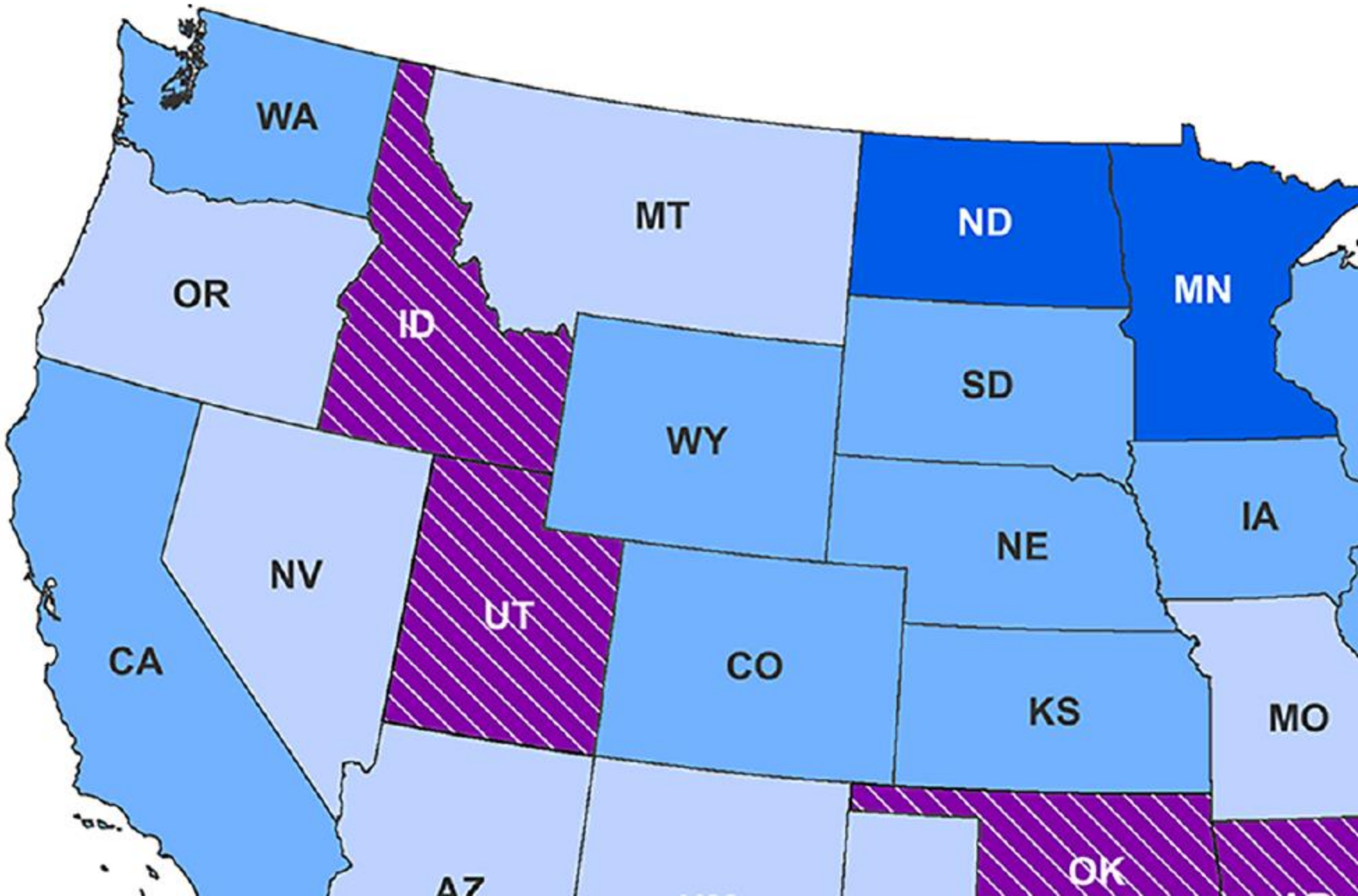
American Cancer Society Estimates 2019

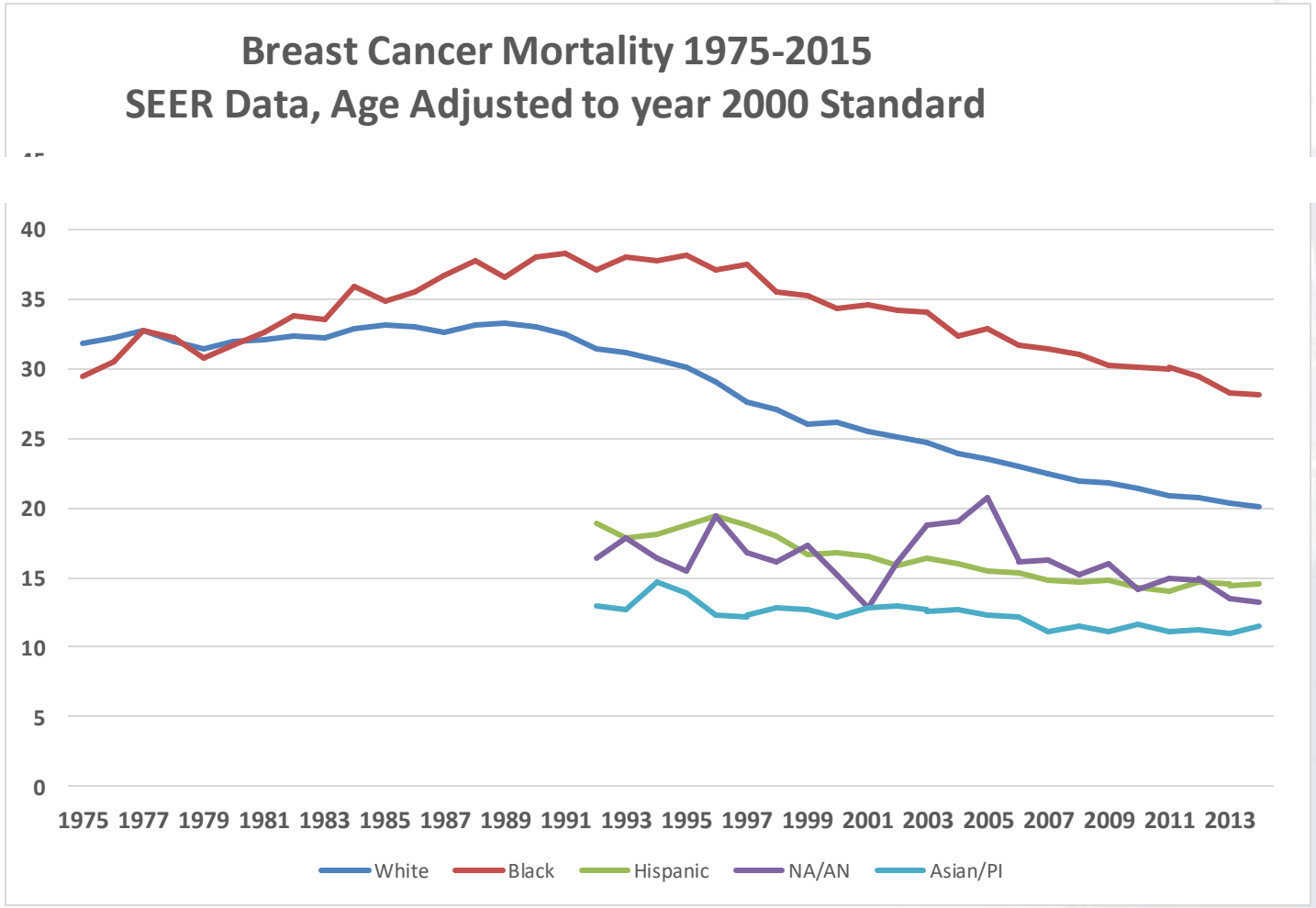
JOHNS HOPKINS MEDICINE



Siegel, et al. CA 2018;68:329-339

JOHNS HOPKINS MEDICINE


WA
OR
CA
ID
NV
MT
WY
UT
AZ
CO
ND
SD
NE
KS
OK
MN
IA
MO



Siegel, et al. CA 2018;68:329-339

JOHNS HOPKINS MEDICINE

Breast Cancer
The Reality

There are seven states where B-W mortality differences are no longer statistically significant.

DeSantis et al, CA, 2017

JOHNS HOPKINS MEDICINE

Breast Cancer
The Reality

There are twelve states where white breast cancer mortality is higher than that of Black women in Massachusetts.

DeSantis et al, CA, 2017

JOHNS HOPKINS MEDICINE

Overemphasis on Screening

CISNET Breast Cancer Modeling Suggests:

- Failure to follow accepted screening guidelines accounts for 9.5 to 11.3% of all breast cancer deaths.
- Failure of the diagnosed to receive appropriate treatment accounts for 21.2 to 27.0% all of breast cancer deaths.

There is overemphasis on screening and an underemphasis on getting all people adequate treatment

» Mandelblatt Stout, Schechter, et al, Cancer 2016
» Mandelblatt van Ravesteyn, Schechter, et al, Cancer 2011

Overemphasis on Screening
(and not enough emphasis on provision of adequate care)

- A substantial proportion of women with breast cancer do not get adequate:
  - surgery,
  - chemotherapy,
  - hormonal therapy,
  - radiation therapy.

Breast Cancer and Quality of Care

- In 2000, 7.5% of Black Women in Atlanta diagnosed with localized highly curable breast cancer did not receive a surgical removal of the tumor in the first year after diagnosis.

- Provision of adequate care is a logistical/policy issue and not new medical science.

Lund et al. Breast Cancer Res Treat, 2008

Breast Cancer
The Reality

Socioeconomic status (availability of care and ability to use that care) leads to a significant lowering of risk of death.

- There is a B-W breast cancer mortality disparity in the U.S. military retiree database, but it is 1/3 of the B-W disparity in the U.S. as a whole.

- An intensive effort at increasing quality screening and treatment significantly reduced disparities in metropolitan Chicago.

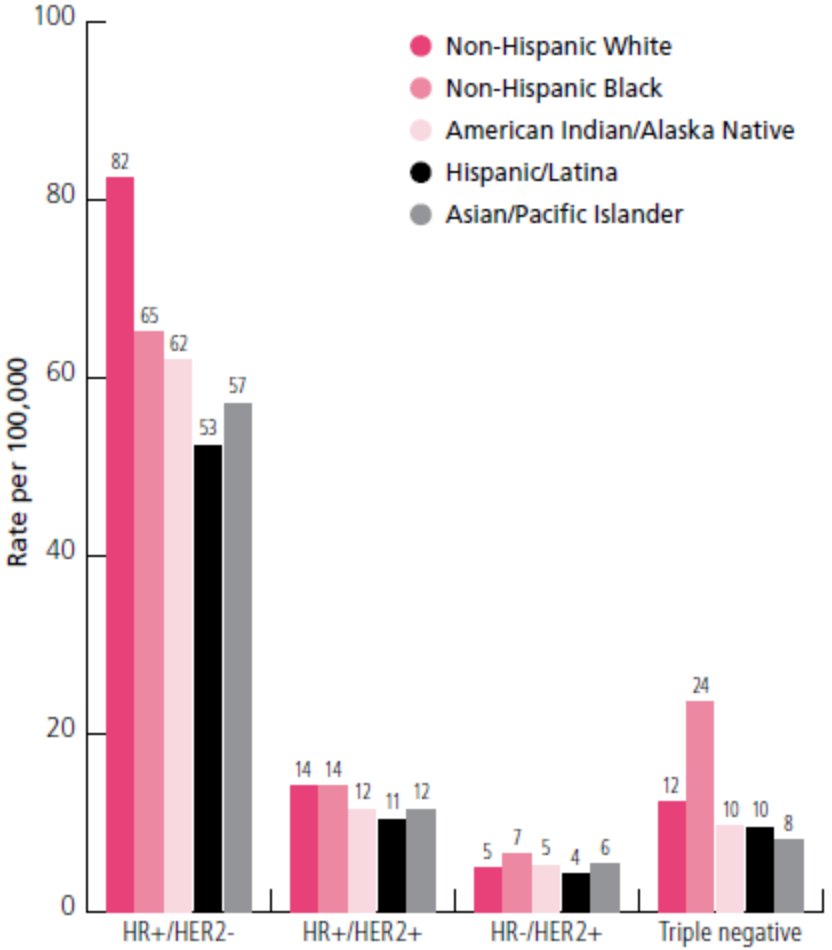
Wojcik et al, Cancer 1998
Anell et al Cancer Causes and Control 2009

JOHNS HOPKINS MEDICINE

Triple Negative Breast Cancer

- Cancer that does not express the estrogen, progesterone, or Her-2-Neu receptor.
- Drug treatment options are more limited for triple negative breast cancer.
- Approximately 24% of Black women and 12% of White women with breast cancer have triple negative disease.

Figure 3. Female Breast Cancer Incidence Rates by Subtype and Race/Ethnicity, 2010-2014, US



HR = hormone receptor, HER2 = human epidermal growth factor receptor 2.
Note: Rates are age adjusted to the 2000 US standard population.

Source: NAACCR, 2017.

JOHNS HOPKINS MEDICINE

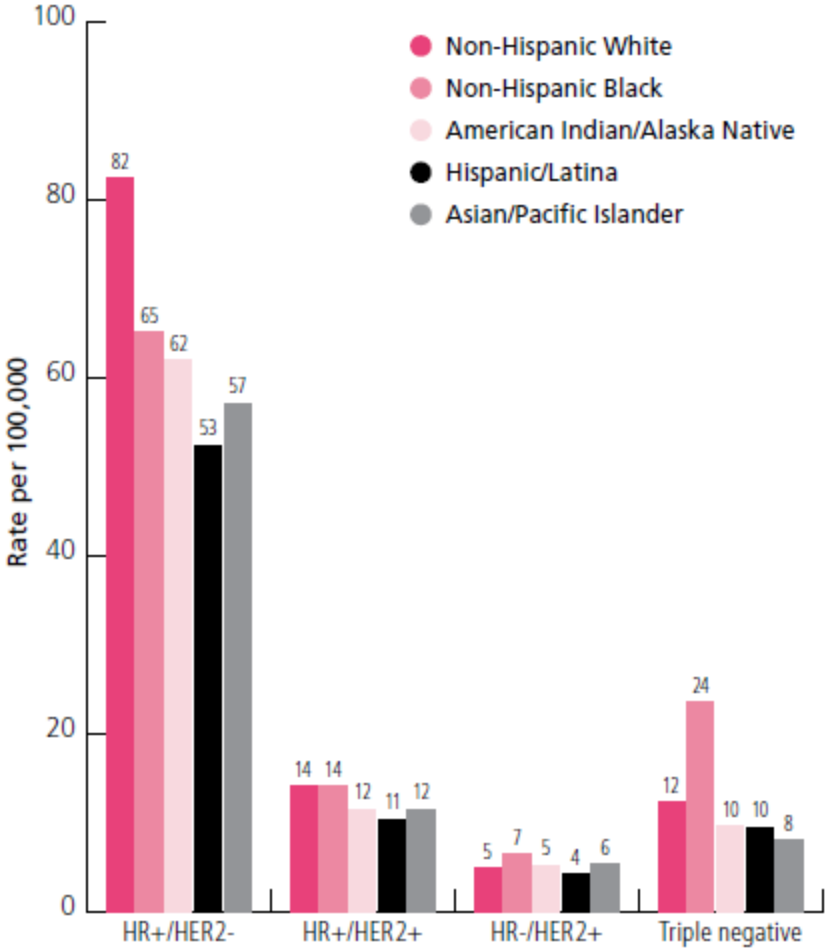
Breast Cancer
The Reality

Few appreciate that the largest portion of the B-W breast cancer mortality treatment disparity is due to disparities in the quality of treatment of black women with estrogen receptor positive disease.

Mandelblatt et al. Cancer. 2013

JOHNS HOPKINS MEDICINE

Figure 3. Female Breast Cancer Incidence Rates by Subtype and Race/Ethnicity, 2010-2014, US



HR = hormone receptor, HER2 = human epidermal growth factor receptor 2.
Note: Rates are age adjusted to the 2000 US standard population.

Source: NAACCR, 2017.

JOHNS HOPKINS MEDICINE

Risk Factors for Triple Negative

Factors with strong correlation

- Obesity
- Dietary Differences (high carbohydrate diet)
- Reproductive patterns
  - Multiparity
  - Early age at first pregnancy
  - **Lower rates of breast feeding!!!!**

Dietze et al Nat Rev Cancer 2015;15:248-254
Millikan et al Cancer Res Treat 2008;109:123-139
Palmer et al. JNCI 2014; 106:dju237

Breast Cancer
Gene-Environment Interaction

- Social deprivation studies in Europe and U.S. suggest more virulent ER negative tumors in the poor.

- Several studies suggest a correlation between higher body mass index and higher stage at presentation.

Thomson et al, Journal of Epidemiology and Community Health, 2001

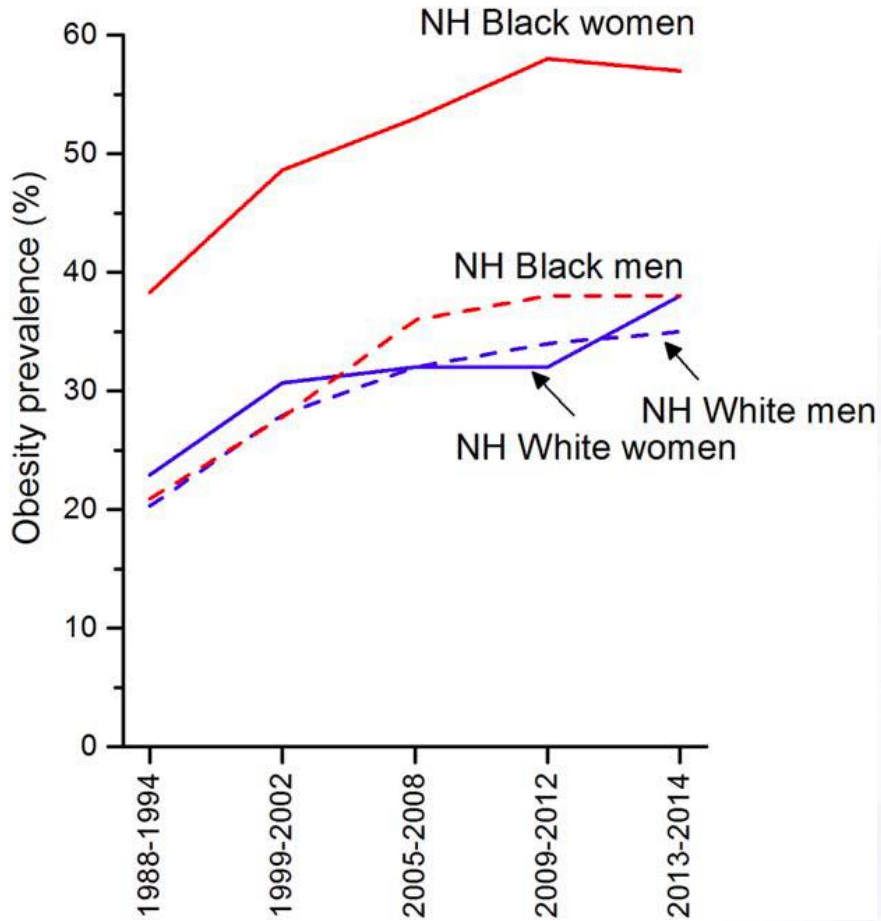
Gordon Am.J.Epidemiol., 1995

JOHNS HOPKINS MEDICINE

Trends in Adult Obesity (Body Mass Index 30 kg/m2) Prevalence (%) by Sex and Race/Ethnicity, United States, 1988 to 2014.

NH indicates non-Hispanic.

Sources: 1988-2012: Health, United States, 2014: With Special Feature on Adults Ages 55-64. 2013-2014: Centers for Disease Control and Prevention. National Health and Nutrition Examination Survey, 2014. Public use data file.



JOHNS HOPKINS MEDICINE

Breast Cancer and Quality of Care

- A substantial number of women of all races and incomes get less than optimal breast cancer care!
  - No screening or poor-quality screening
  - No diagnostics or poor-quality diagnostics
  - No surgery or poor-quality care
  - No radiation therapy or poor-quality radiation therapy
  - No chemotherapy or inappropriate dosing of chemotherapy
- Racial minorities and the poor are more likely to get less than optimal breast cancer care.

COLON CANCER

JOHNS HOPKINS
MEDICINE

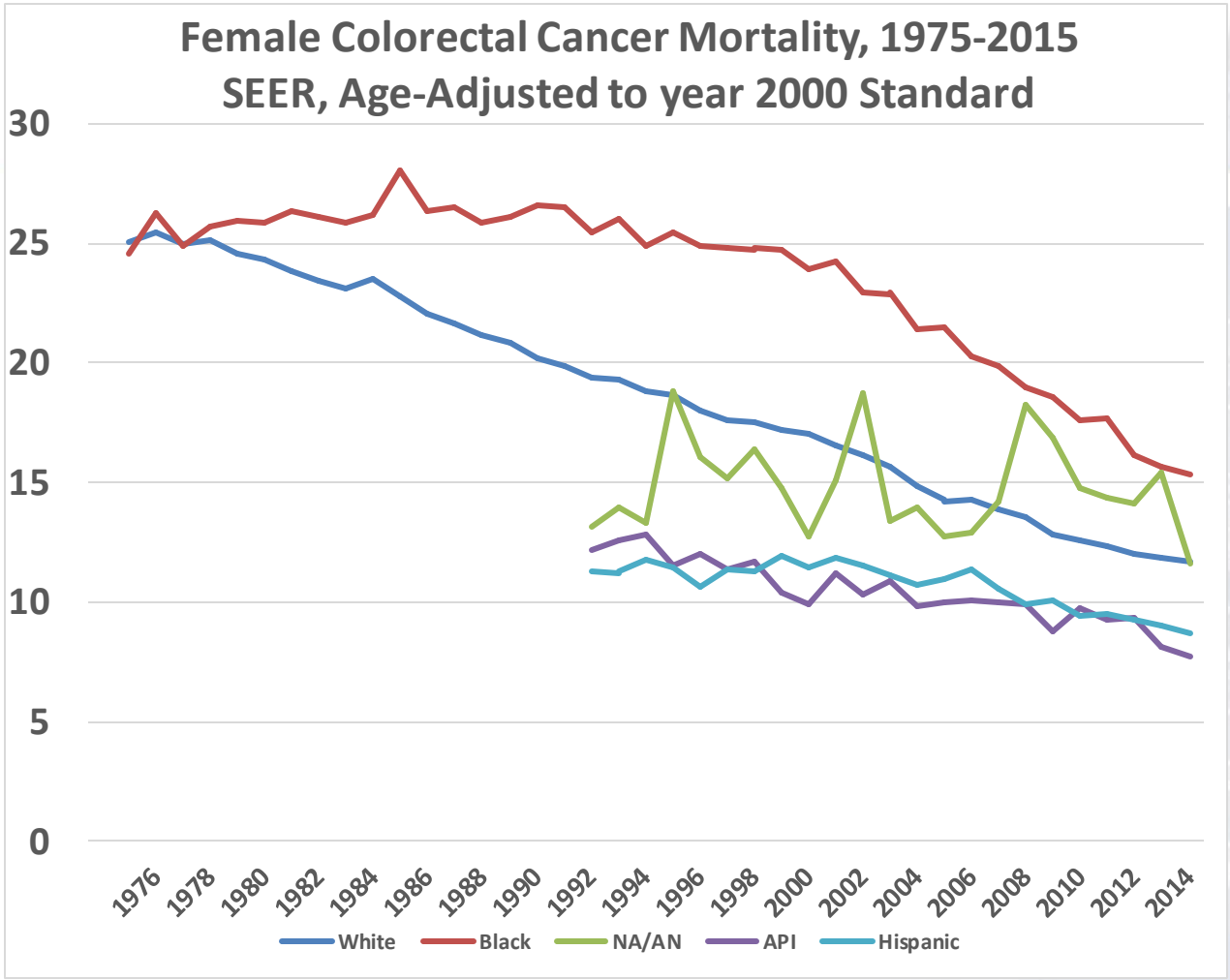
Colon and Rectal Cancer

In 2019,

- Diagnosed: 101,400 colonic and 44,200 rectal
- 51,000 Americans will die of colon and rectal cancer.
- Among the US Population as a whole, there has been a 50% decline in age-adjusted death rate since 1980.
- Screening is attributed with about 2/3 of the decline.

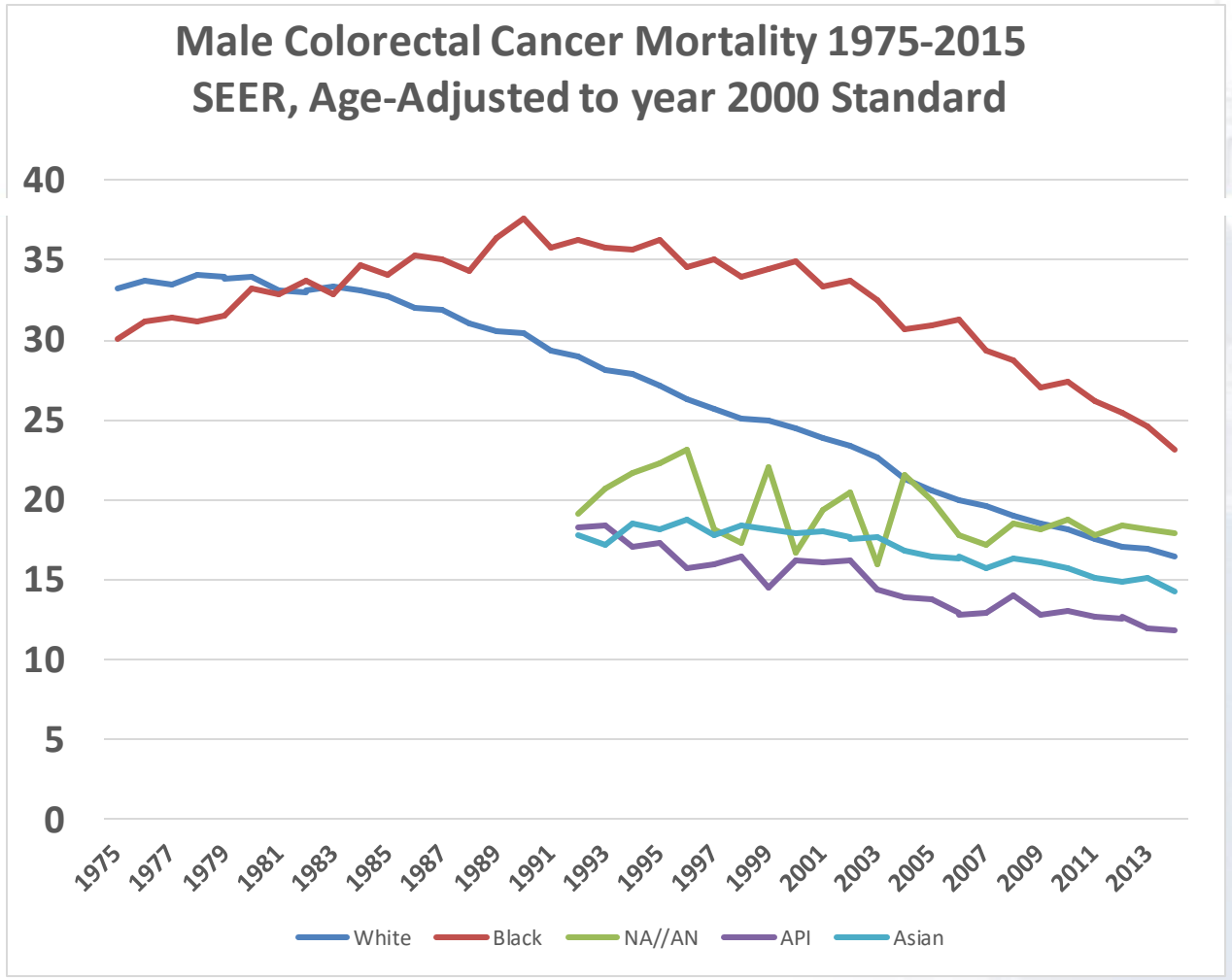
American Cancer Society Estimates 2019

JOHNS HOPKINS MEDICINE



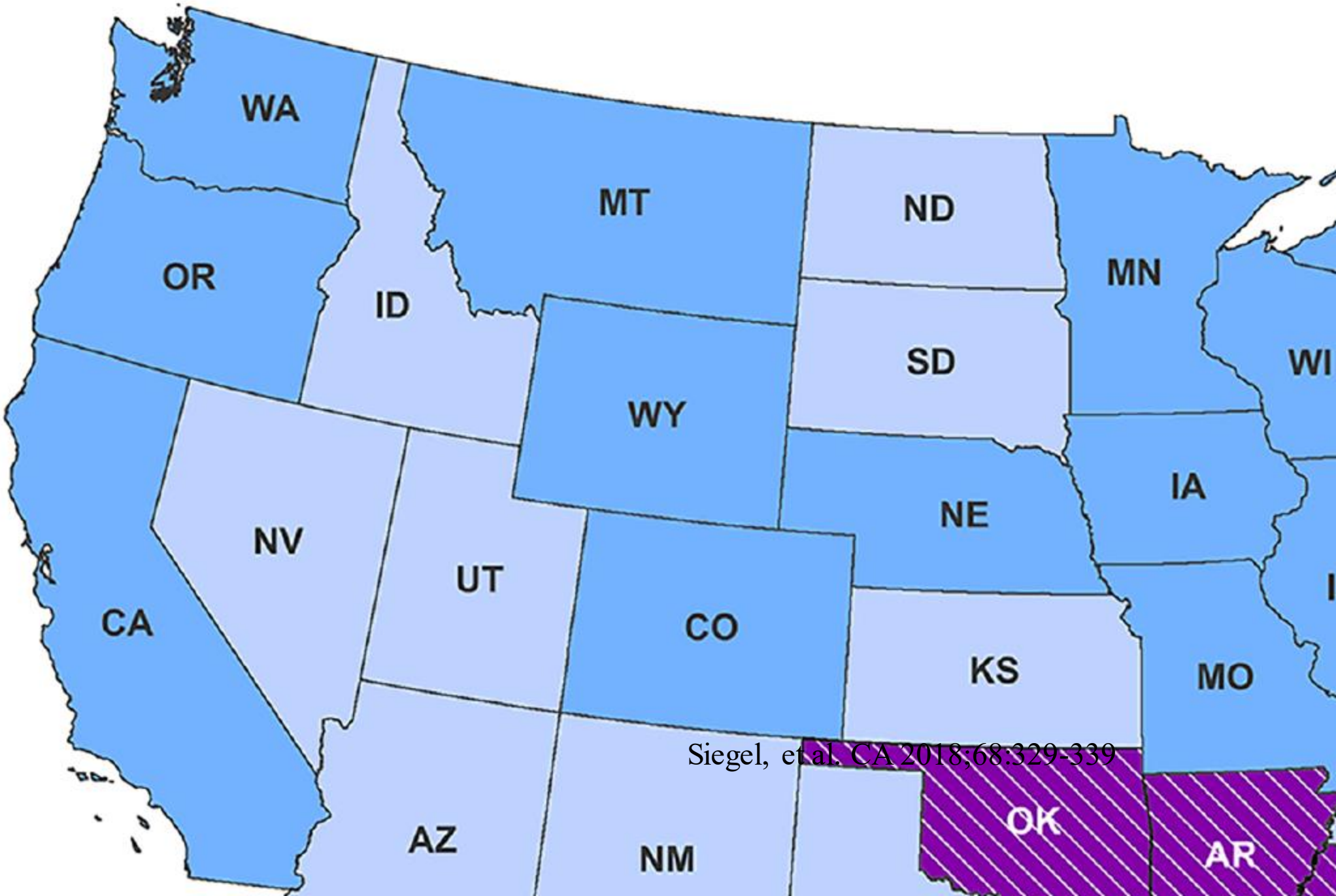
Siegel, et al. CA 2018;68:329-339

JOHNS HOPKINS MEDICINE



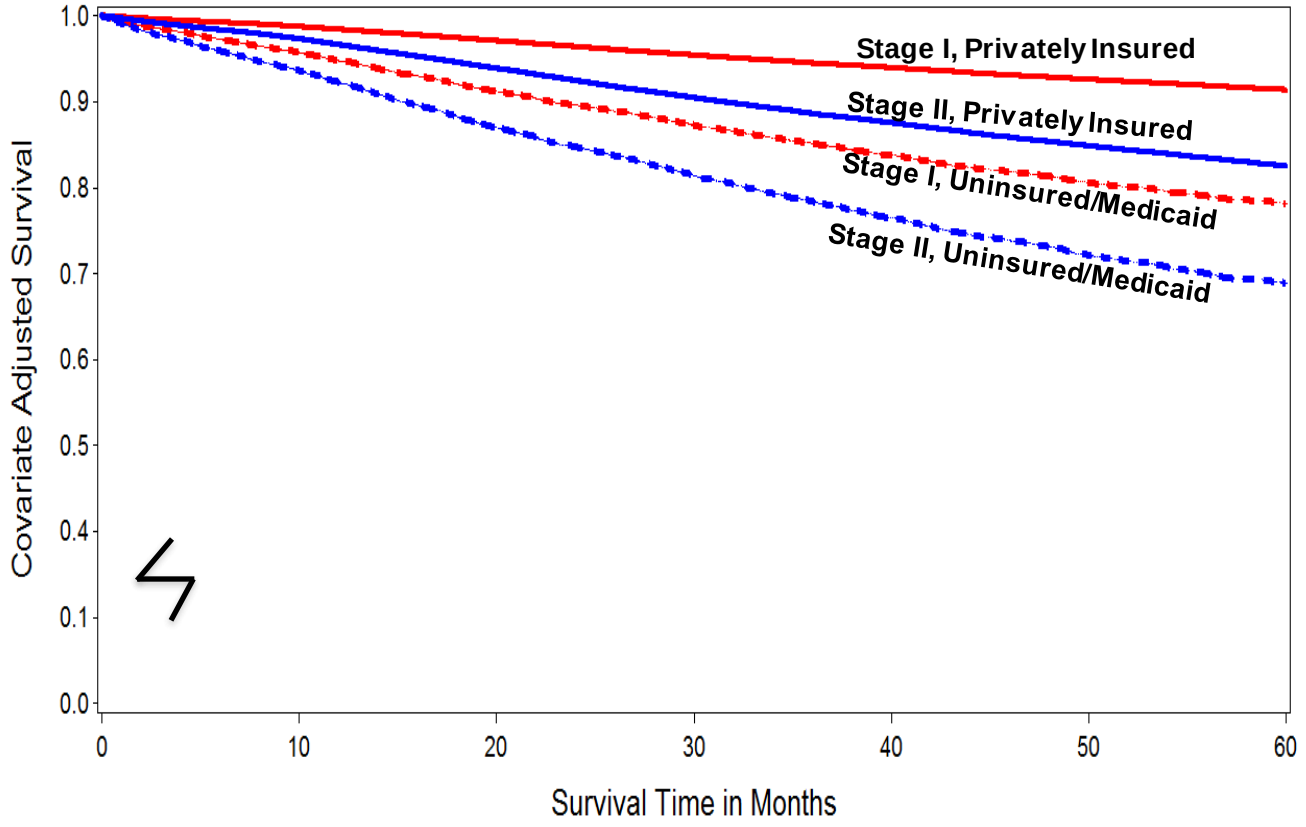
Siegel, et al. CA 2018;68:329-339

JOHNS HOPKINS MEDICINE



Siegel, et al. CA 2018;68:329-339

Adjusted Colorectal Cancer Survival by Stage and Insurance Status, among White Patients 18-64 years Diagnosed from 1999-2000, NCDB



JOHNS HOPKINS MEDICINE

Colon Cancer Quality of Surgery/Pathologic Assessment

A minimum of 12 lymph node should be examined in an adequate colorectal cancer pathology specimen

-About half of all colorectal cancer patients have 12 or more LN examined.

-Hispanics, Blacks and the poor have higher odds of receiving an inadequate dissection.

– Rhoads et al, Cancer 2012 Jan 15;118(2):469-77

JOHNS HOPKINS MEDICINE

Colon Cancer Quality of Surgery/Pathologic Assessment

-Inadequate examination is associated with the hospital where care was received.

Blacks are more likely to be treated in a hospital where the pathologist has multiple cases per day to process.

-Inadequate staging leads to some Blacks with true stage 3 disease being labeled stage 2 and some of the talk that colorectal cancer is more aggressive among Blacks!!!

– Rhoads et al, Cancer 2012 Jan 15;118(2):469-77

Causes of Colorectal Cancer Disparities

Differences in:

- Prevalence of screening
- Quality of screening
- Quality of diagnostics and pathology
- Proportion treated
- Quality of treatment

- Differences by:
  - Race
  - Socioeconomic Status
  - Region of Residence

Equal Treatment Yields Equal Outcome
There is not Equal Treatment

Studies suggest that disparities in treatment may be due to:

- Cultural differences in acceptance of therapy.
- Disparities in comorbid diseases making aggressive therapy inappropriate.
- Lack of convenient access to quality treatment (insurance and transportation are major issues).
- Racism and SES discrimination.

A PLEA FOR MORE EMPHASIS ON PREVENTION (RISK REDUCTION)

JOHNS HOPKINS MEDICINE

Potentials for Cancer Prevention

Cause	% cancer caused	Deaths in United States‡	Magnitude of possible reduction (%)	Period of time (years)	Evidence example
Smoking	33%	188,744	75%	10–20	Utah vs Kentucky
Overweight/obesity	20%	114,390	50%	2–20	Bariatric surgery
Hereditary factors (*)	16%	91,520	50%	2–10	Oophorectomy; MRI: Tamoxifen; Colonoscopy
Diet	5%	28,600	50%	5–20	Folate , colorectal cancer
Lack of exercise	5%	28,600	85%	5–20	Adolescent activity
Occupation	5%	28,600	50%	20–40	Asbestos
Viruses	5%	28,600	100%	20–40	Liver cancer, HPV vaccine
Alcohol	3%	17,200	50%	5–20	Regulation
UV and ionizing radiation	2%	11,400	50%	5–40	Medical exposures
Prescription drugs	1%	5,720	50%	2–10	Hormone therapy
Reproductive factors	3%	17,200	0	N/A	N/A
Pollution	2%	11,400	0	N/A	N/A

We could reduce cancer deaths 60% by paying attention to known risk factors

Modified from Colditz, *Sci Trans Med* 4:127,2012

JOHNS HOPKINS MEDICINE

Causes of Cancer Mortality Increases

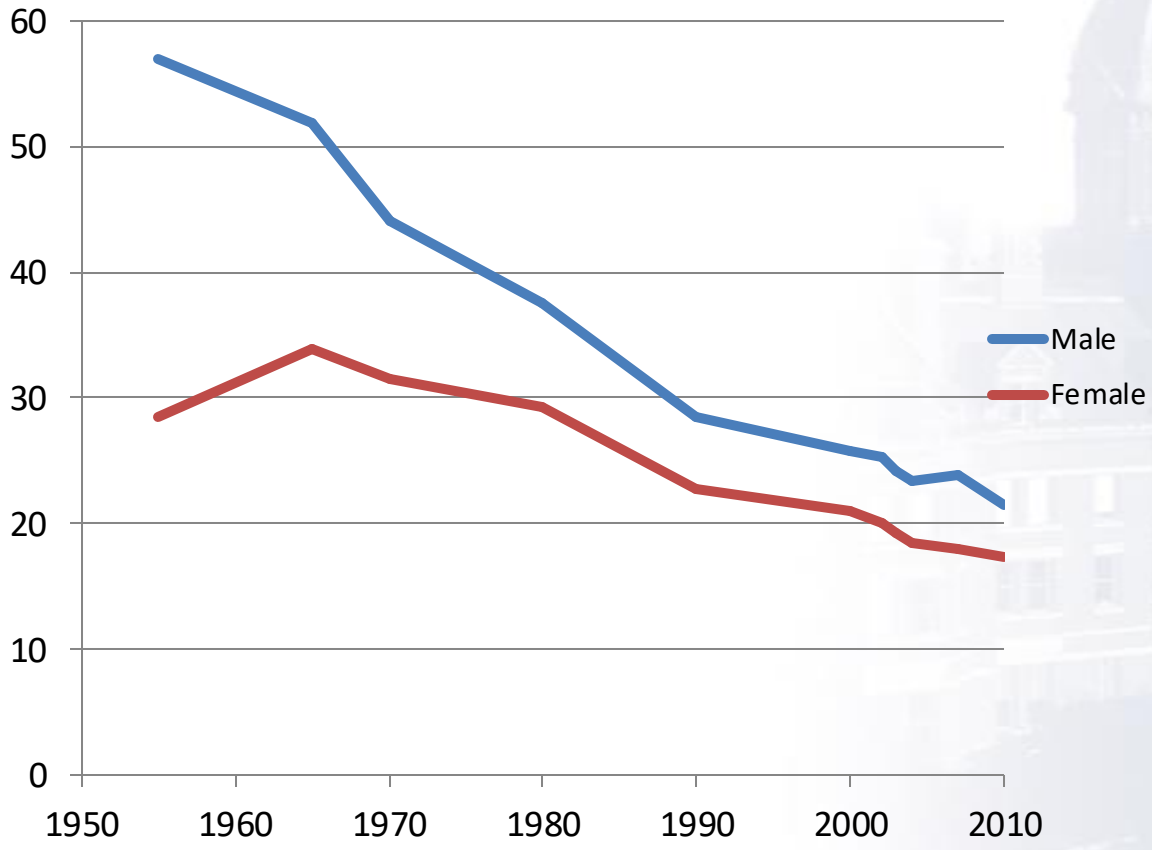
Tobacco is still the leading cause of cancer in the US.

Cancers due to tobacco use (other than bladder) are declining significantly more so in men than women.

Weir HK, Thompson TD, Soman A, Møller B, Leadbetter S, White MC. Meeting the Healthy People 2020 objectives to reduce cancer mortality. *Preventing Chronic Disease* 2015;12:140482.
Weir HK, Thompson TD, Soman A, Møller B, Leadbetter S. The past, present, and future of cancer incidence in the United States: 1975 through 2020.External *Cancer* 2015;121(11):1827–1837.

JOHNS HOPKINS MEDICINE

U.S. Smoking Prevalence by Gender 1955-2010



JOHNS HOPKINS MEDICINE

Causes of Cancer Mortality Increases

Energy balance (overweight, obesity, too many calories, lack of exercise)

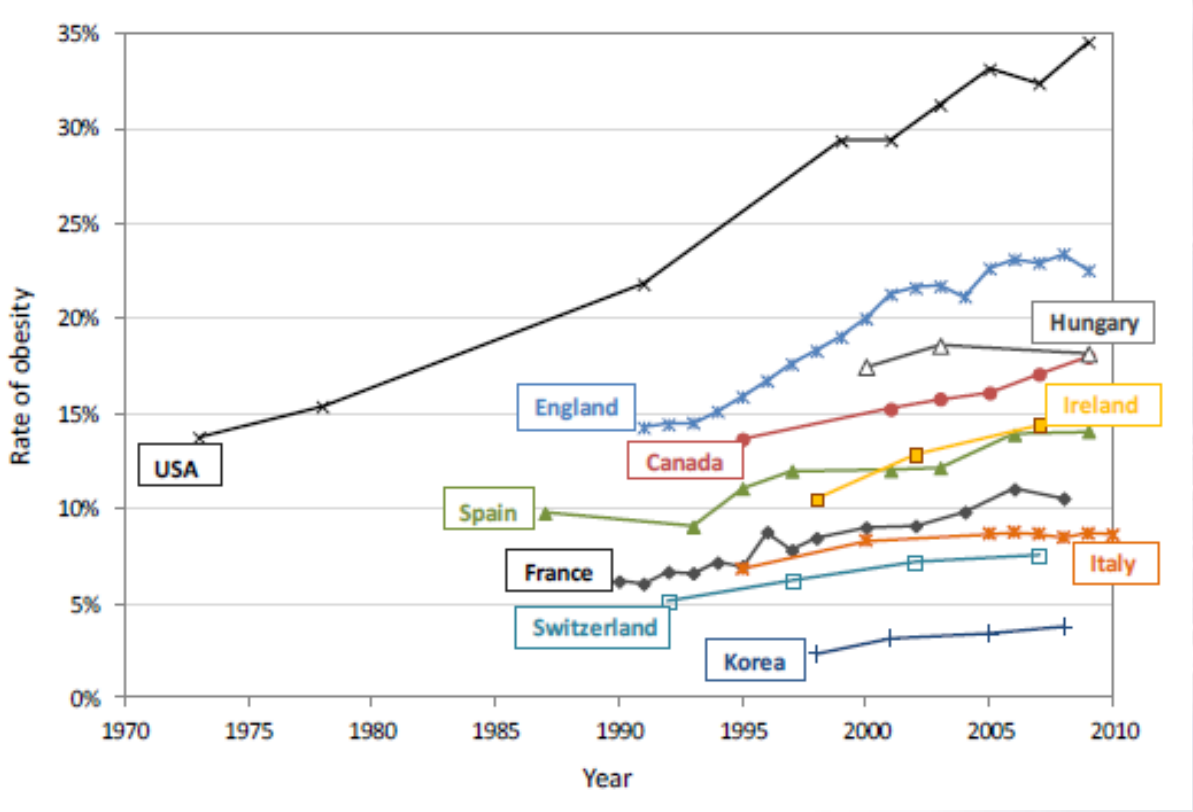
- 2/3 of adults and 1/3 of children are overweight or obese
- Weight related cancers are expected to increase 30 to 40% by 2030

Prevention of cancer is clearly a need in the future!

Weir HK, Thompson TD, Soman A, Møller B, Leadbetter S, White MC. Meeting the Healthy People 2020 objectives to reduce cancer mortality. *Preventing Chronic Disease* 2015;12:140482.
Weir HK, Thompson TD, Soman A, Møller B, Leadbetter S. The past, present, and future of cancer incidence in the United States: 1975 through 2020.External *Cancer* 2015;121(11):1827–1837.

JOHNS HOPKINS MEDICINE

US Continues to Lead the World in Obesity Rates



OECD Obesity Update 2012

JOHNS HOPKINS MEDICINE

Causes of Cancer Mortality Increases

Cancers caused by infection:

- Liver cancer deaths expected to go up 50% due to HCV and HBV.
- Head and neck cancer deaths increasing by 30% due to HPV.

Prevention of cancer is clearly a need in the future!

Weir HK, Thompson TD, Soman A, Møller B, Leadbetter S, White MC. Meeting the Healthy People 2020 objectives to reduce cancer mortality. *Preventing Chronic Disease* 2015;12:140482.
Weir HK, Thompson TD, Soman A, Møller B, Leadbetter S. The past, present, and future of cancer incidence in the United States: 1975 through 2020.External *Cancer* 2015;121(11):1827–1837.

JOHNS HOPKINS MEDICINE

THE TRUE COST OF AMERICAN HEALTHCARE (FROM A CANCER DOC!)

Applying Known Science (Prevention and Treatment)

Fact:

College educated Americans have a much lower risk of cancer death compared to non college educated.

This is true among all races and ethnicities.

Siegel, et al. CA 2018;68:329-339

JOHNS HOPKINS MEDICINE

Applying Known Science (Prevention and Treatment)

- It is estimated that about 600,000 Americans will die of cancer this year.
- If all Americans had the cancer death rate of college educated Americans, 22% would not die.
- More than one in five cancer deaths (132,000 Americans) would not occur!

Siegel, et al. CA 2018;68:329-339

JOHNS HOPKINS MEDICINE

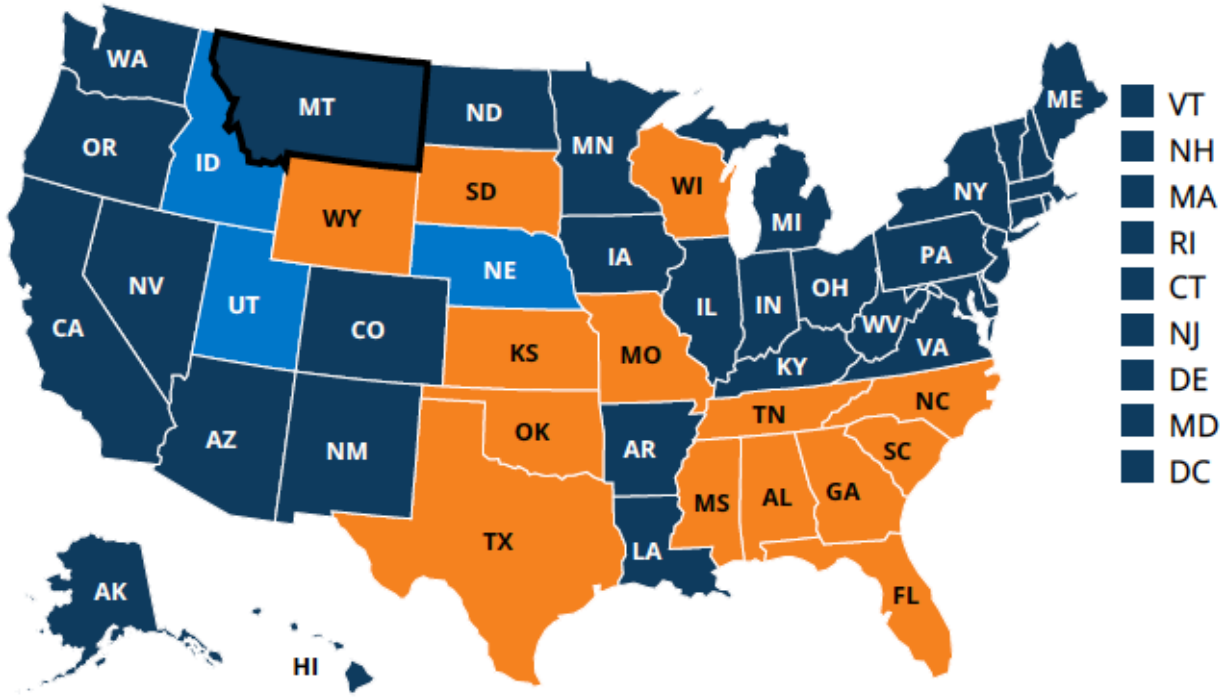
Applying Known Science (Prevention and Treatment)

- At least 132,000 (22% of the more than 600,000) deaths per year are preventable if all Americans received known medical prevention and treatment.
- The United States leads the western world in preventable cancer deaths.
- The majority of these preventable deaths are among white Americans.
- The issue of disparities in health are not just a racial minority health issue.

Siegel, et al. CA 2018;68:329-339

JOHNS HOPKINS MEDICINE

State Medicaid Expansion Plans as of late 2020



Adopted and Implemented

Adopted but Not Implemented

Not Adopted

JOHNS HOPKINS MEDICINE

The American Healthcare System

Inefficient!!!

- Some over consume resources
  (This can be harmful to the over-consumer)
- Some under consume resources
  (This is the cause of disparities)
- Healthcare outcomes could be better
  (People die needlessly)

JOHNS HOPKINS MEDICINE

True Healthcare Reform

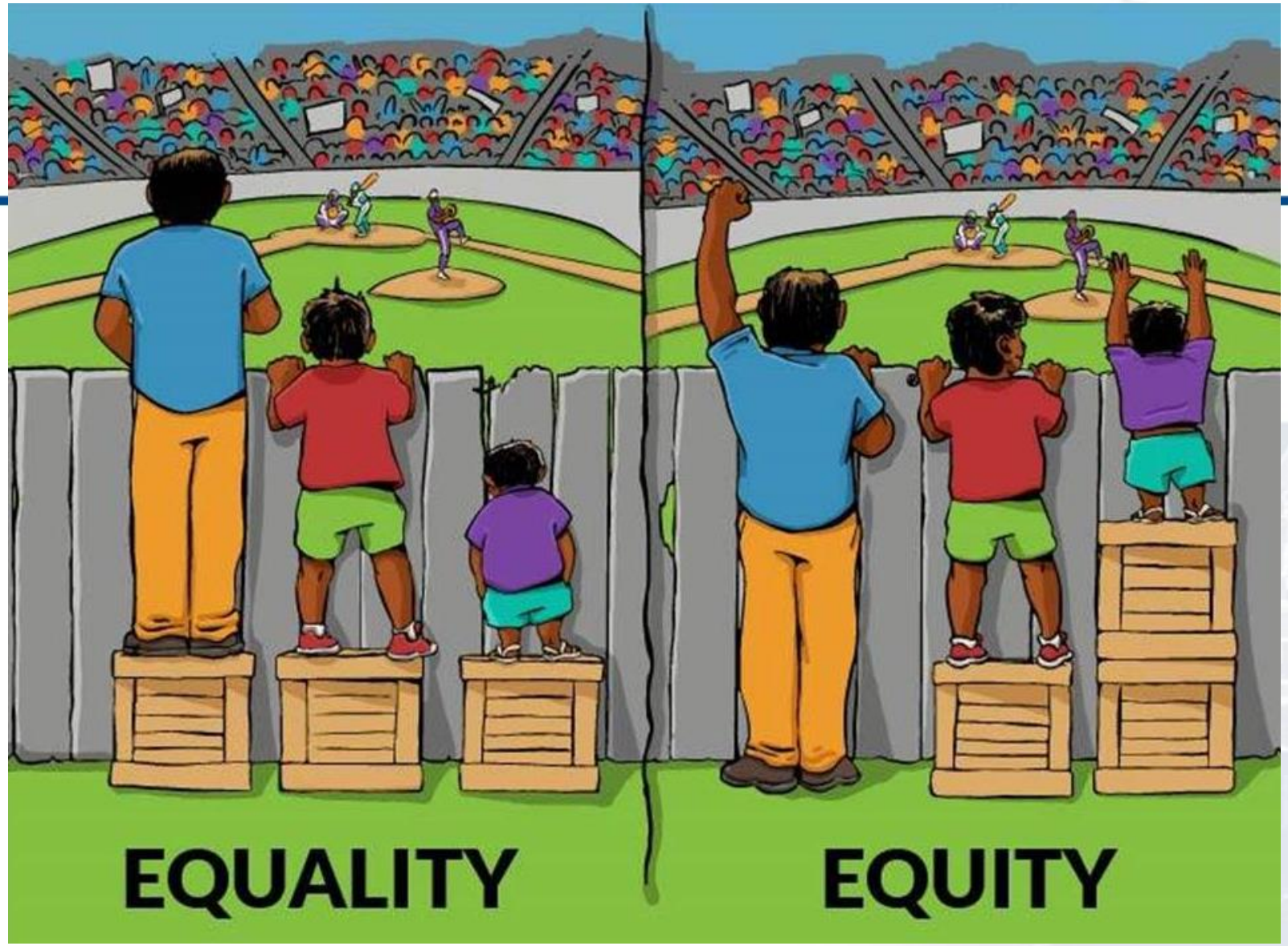
Requires:

The use of “Evidence Based Care and Prevention”

That is:

- The rational practice of medicine
- Not the irrational practice of medicine
- Not the rationing of medicine

JOHNS HOPKINS MEDICINE



The Metropolitan Chicago Breast Cancer Taskforce

- In 2007, implemented
  - Quality of care improvement programs, and
  - Navigation programs with policy changes

- Result in a:
  - 39% decline in breast cancer death rate for Black Chicagoans over 9 years.
  - The largest mortality decline of any major US city.

VIEWPOINT

Ensuring Equity and Justice in and Outcomes of Patients With

Blase N. Polite, MD
Pritzker School of Medicine, University of Chicago Cancer Center, University of Chicago, Chicago, Illinois.

In 1966, Rev Martin Luther King Jr told the Medical Committee for Human Rights, "Of all the forms of inequality, injustice in health is the most shocking and the most inhuman...." The problem of health inequity rings especially true for cancer. In 1980, all women in Chicago had the same cancer mortality rate: there was no disparity. By

tially, whe
remained
tection an
tified as pr
cer outco
racial gap

Polite, Gluck, and Brawley. JAMA 2019

The Most Important Question in Cancer Control

How can we provide adequate high-quality care (to include preventive services) to populations that so often do not receive it?

- Unnecessary care interferes with abilities to provide necessary care.

- The provision of unnecessary care is a cause of health disparities.

JOHNS HOPKINS MEDICINE

The Johns Hopkins Medical Institutions

JOHNS HOPKINS MEDICINE

Panel: Stakeholder Priorities in Advancing Cancer Equity

Jenny Goins, SPHR, MA
President and CEO
Kentuckiana Health Collaborative

Adam Bradley
Co-Founder
Cancer Study Group

Elizabeth Holtsclaw, MA
Cancer Control Strategic Partnerships Manager
American Cancer Society

Veronica Sandoval, PhD, JD
Principal, Patient Inclusion and Health Equity
Genentech

Cancer Study Group

Racial Disparities in Cancer (for Large Employers)

First Learning: Disparities exist at every stage of a patient's cancer journey.

Social Determinants, General Health, and Risk Factors

Lower rates of insurance coverage, greater likelihood of getting cancer due to heightened risk factors (e.g., smoking), and greater risk of comorbidities given structural inequity

Site of Care & Differences in Treatment

Lower levels of access to top institutions, lower likelihood of receiving medically appropriate care, and less access to new, complex, and/or expensive treatments

Cancer Screenings & Stage at Diagnosis

Lower rates of screening coupled with greater underlying need for screening, resulting in later stages at diagnosis

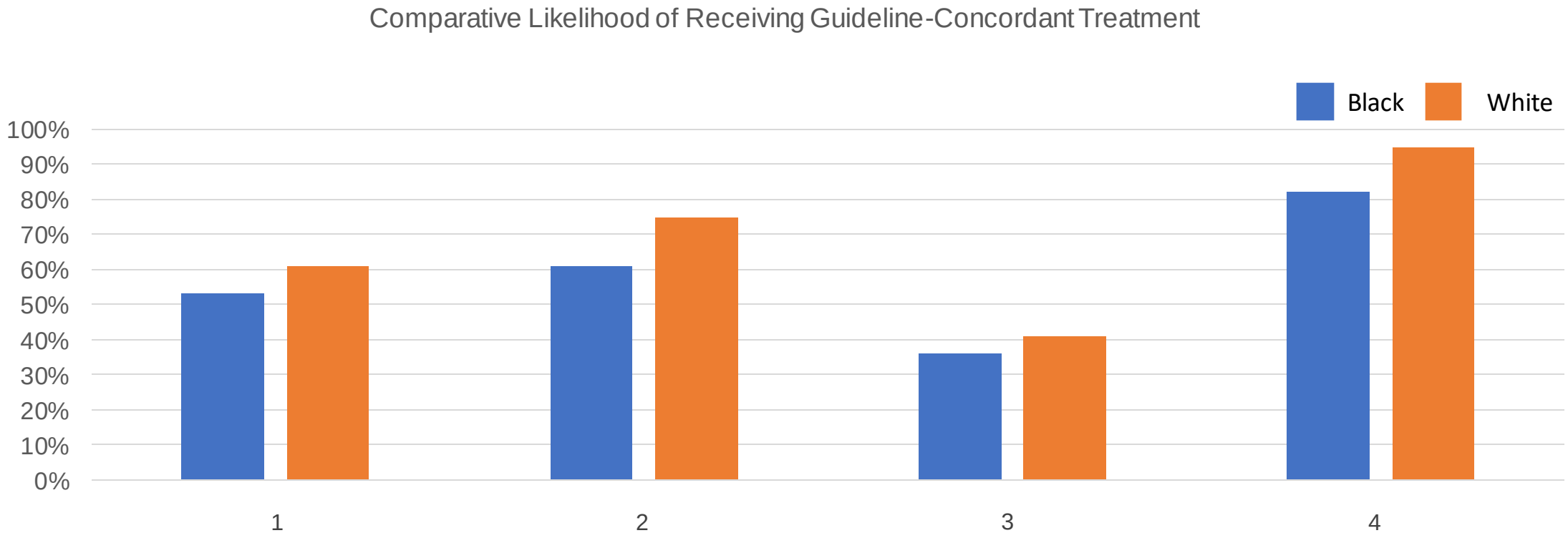
Treatment Adherence & Follow Up Care

Lower rates of adherence to treatment, lower rates of participation in follow-up care, and less engagement between patient and provider

Key Takeaway: Black and African American patients are less likely to receive their best shot against the disease.

Care Disparities (1/3): Black and African-American patients are less likely to receive appropriate (guideline concordant) care

Across Cancers, Black Patients Were Less Likely to Receive Guideline Concordant Treatments



CARE DISPARITIES (2/3): BLACK AND AFRICAN-AMERICAN PATIENTS ARE LESS LIKELY TO RECEIVE NEW, MORE COMPLEX OR EXPENSIVE TREATMENTS

Fewer Transplants	*Less Use of Targeted Therapies*	*Lower Rates of Clinical Trial Participation*

-49% Lower likelihood of Black patients receiving **autologous stem cell transplantation for multiple myeloma**

-47% Lower likelihood for Black patients with **leukemia receiving hematopoietic cell transplantation**

-25% Lower likelihood for Black patients to receive **trastuzumab which can increase survival by 37%** in HER2+ breast cancer

"**Disparities will only increase as medicine becomes more complex**, harder to understand, harder to access…."

- Dr. Andrea Miyahira, Director of Research at the Prostate Cancer Foundation

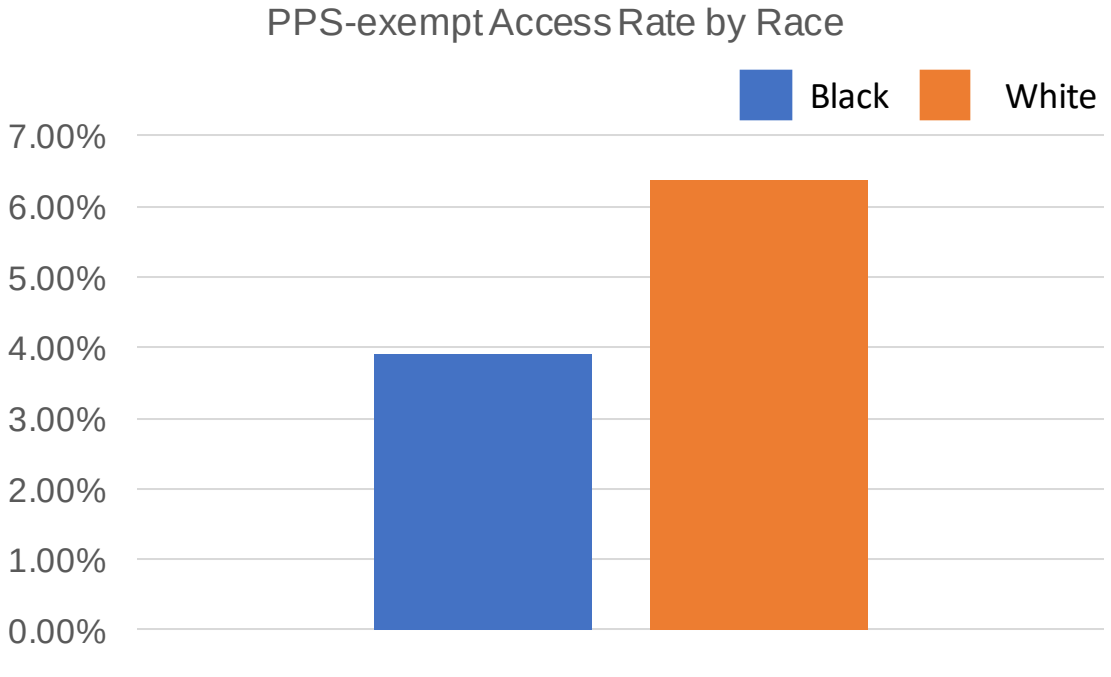
Fewer Black and African-American patients participate in clinical trials

In 2018, of the 17 drugs for cancer approved by the FDA, ***only one drug*** *had a clinical trial* ***where ~10% of the participants were Black.***

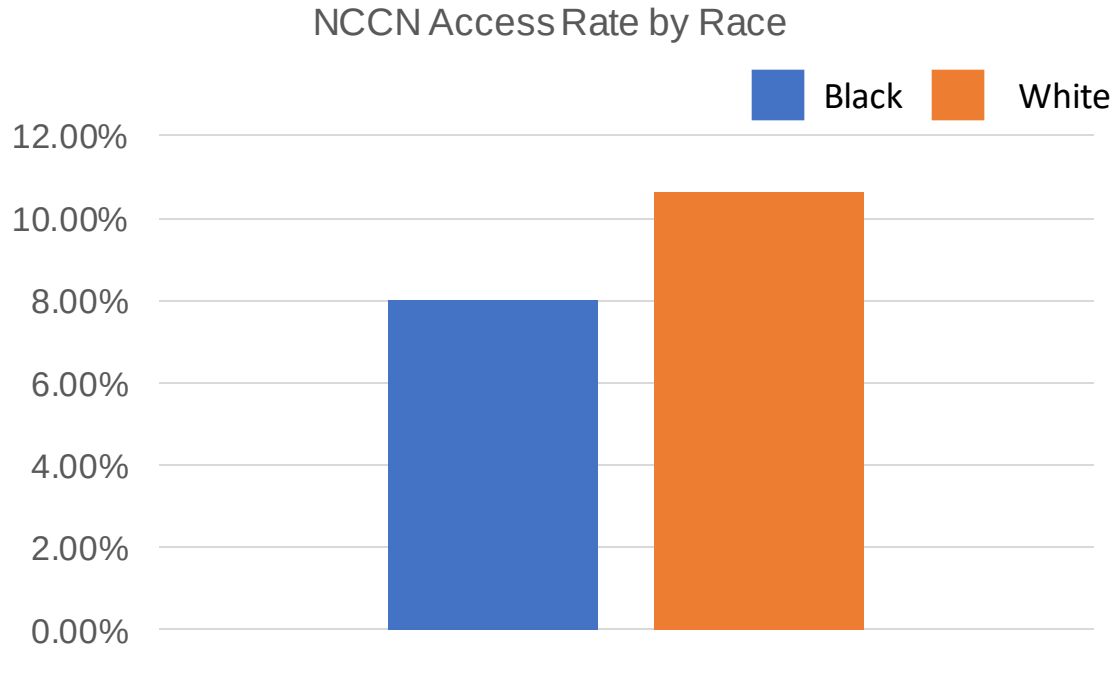
These rates are significantly lower than the representative share both ***from a population basis*** *and from a* ***cancer incidence basis***

CARE DISPARITIES (3/3): BLACK AND AFRICAN-AMERICAN PATIENTS ACCESS TOP CENTERS AT LOWER RATES THAN WHITE PATIENTS

White Patients Are More Likely to Access the Top 11 Sites of Care Than Black Patients



White Patients are Also More Likely to Access the Top 30 Cancer Hospitals Than Black Patients



Note: This research was based on Cancer Study Group's proprietary analysis of a large Medicare dataset

For patients with the most complex cancers, access to the top centers can matter hugely.

Source: Cancer Study Group analysis of a large Medicare dataset.

Sources: included here for every open-source fact (not including primary Cancer Study Group research)

(slide 3) Racial Disparities in Guideline-Concordant Care
(slide 4) Racial Disparities in Treatment Utilization for Multiple Myeloma
(slide 4) Access to bone marrow transplantation for leukemia and lymphoma: the role of sociodemographic factors
(slide 4) Disparities in Use of Human Epidermal Growth Hormone Receptor 2–Targeted Therapy for Early-Stage Breast Cancer
(slide 4) As cancer treatments become more targeted, minorities face widening disparities

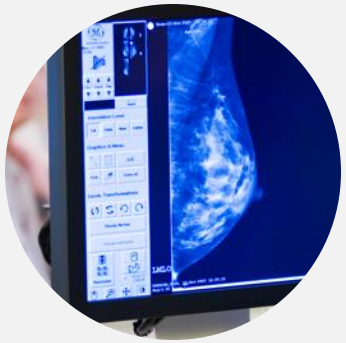
Elizabeth Holtsclaw, MA
Elizabeth.Holtsclaw@cancer.org

Health Equity Work at the American Cancer Society

OUR MISSION

RESEARCH

We launch innovative, high-impact research to find more – and better – treatments, uncover factors that may cause cancer, and improve the quality of life for people facing cancer.



EDUCATION

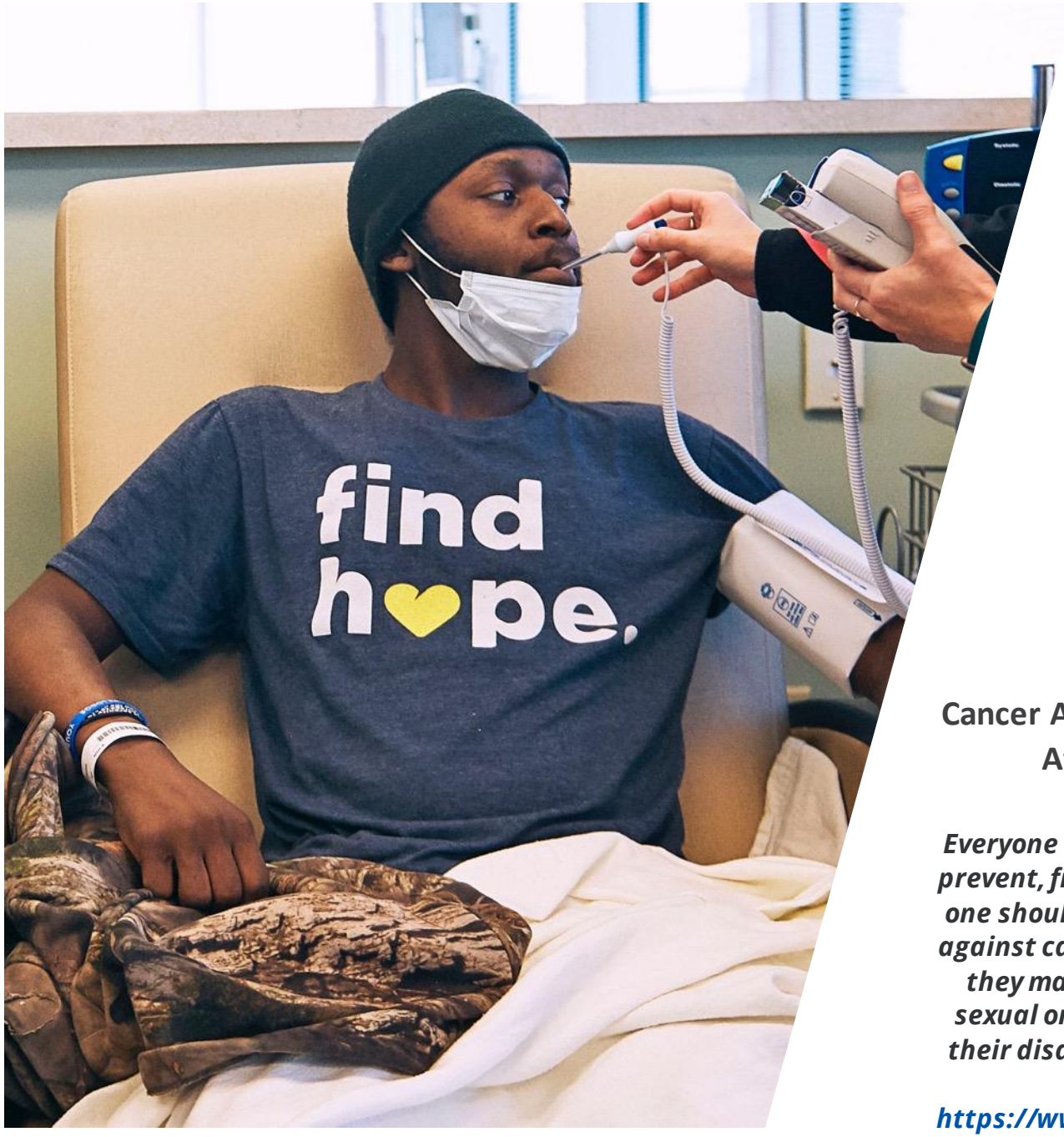
We provide the latest, evidence-based cancer information, share how making healthy lifestyle choices like eating right, staying active, and avoiding alcohol and tobacco can help reduce cancer risk, and develop screening guidelines that can help detect certain cancers early.

ADVOCACY

We fight cancer in city hall, the statehouse, and in Congress to demand change from our elected officials to build healthier communities, create safer workplaces, and provide greater, more equitable access to quality medical care.

SERVICE

We help people find answers and resources, whether they want to understand their diagnosis and treatment options, how to cope with side effects, or find transportation or a place to stay when treatment is far from home.



Cancer Affects Everyone, But Doesn't Affect Everyone Equally

Everyone has a fair and just opportunity to prevent, find, treat, and survive cancer. "No one should be disadvantaged in their fight against cancer because of how much money they make; the color of their skin; their sexual orientation; their gender identity; their disability status; or where they live."

https://www.cancer.org/about-us/what-we-do/health-equity.html

HEALTH EQUITY RESEARCH FUNDING

- **ACS has funded over $300M in health equity/cancer disparities research in 552 grants.**
- **CPS3 participants (over 1.5 million people enrolled) help us to understand access issues including geographical and disparities**
- **In 2021, ACS invested $29,563,000 in funding for Diversity in Cancer Research, including more than $10 million to four historically Black medical schools to support grants that aim to increase the pool of minority cancer researchers.**

The Society's internal culture and external reputation must reflect a commitment to diversity and inclusion.

s://www.cancer.org/research.html

ADVOCACY FOR HEALTH EQUITY

- ACS Cancer Action Network works for Medicaid expansion which can help to address health disparities and access to care
- ACS CAN advocates for increasing diversity in clinical trials
- ACS CAN successfully advocated for the passage of the Henrietta Lacks Enhancing Cancer Research Act which encourages underrepresented groups to fully participate in federally funded cancer research studies through accountability and evaluation of federal policies.
- ACS CAN works to eliminate tobacco companies targeting Black teenagers and communities
- ACS CAN is collaborating with 150 organizations representing patients, providers and health equity advocates urging Congress to pass Diversifying Investigations Via Equitable Research Studies for Everyone Trials Act (DIVERSE act) into law
- ACS and ACS CAN participate in the National Lung Cancer Roundtable and the National Colorectal Cancer Roundtable- national coalitions dedicating to reducing the burden of lung and colon cancer, overcoming disparities in delivery of care, health education, access to screening and therapies. The work extends to state- based initiatives including identification of areas of need based on race/ethnicity, income, insurance coverage and geography. ACS was a founding member of both organizations.

Our plan must be integrated and interdependent: failure in one business function compromises the success of the entire plan

www.fightcancer.org

NATIONAL AND REGIONAL INITIATIVES

Multiple Cancer Facts and Figures for African Americans/ Hispanics/Latinos/Asian Americans/LGBTQ highlight circumstances for populations of focus

A grant from the Anthem Foundation enabled us to train more than 2,000 ambassadors to deliver cancer prevention, early detection information, and resources to Black communities, in partnership with The Links, Inc.

Return to Screening Initiative shows that all screening and vax rates are down since Covid, but communities of color and under-resourced area have higher lags of screening due to access and social determinants

Crucial Catch with NFL supports breast screenings for Black women and for women without insurance (CHANGE grants)

Our Partnering For Life program works to spread awareness of cancer risk, prevention, and early detection throughout Black communities.

Diversity and Inclusion is an essential business strategy and is in direct support of the Society's vision of leading the fight for a world without cancer.

Diversity in Cancer Research Internships – to promote cancer research funding for young undergraduate research candidates with diverse backgrounds – piloted at University of Kentucky

SHES – Surveillance & Health Equity Sciences division – includes program to encourage young women to engage with STEM, healthcare, oncology and research. Funded by ResearcHERS, an initiative supported by female community members interested in gender equity in research

Statewide collaboration with CDC to increase CRC screening in under-resourced clinics in Eastern KY and Louisville

Kentucky Specific

Health Equity Work

- Focus groups conducted in 2021 to better understand barriers to colon cancer screening
- Development of a tool to help address potential health literacy barriers to completing colon cancer screening
- March 21st will be co-hosting a webinar in partnership with Coke Memorial Church, Norton Institute for Health Equity
- Grants submitted to continue growing our collaboration

PARTNERING WITH AFRICAN AMERICAN CHURCHES IN LOUISVILLE TO INCREASE COLON CANCER SCREENING

LGBTQ+ & Cancer Care Through the Primary Care Lens Project ECHO

TRANSPORTATION AND LODGING

Hope Lodge in Lexington, KY

ACS has funded $150,000 in Transportation and Lodging Grants, Emergency Relief Grants in KY in the past year

THANK YOU

cancer.org | 1.800.227.2345

Closing

Natalie Middaugh

Community Health Program Manager
Kentuckiana Health Collaborative

UPCOMING KHC EVENTS

The Quest for Value and Equity

KHC 8th Annual Conference

April 12-13, 2021

https://khcollaborative.org/2022-conference/

Reducing Cancer Disparities to Achieve Equity

Thank you for attending!

Kentuckiana Health Collaborative
Building a Bridge to Better Health, Better Care and Better Value

Have a Heart Clinic

American Nurses Association Kentucky