

Knowledge Gaps: Stroke and Other Health Disparities

Gwendolyn Lynch, M.D., FAHA

Staff Neurointensivist/Stroke Specialist

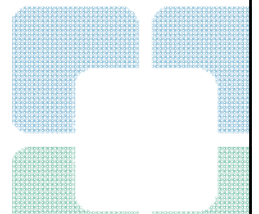
Asst. Professor of Neurology

Director Minority Stroke Program

Cerebrovascular Center Quality Improvement Officer



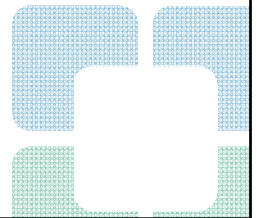
Why?



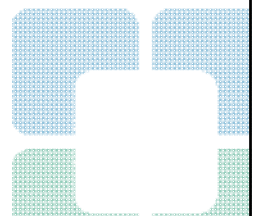
“....the vast majority of genetic variation exists within racial groups and not between them. Race is an ideology and for this reason, many scientists believe that race should be more accurately described as a social construct and not a biological one.”



Courtesy: National Human Genome Research Institute, genome.gov



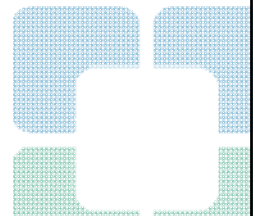
Reference: Ayanian JZ. The Cost of Racial Disparities in Health Care. Harvard Bus. Rev. October 10, 2016



ECRI TOP TEN SAFETY CONCERNS 2021

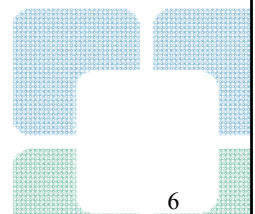
1. Racial and Ethnic Disparities in Healthcare

2. Emergency Preparedness and Response in Aging Services
3. Pandemic Preparedness across the Health System
4. Supply Chain Interruption
5. Drug Shortages
6. Telehealth Workflow Challenges
7. Improvised Use of Medical Devices
8. Methotrexate Therapy
9. Peripheral Vascular Harm
10. Infection Risk from Aerosol-Generating Procedures



FIVE MAJOR CONTRIBUTORS TO HEALTH

- 1. Healthy Behaviors*
- 2. Physical and Social Environment*
- 3. Socioeconomic Status*
- 4. Public Policy*
- 5. Healthcare*



CDC – 5 Key Areas of Social Determinants of Health

- Social and Community Context
- Economic Stability
- Neighborhood and Built Environment
- Education Access and Quality
- Healthcare Access and Quality

<https://www.cdc.gov/socialdeterminants/about.html><https://health.gov/healthypeople/objectives-and-data/social-determinants-health>

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Courtesy of the Office of Disease Prevention and Health Promotion <https://health.gov/healthypeople>

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Wellness

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*"...physiological adaptations or disruptions
affect lifelong outcomes in learning, behavior,
and both physical and mental well-being."*

*Lifelong Health
Harvard University*

<https://developingchild.harvard.edu/science/deep-dives/lifelong-health/>

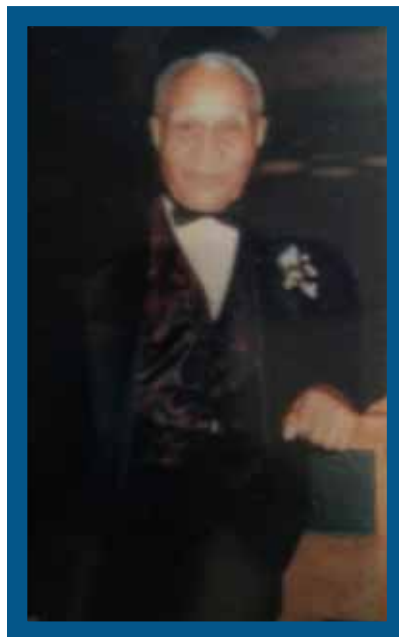
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Impact of Effective Life Guidance During Childhood

- Higher sense of wellbeing
- Less Depression
- Higher rates of healthy eating
- Less Obesity
- Higher socioeconomic and cognitive achievements

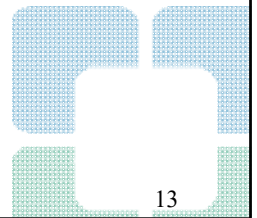
Int J Behav Nutr Phys Act 14, 47 (2017).
Int J Behav Med. 2006; 13(4): 320–329.

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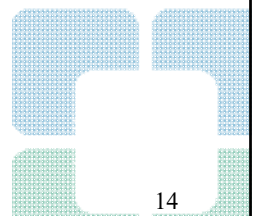
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*How can we more effectively help families
and communities implement efforts to optimize
childhood wellness initiatives that extend to adulthood ?*



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*What are best practices that minority
and ethnic communities can use to address
social determinants of health at the ground level ?*



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What are best practices to addressing the wellness aspects of social determinants of health during the patient care visit, including both the outpatient and inpatient settings ?

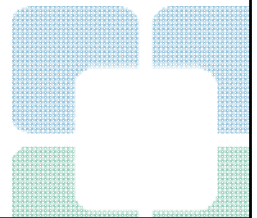
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Healthcare

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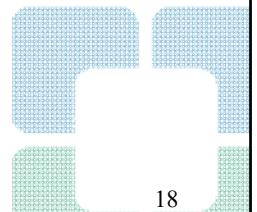
Knowledge Gaps: Healthcare

- *Evaluation*
- *Treatment*
- *Research*



The Great Divide in Patient Assessment

- Longer Wait Times
 - Outpatient visits
 - Emergency room evaluations
- Fewer diagnostic studies
- Lower rates of diagnosing chronic conditions such as hypertension and diabetes
- Later presentation to get care



*You
Never get
A Second Chance
To
Make a
First Impression.*

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Heathcare: Cultural Sensitivity Training

- Majumdar et al, Journal of Nursing Scholarship 36: 161-6
- Randomized controlled trial
- 114 healthcare providers underwent training and assessment
- 133 patients were assigned to experimental and control groups
- Found that completion of a cultural sensitivity training program improved knowledge and attitudes among health care providers, and yielded positive health outcomes for their patients.

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NEWS RELEASES

Wednesday, January 15, 2020

Panel identifies need for improved implementation of preventive services and reduced health disparities

<https://www.nih.gov/news-events/news-releases/pi>

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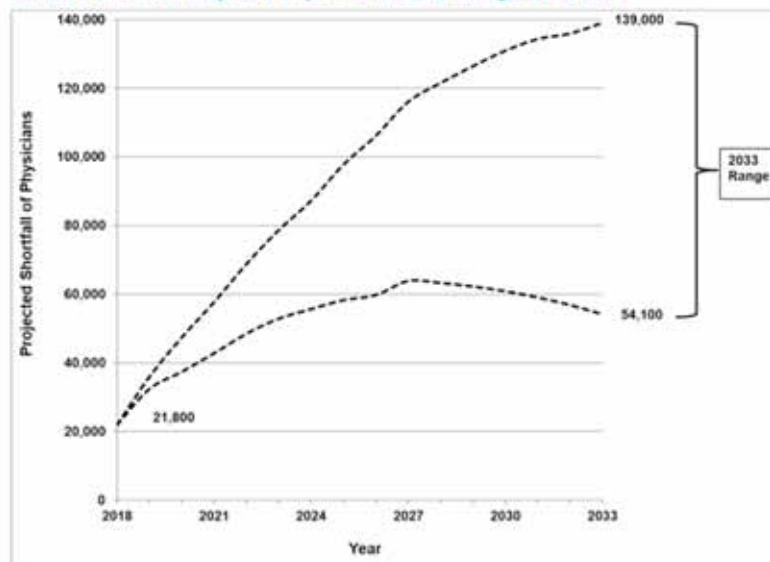
What factors are the greatest hindrance to optimal Patient-Provider relationships?

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*What can be done so that we have enough
providers/under-represented
minority providers to perform proper patient
assessments?*

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Exhibit ES-1: Total Projected Physician Shortfall Range, 2018-2033



Note: Because complex systems have internal checks and balances to avoid extremes, the upper and lower bounds of the shortage projections reflect the range of most likely outcomes. The divergence over time represents increasing uncertainty.

<https://www.aamc.org/media/45976/download>

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Closed Historically Black Medical Schools

- Campbell K et al. JAMA Network Open 2020;3(8):e2015220
- Analysis of historical records and reports from the AAMC
- Estimated the number of graduates from the hypothetical continued operation and expansion of the five HBCU medical schools closed by the Flexner Report .
 - Flint Medical College of New Orleans University,
 - Knoxville Medical College,
 - Leonard Medical School of Shaw University,
 - Louisville National Medical College,
 - University of West Tennessee College of Medicine and Surgery–Memphis.

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Courtesy NINDS - <https://www.ninds.nih.gov/About/NINDS/Impact/NINDS-Contributions-Approved-Therapies/Tissue-Plasminogen-Activator-Acute>

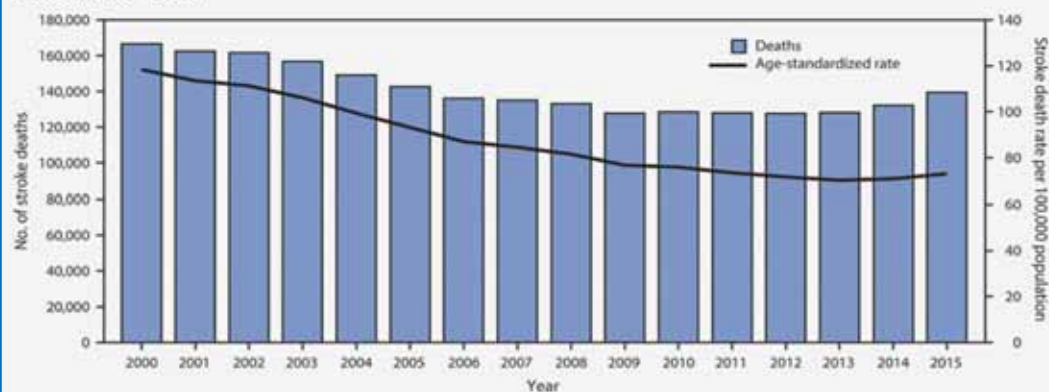
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"Take an aspirin and call....."

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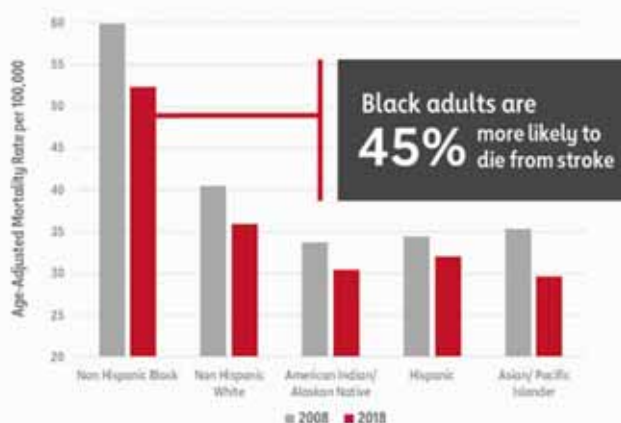
FIGURE 1. Stroke deaths and age-standardized stroke death rate among adults aged ≥ 35 years — United States, 2000–2015



MMWR 2017 / 66(35):933–939

Heart Attack and Stroke Symptoms

MORTALITY RATES by Race/Ethnicity



Age-adjusted total stroke mortality rates per 100,000 people by race and ethnicity in 2008 and 2018.

<https://healthmetrics.heart.org/data-visualization/>

Table 1. Summary of Select Baseline Characteristics Reported by Each Study

Study name	No. of Patients	% Female	Past stroke	Past TIA	MI	Angina pectoris	CHF	Hypertension	Diabetes	Smoking	Alcohol	% African-American
AAASPS	1087	53	25	8	10	12	5	84	39	64	3	100
ACAS ⁵¹	1659	34	—	—	—	—	—	64	23	26	—	3
AFASAK ³⁴	1007	46	4	2	8	17	52	32	8	—	8	—
BAATAF ⁴²	420	28	3	—	13	24	26	51	15	61	—	—
CAN_TIA ⁴⁰	890	33	13	—	15	15	2	48	15	—	—	—
CAPRIE ⁴³	19185	28	9	—	17	53	6	52	20	79	—	—
CASANOVA ⁴⁸	410	27	—	—	—	—	—	60	30	—	—	—
CATS ²³	1053	39	20	18	17	18	6	67	32	66	—	21
DUTCHTIA ³⁶	3131	35	—	—	10	10	—	42	8	45	—	—
DUTCH_AT ³³	1473	36	—	—	5	5	—	28	5	47	—	—
EAF ³⁸	1007	44	—	—	8	11	10	47	13	—	—	—
ECIC ⁴¹	1377	19	—	—	10	9	—	50	18	—	—	—
ECST ³¹	1152	29	56	69	20	—	—	9	56	—	—	—
ESPS ³⁵	2500	42	—	—	—	—	—	37	—	—	43	—
ESPS_2 ⁵⁰	6602	42	29	—	—	—	8	61	15	57	—	—
NASCET ⁴⁹	659	32	—	—	24	24	—	61	19	35	—	3
SALT ³⁹	1360	34	9	10	11	18	5	47	13	50	—	—
SPAF_1 ⁴⁴	1330	29	—	—	8	10	19	52	—	16	—	6
SPAF_2 ⁴⁵	1100	30	—	—	10	11	20	53	16	12	—	—
SPINAF ⁴⁷	525	0	—	—	19	—	30	58	18	17	—	—
SWED_ASA ³⁷	505	38	11	8	10	18	16	46	17	—	—	—
TASS ⁴⁶	3069	36	10	—	17	19	—	53	20	42	—	—
UK_TIA ³²	2435	27	—	—	10	15	1	27	—	53	—	—
VETS_CEA ⁵²	444	0	—	—	26	27	6	64	28	92	—	7

Entries are percentages of patients reporting specified characteristics, rounded up to the nearest percent; — indicate that information was not reported in article.

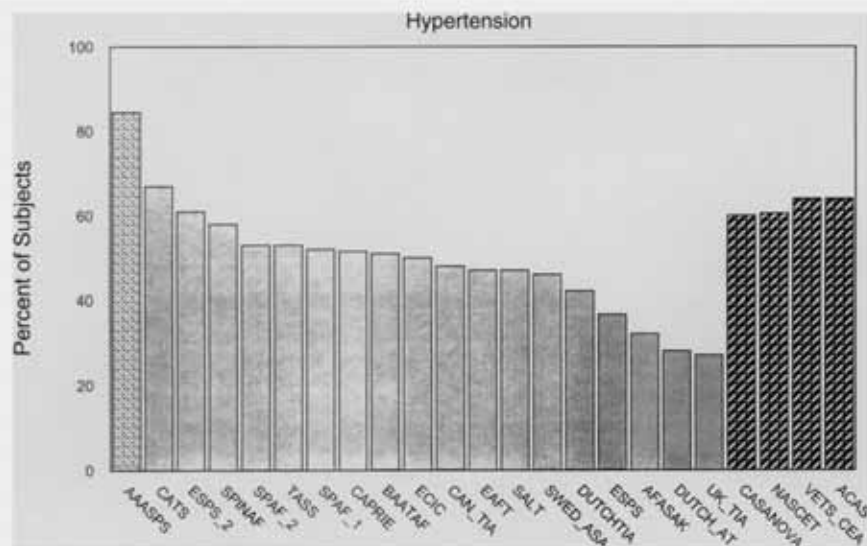


Figure 1. Prevalence of hypertension reported in each study.

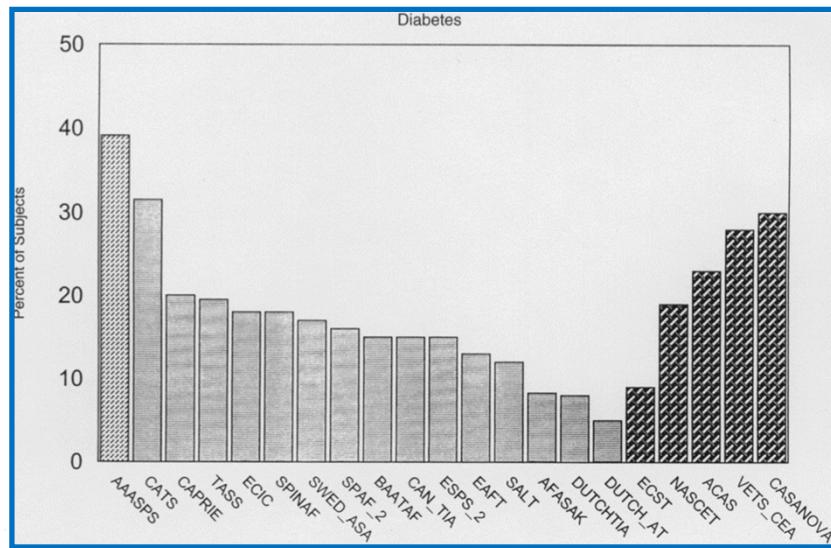


Figure 2. Prevalence of diabetes reported in each study.

JNatlMedAssoc.2001;93:79-86

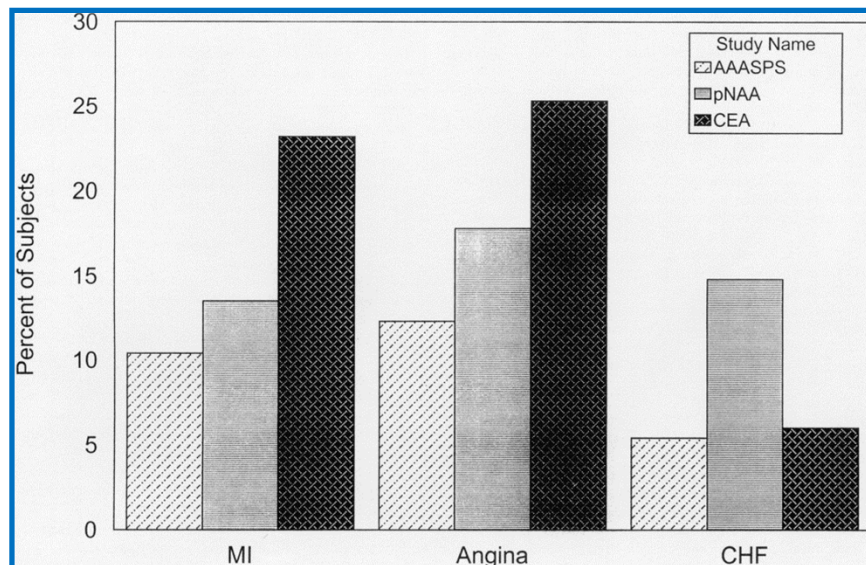
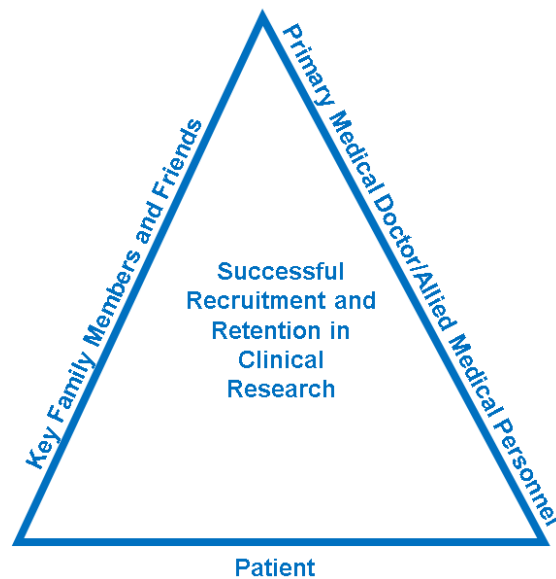


Figure 3. Cardiac conditions.

JNatlMedAssoc.2001;93:79-86



The Recruitment Triangle

J Natl Med Assoc. 1998;90: 141-145

Summary:

Knowledge Gaps regarding Health Disparities

- **Closing the Healthcare Divide**
- **Involvement of:**
 - Patient, Family & Friends, Community, Healthcare Providers, Key Stakeholders
- **Addressing Social Determinants of Health**
- **Addressing Cultural Awareness and Sensitivity**
- **Correcting the doctor shortage**
- **Increasing Minority Participation in Clinical Trials**

Thank you!

