DISPARITIES IN ACCESS TO PAIN MEDICATIONS

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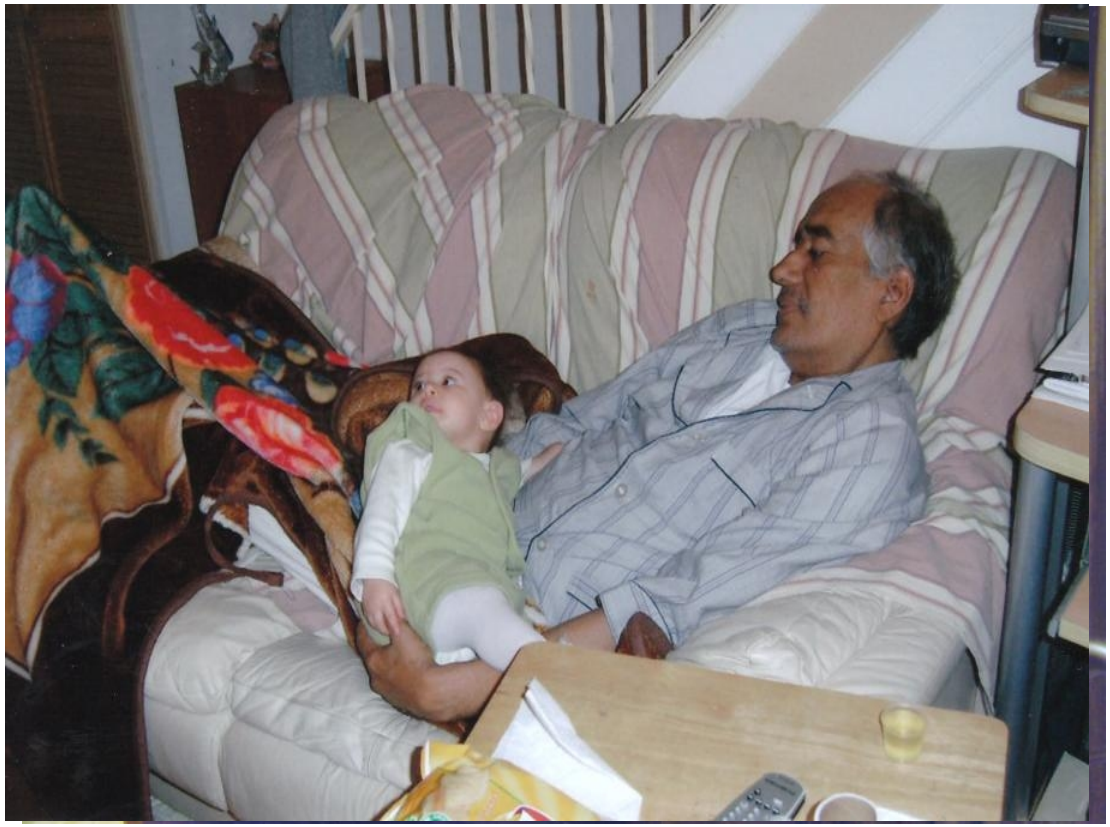
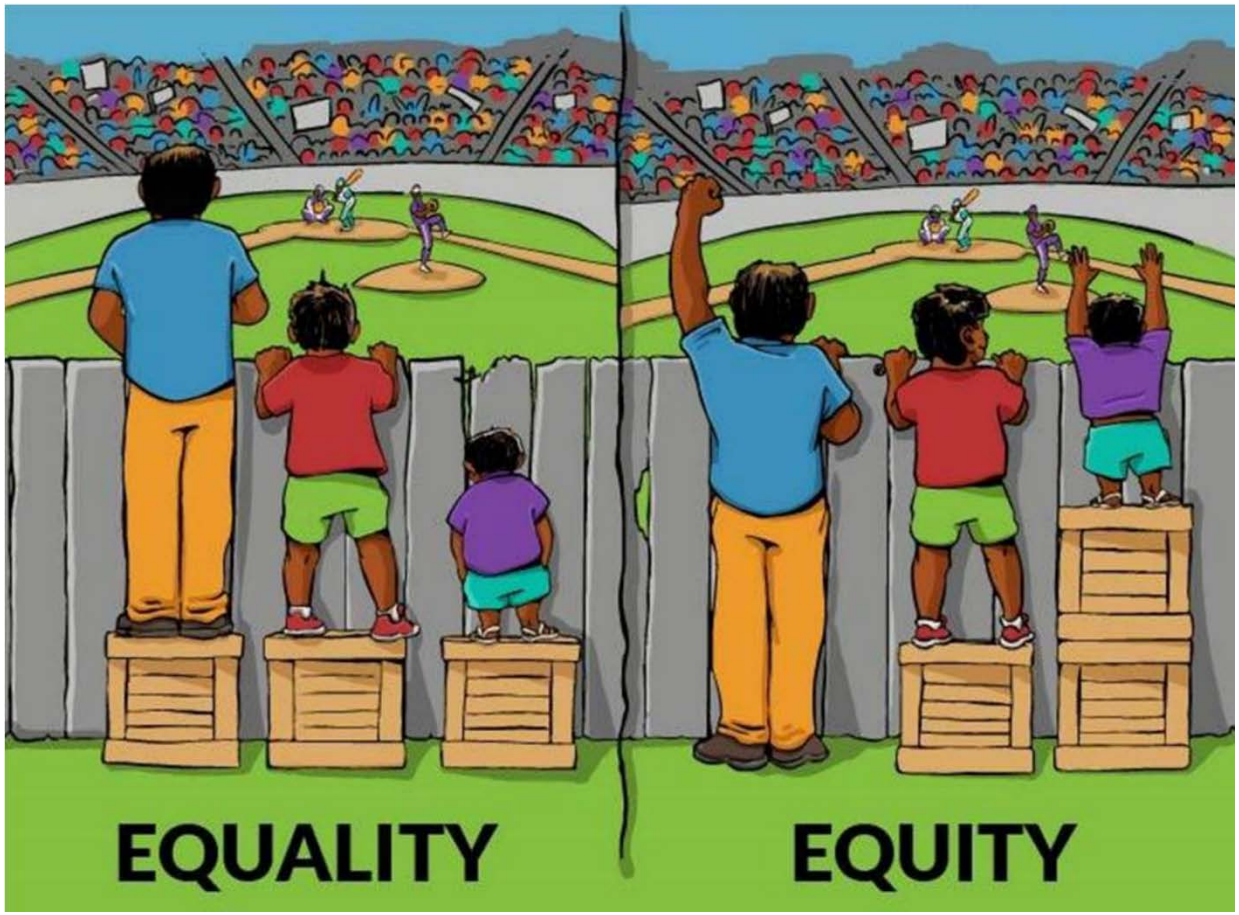
My Story



Health Care Disparities - Defined

Organization/Group	Definition
NAMS	Racial or ethnic differences in the quality of healthcare that are not due to clinical needs, preferences, and appropriateness of intervention.
CDC/Healthy People 2020	Type of difference in health that is closely linked with social or economic disadvantage. Health disparities negatively affect groups of people who have systematically experienced greater social or economic obstacles to health. These obstacles stem from characteristics historically linked to discrimination or exclusion such as race or ethnicity, religion, socioeconomic status, gender, mental health, sexual orientation, or geographic location.
NIH	Health disparities are differences in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions that exist among specific population groups in the United States.
NIMHD	A population is a health disparity population if there is a significant disparity in the overall rate of disease incidence, prevalence, morbidity, mortality or survival rates in the population as compared to the health status of the general population.


EQUALITY
EQUITY

US Demographics

Variable	2000 (N, %)	2010 (N, %)
Total Population	281,421,906 (100)	308,745,538 (100)
White	211,460,626 (75)	223,553,265 (72)
Hispanic or Latino	35,305,818 (12.5)	50,477,594 (16.3)
Black or AA	34,658,190 (12.3)	38,929,319 (12.6)
AI/AN	2,475,956 (0.9)	2,932,248 (0.9)
Asian	10,242,998 (3.6)	14,674,252 (4.8)
Native Hawaiian or Other PI	398,835 (0.1)	540,013 (0.2)
Other	15,359,073 (5.5)	19,107,368 (6.2)
Spoke a language other than English at home	47,278,956 (16.5)	55,076,078 (18)
Spanish spoken at home	31,586,729 (11)	34,183,622 (11)

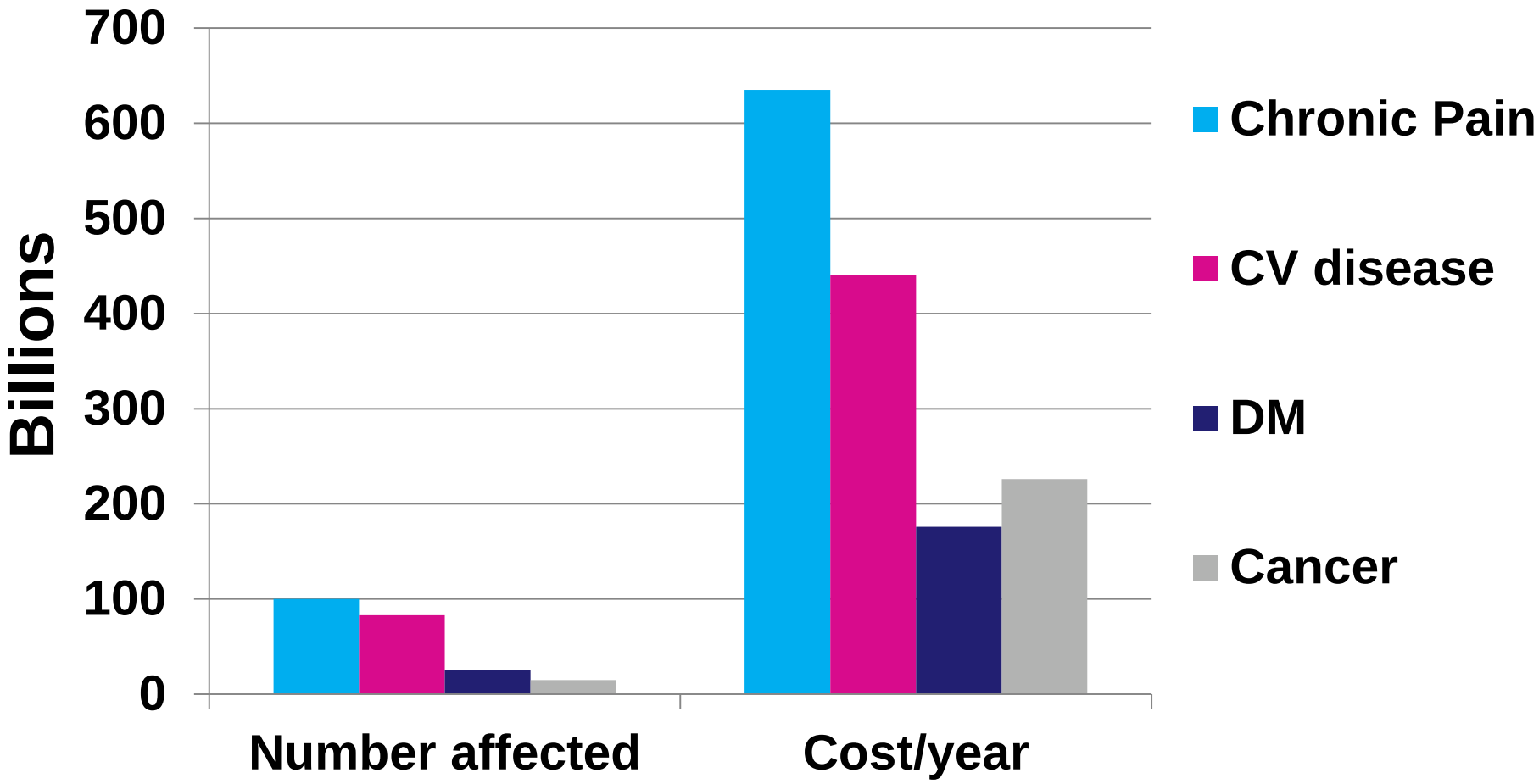
U.S. Census Bureau, 2010

The New York Times

Finding Good Pain Treatment Is Hard. If You're Not White, It's Even Harder.

August 9, 2016

Extent of Pain in the US



Unequal Burden of Pain

Variable	White	Hispanic	Black
Rates of "illicit" drug use[1,2]	8.8%	9.6%	7.9%
Drug induced deaths[2]	12.6%	9.5%	8.9%

[1]National Survey on Drug Use and Health, 2010 survey.
[2]CDC, 2011

Race and Pain

Minority patients with pain:

- Have less access to pain management
- Less likely to have pain recorded/assessed
- Receive less pain medications
- Are at risk for under-treatment

Consequences of Pain

- Physical Function
- Family/Social Role
- Economic
- Psychological function

Factors Responsible for Disparities

- Health systems-level factors
- Clinician-level factors
- Patient-level factors
- Disparities arising from clinical encounters

Race and Pain

Meta-analysis 1989-2011

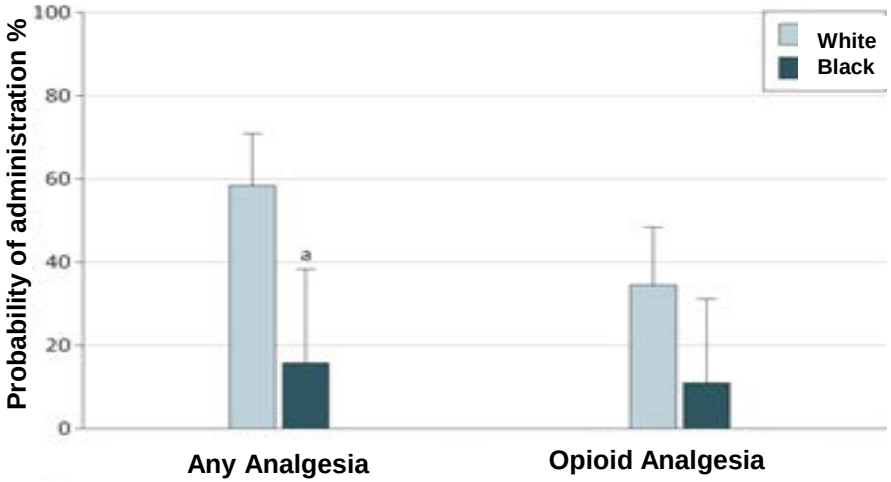
Characteristic	Racial or Ethnic Group	Number of Studies	Odds Ratio (95% Confidence Interval)	*P* Value	I^2 (*P* Value)
Subgroup	Hispanics/Latinos vs Whites				
Outcome	Opioids (prescription of)	11	0.78 (0.65–0.93)	0.006*	49.4 (0.031)
Study quality†	High (≥76% criteria)	6	0.76 (0.60–0.97)	0.028*	44.8 (0.107)
	Medium (51%–75% criteria)	5	0.80 (0.57–1.10)	0.176	61.0 (0.067)
Study period‡	Prior to TJC pain guidelines	5	0.64 (0.41–1.01)	0.059	65.3 (0.021)
	After 2001§	4	0.85 (0.69–1.05)	0.136	15.1 (0.316)
Setting	ED	8	0.80 (0.68–0.94)	0.008*	23.3 (0.243)
	Non-ED	3	0.60 (0.22–1.59)	0.307	76.9 (0.013)
Subgroup	Blacks/African Americans vs Whites				
Outcome	Opioids (prescription of)	15	0.70 (0.62–0.80)	0.000*	52.5 (0.009)
Study quality†	High (≥76% criteria)	9	0.66 (0.56–0.79)	0.003*	50.5 (0.040)
	Medium (51%–75% criteria)	6	0.76 (0.63–0.90)	0.001*	50.8 (0.070)
Study period‡	Prior to TJC pain guidelines	5	0.74 (0.57–0.94)	0.029*	62.9 (0.029)
	After 2001§	8	0.67 (0.56–0.81)	0.000*	55.3 (0.028)
Setting	ED	10	0.68 (0.58–0.78)	0.000*	44.5 (0.060)
	Non-ED	5	0.76 (0.60–0.96)	0.024*	57.9 (0.050)

Meghani, et. Al. Pain Medicine 2012; 13: 150–174

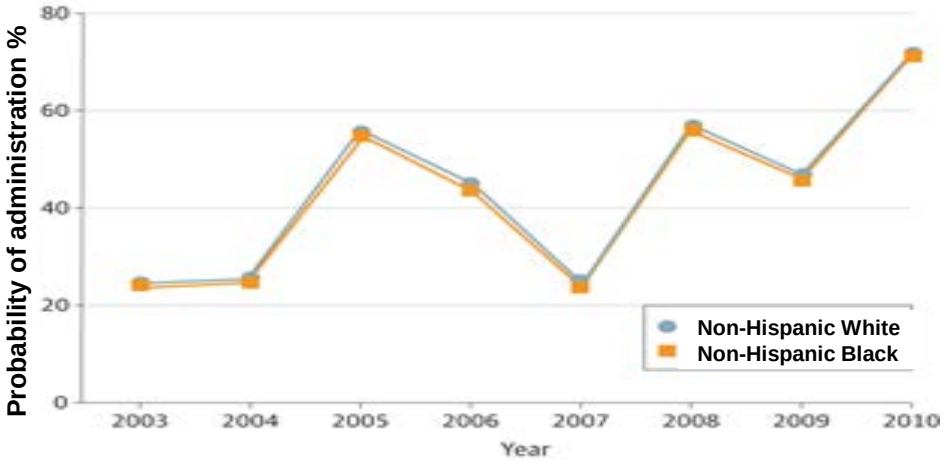
Race and Pain: Children

Children up to 21 years presenting to ED with appendicitis. National Hospital Ambulatory Medical Care Survey from 2003 to 2010.

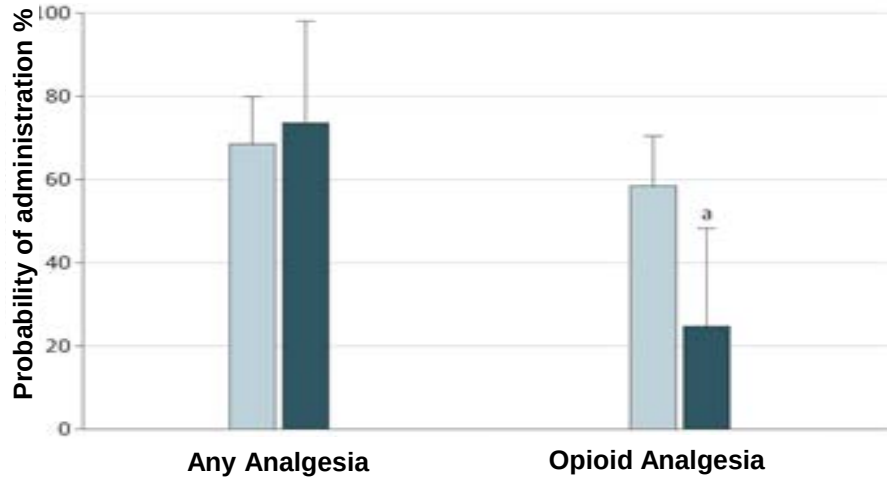
Moderate Pain



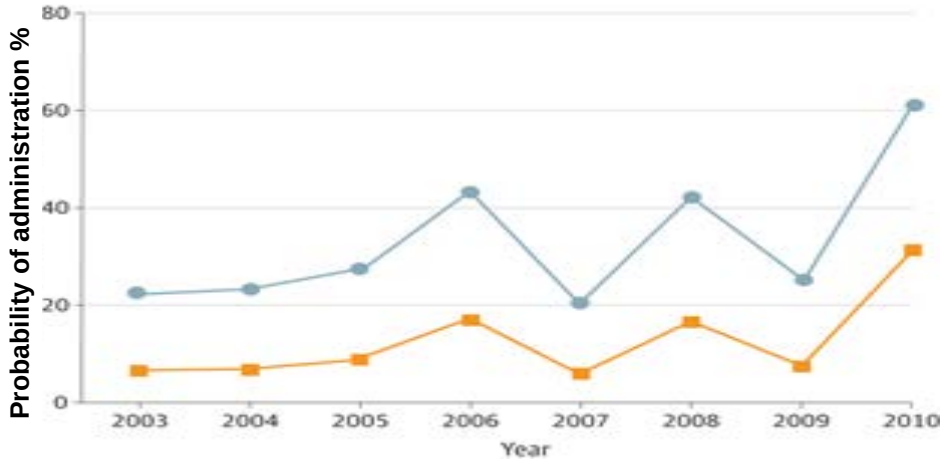
Any Analgesia



Severe Pain



Opioid Analgesia



Goyal, MK. JAMA Pediatr. 2015;169(11):996-1002.

Race and Pain: Children

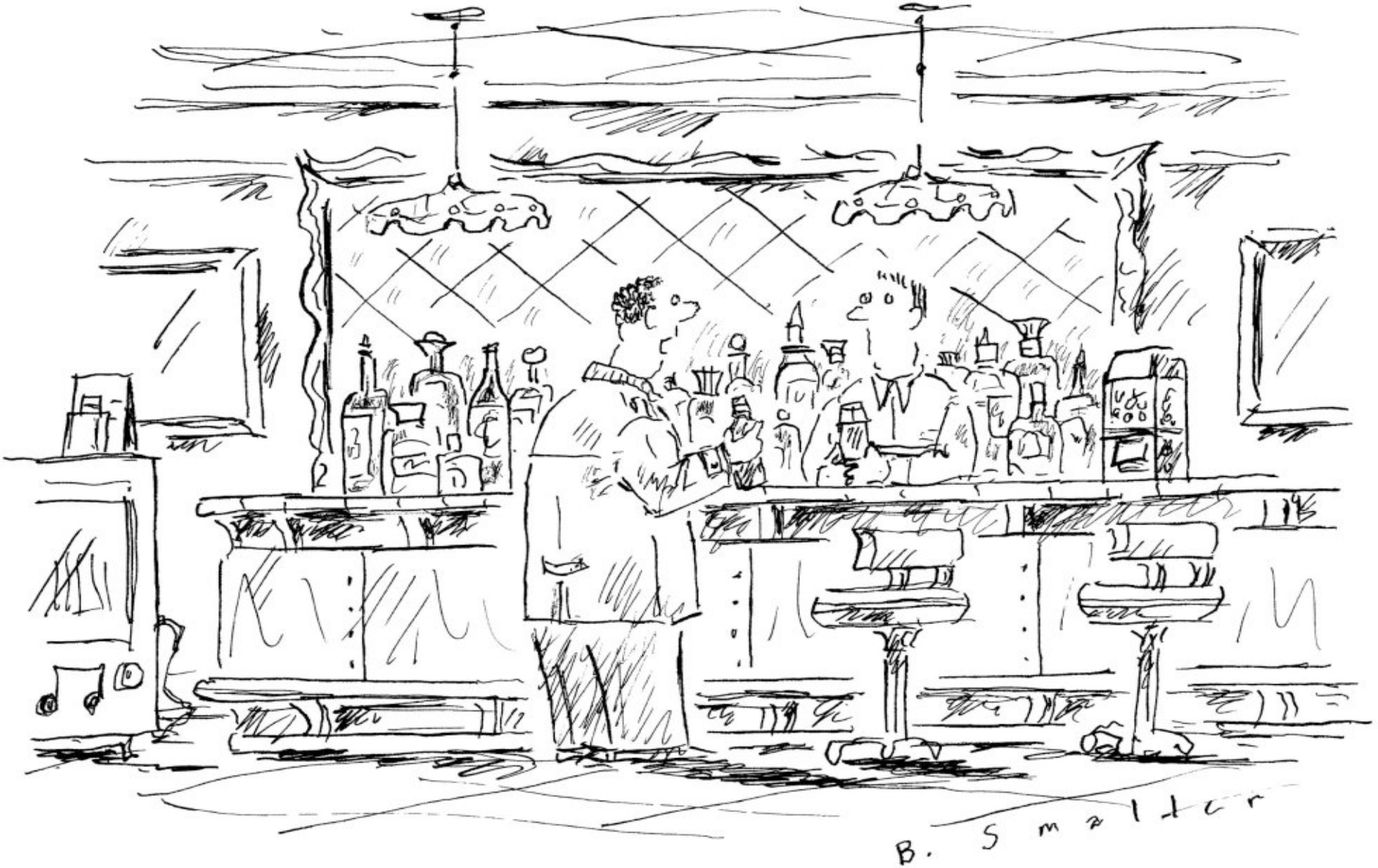
Table 3. Multivariable Analysis of Overall Analgesia and Opioid Administration by Race[a]

	Any Analgesia Administration		Opioid Administration	
Race	Predicted Probability, % (95% CI)	AOR (95% CI)	Predicted Probability, % (95% CI)	AOR (95% CI)
White	48.3 (12.2-84.4)	1 [Reference]	33.9 (0.6-74.9)	1 [Reference]
Black	42.0 (2.9-81.0)	0.7 (0.3-1.8)	12.2 (0.1-35.2)	0.2 (0.06-0.8)

Abbreviation: AOR, adjusted odds ratio.

[a] Adjusted for ethnicity, age, sex, insurance status, triage level, and pain score.

Goyal, MK. JAMA Pediatr. 2015;169(11):996-1002.



"The great thing about self-medicating is that there is a low co-pay"

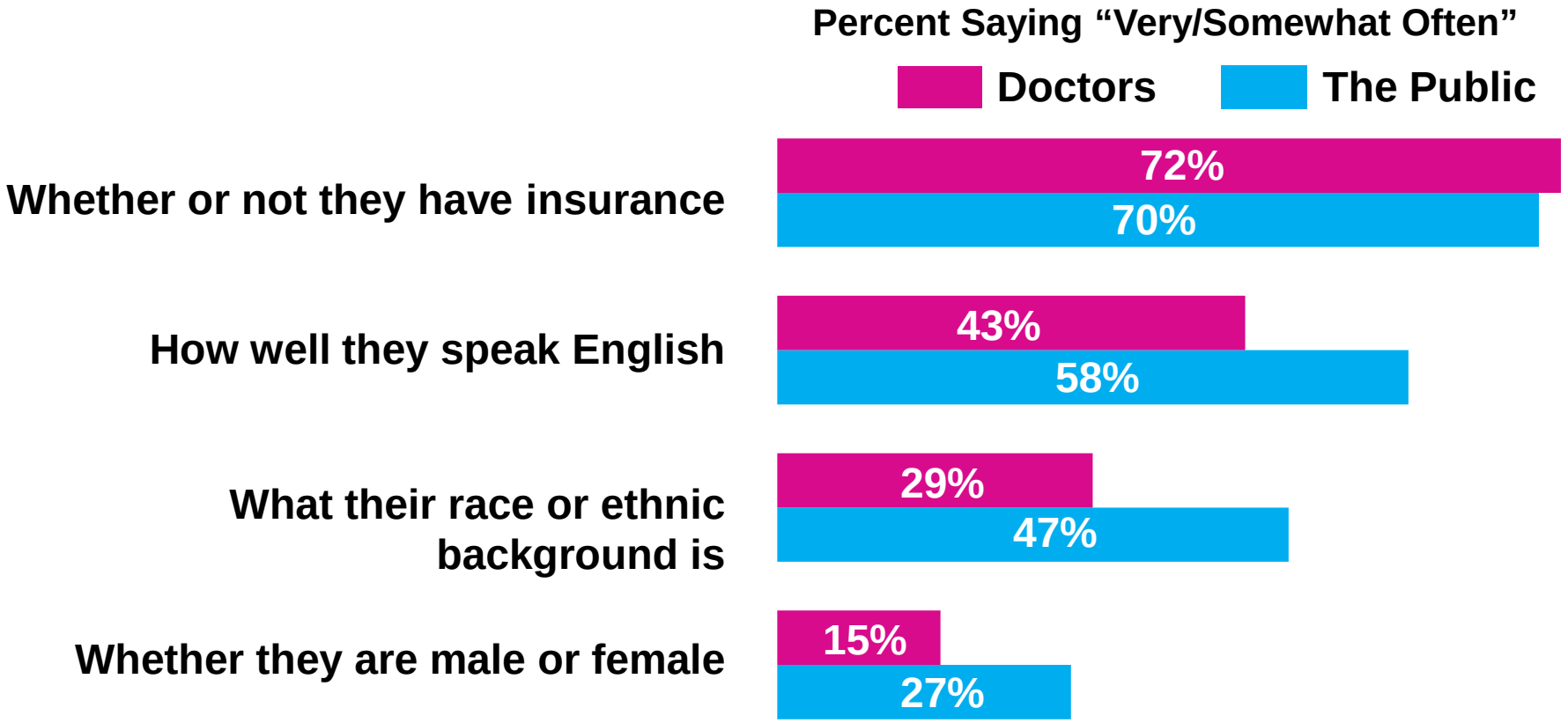
New Yorker 6.16

Disparities in the Clinical Encounter: The Core Paradox

How could well-meaning and highly educated health professionals, working in their usual circumstances with diverse populations of patients, create a pattern of care that appears to be discriminatory?

Perceptions of Disparities in Health Care

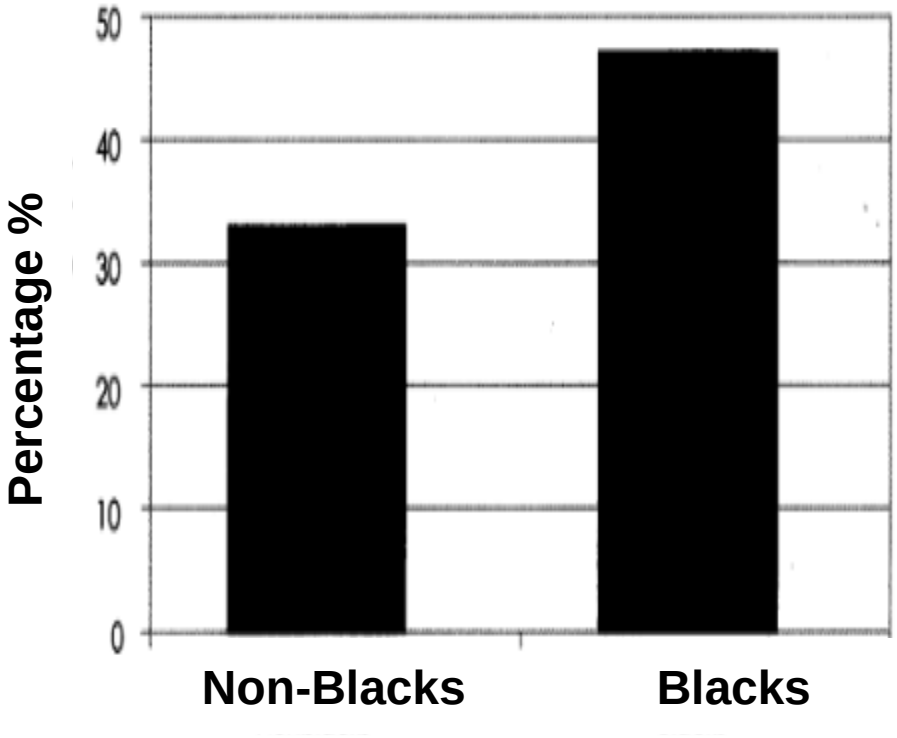
Generally speaking, how often do you think our health care system treats people unfairly based on…



Source: Kaiser Family Foundation, *National Survey of Physicians*, March 2002 (conducted March-October 2001); *Survey of Race, Ethnicity and Medical Care: Public Perceptions and Experiences*, October 1999 (Conducted July – Sept., 1999)

THE HENRY J. KAISER FAMILY FOUNDATION

Physician Barriers: Underestimation



- Patient and physician perception of pain (chronic non-cancer pain) in 12 academic medical centers
- Physicians underestimated pain in 33% of non-blacks as compared to 47% of blacks ($p<0.005$)

Staton, LJ, et al. JNMA. May;99(5):532-8.

System Barriers: Pharmacies

TABLE 2. ADEQUACY OF OPIOID SUPPLIES AT 347 PHARMACIES, ACCORDING TO THE RACIAL AND ETHNIC COMPOSITION OF THE NEIGHBORHOOD.

RACIAL AND ETHNIC COMPOSITION OF NEIGHBORHOOD	TOTAL PHARMACIES	PHARMACIES WITH ADEQUATE OPIOIDS	P VALUE FOR TREND
	no.	%	
White			<0.001
0–39%	110	25	
40–69%	72	56	
70–79%	72	50	
≥80%	93	72	
Black			<0.001
<10%	173	61	
10–19%	53	45	
20–39%	57	42	
≥40%	64	30	
Hispanic			0.002
<10%	89	56	
10–19%	108	54	
20–39%	70	50	
≥40%	80	34	
Asian			0.01
<10%	241	54	
10–19%	74	42	
20–39%	16	44	
≥40%	16	25	

Morrison, RS, et al. N Engl J Med.. 2000 Apr 6;342(14):1023-6.

System Barriers: Pharmacies

- 54% reported little demand
- 44% concern about disposal
- 20% fear of DEA investigations
- 19% fear of robbery
- 7% problems with reimbursement

Morrison, RS, et al. N Engl J Med.. 2000 Apr 6;342(14):1023-6.

System Barriers: Pharmacies

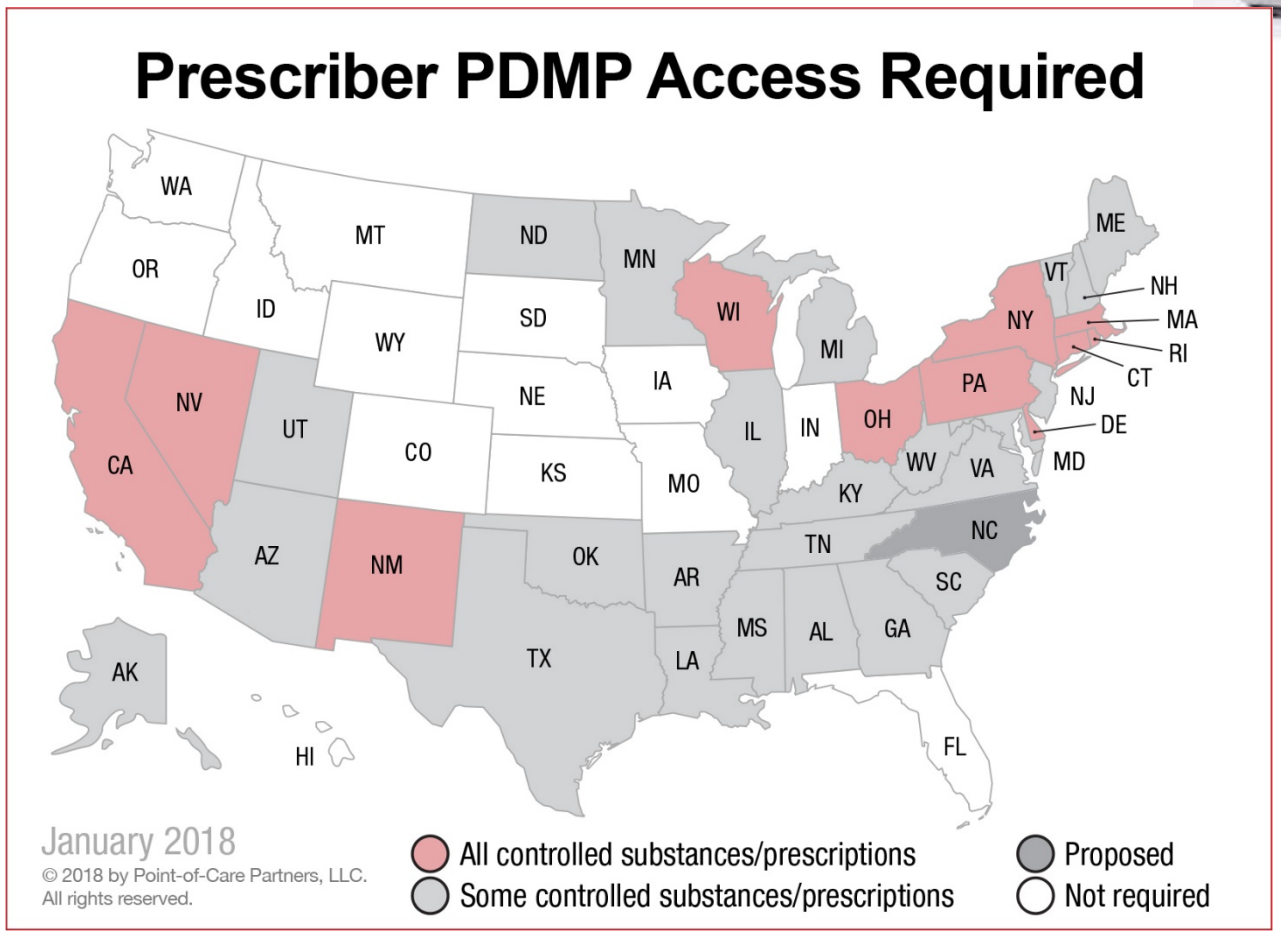
	Income Group*			
	≥ Mean Zip Code Income		< Mean Zip Code Income	
Predictor	Odds Ratio	95% CI	Odds Ratio	95% CI
White	13.36	(1.09-164.17)	54.42	(6.27-472.02)
Noncorporate	24.92	(3.03-205.18)	3.61	(1.11-11.77)
Median age	.77	(.60-1.00)	1.06	(.99-1.14)
Hospital in the zip code	.63	(.12-3.44)	2.01	(.62-6.52)

Abbreviation: CI, confidence interval.

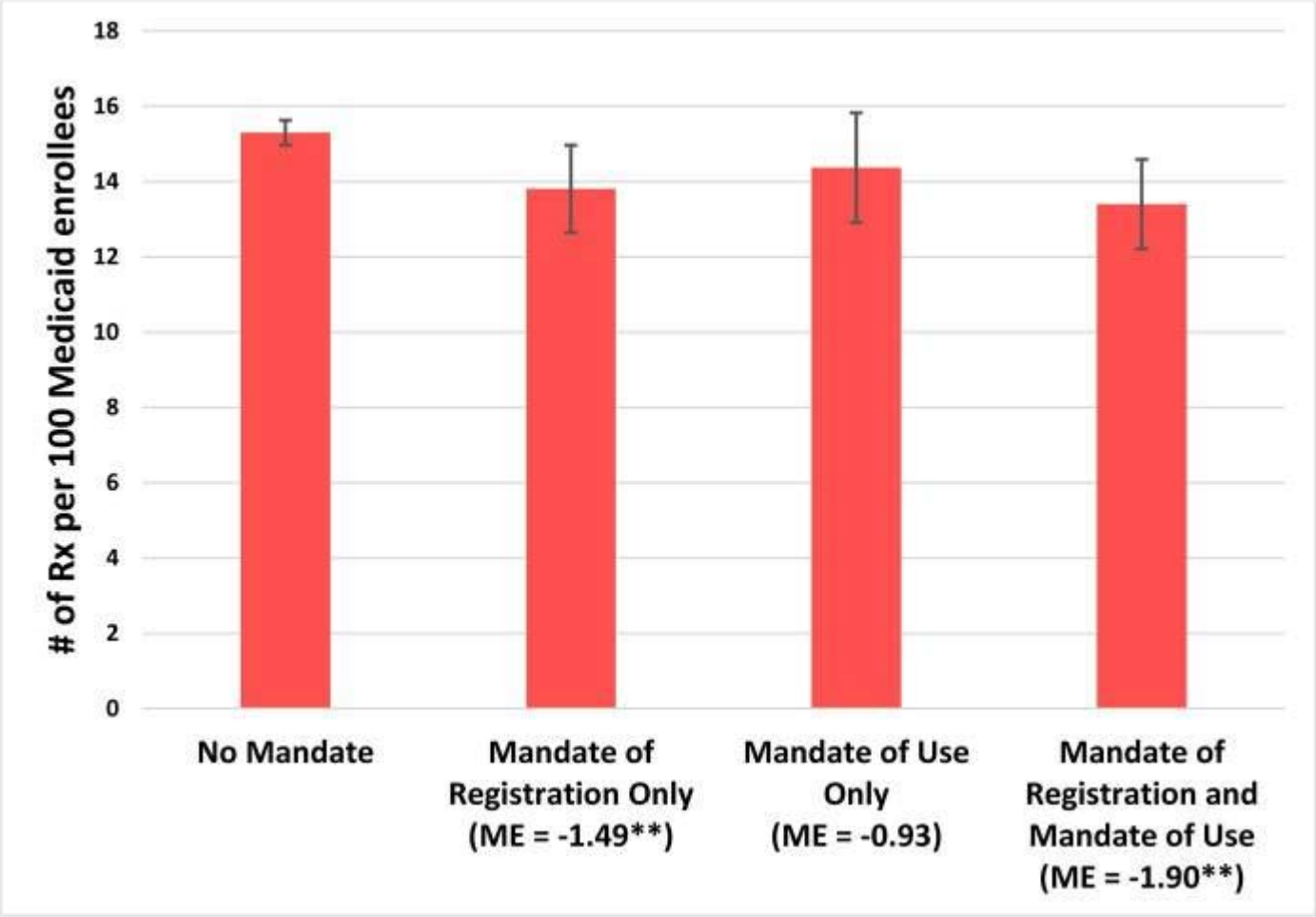
* Pharmacies are divided into 2 income groups: those in zip codes with a median income that is greater than or equal to the average median zip code income and those with a median income that is less than the average median zip code income.

Green, CR, et al. J Pain. 2005 Oct;6(10):689-99

System Barriers: PDMPs

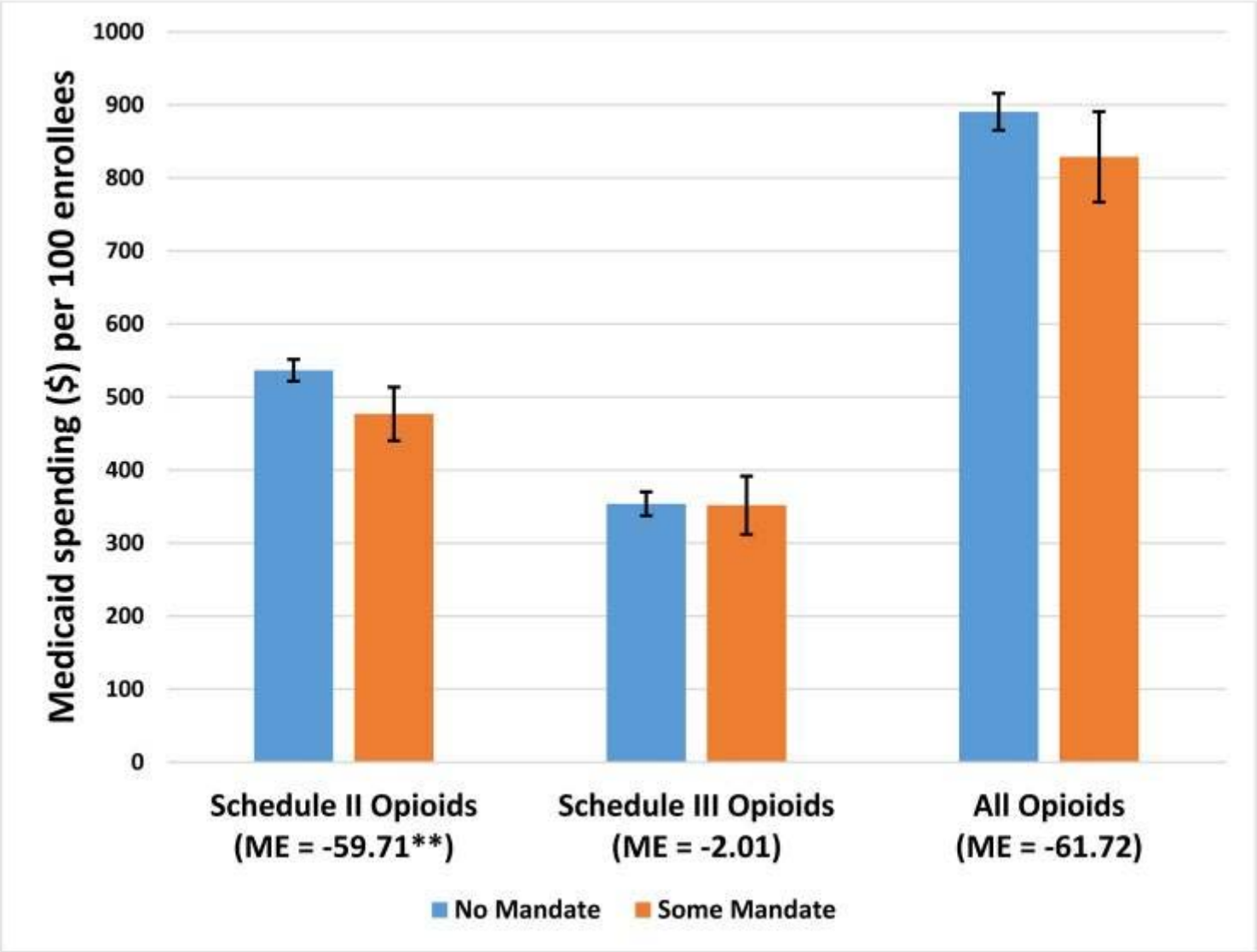


PDMP's: Medicaid Beneficiaries



Wen H., et al. Health Aff. 2017 Apr 1; 36(4): 733–741

PDMP's: Medicaid Beneficiaries



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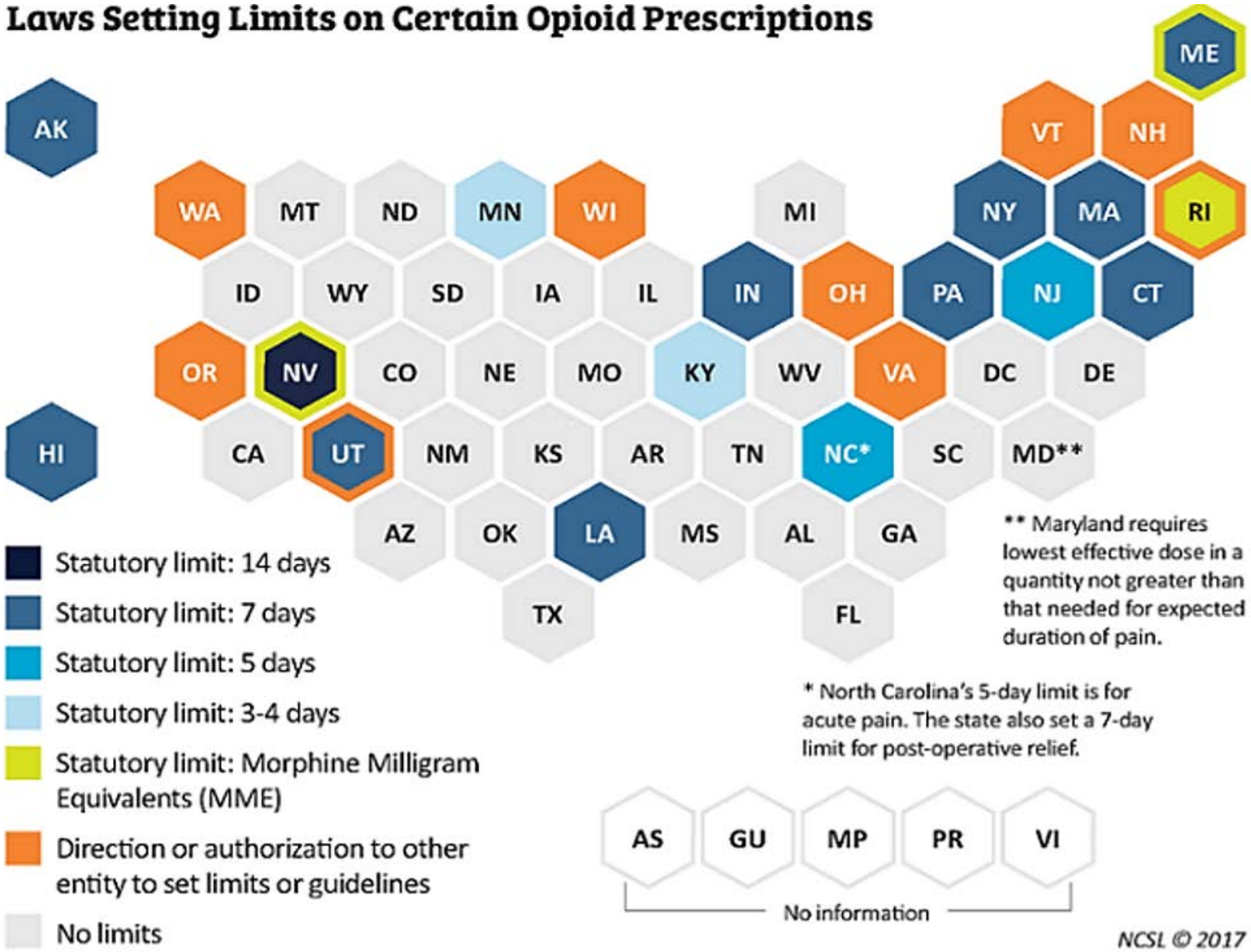
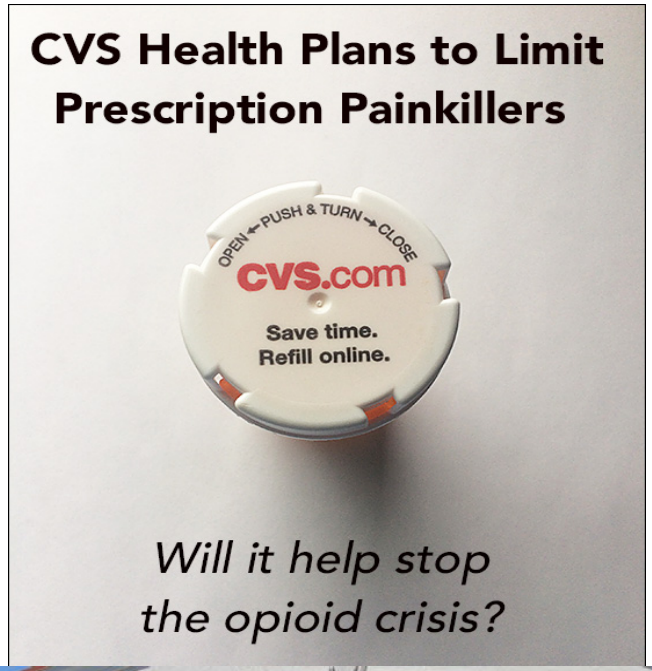
System Barriers





BlueCross BlueShield

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www.nytimes.com

New Opioid Limits Challenge the Most Pain-Prone - The New York Times

Viscous Cycle

Suggested Solutions

- Enhance access
- Address cultural differences
- Care coordination
- Address potential provider bias
- Access to palliative care

"The test of our progress is not whether we add more to the abundance of those who have much. It is whether we provide enough for those who have little."
-- FDR