



# Burden of Joint Cognitive & Physical Impairment in the US, 1998-2016



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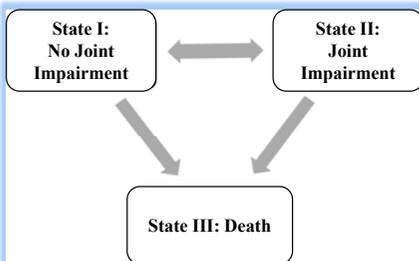
## Objective

**What is the burden of joint cognitive & physical impairment for older Americans?**

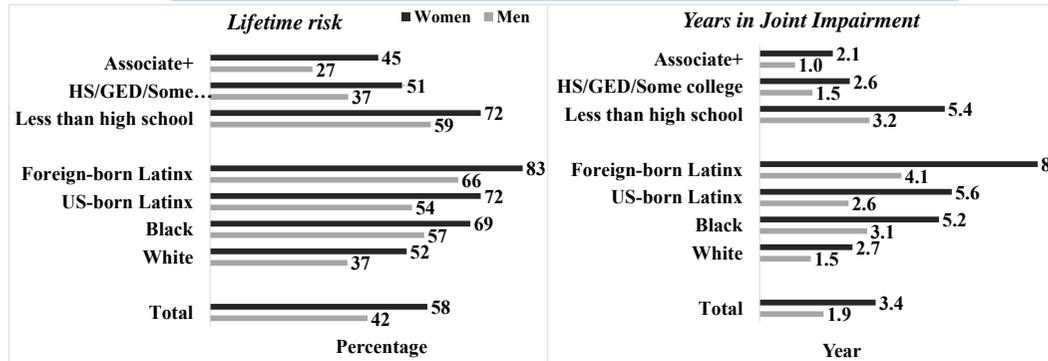
We quantify it using 2 key indicators  
 - Lifetime risk  
 - Years lived (expectancies)

We also investigate how would “eliminating racial/ethnic disparities in educational attainment” mitigate disparities in joint impairment burden?

## Data & Methods



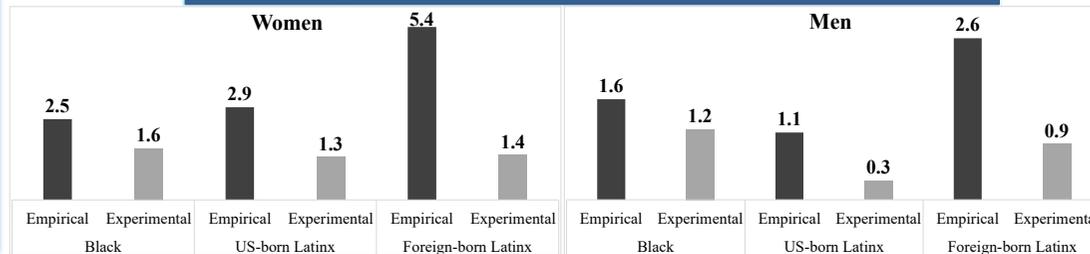
## Results: By Race/Ethnicity, Nativity & Education



## Results: Intersections of Race/Ethnicity, Nativity & Education

Race/Ethnicity	Education	Women		Men	
		Joint impairment years	Lifetime risk	Joint impairment years	Lifetime risk
White	< high school	3.6	61	2.5	51
	HS/GED/Some college	2.5	49	1.3	34
	Associate +	2.1	45	1.0	27
Black	< high school	<b>7.4</b>	<b>79</b>	<b>4.0</b>	<b>66</b>
	HS/GED/Some college	4.0	62	2.9	53
	Associate +	2.8	52	1.5	36
US-born Latinx	< high school	6.8	78	3.8	66
	HS/GED/Some college	3.6	62	1.8	44
	Associate +	3.0	50	0.6	21
Foreign-born Latinx	< high school	<b>9.6</b>	<b>88</b>	<b>5.0</b>	<b>72</b>
	HS/GED/Some college	3.6	63	1.7	42
	Associate +	1.1	31	2.1	43

## Disparities in Expectancies: Empirical vs Experimental



## Discussion & Conclusion

- We provide a novel insight into the joint cognitive and physical impairment burden and evidence of dramatic disparities in the older US population.
- Minority and lowest educated, especially those with intersecting disadvantages, are substantially hard hit by joint impairment.
- Eliminating educational differences considerably reduce racial disparities in joint-impairment, especially for Latinx.
- Important to develop programs & services that effectively address the needs of the older minority and lower educated as well as their caregivers due to the considerable strain of joint impairment caregiving.
- We use highly preferred incidence-based multistate model based on high quality longitudinal data.

## Future Directions

Potential queries to address in the further research-

1. What are the mechanisms behind the disparities
2. Why do the effects of increasing education differ across racial subgroups?
3. What is the forecast for joint-impairment?