

# Evaluating a Course on Implicit Bias in the Clinical and Learning Environment: Provider Bias-awareness, Patient-centeredness, and Reflections

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## Statement Honoring the Land on which the University of Washington Stands

UW Medicine acknowledges the land we occupy today as the traditional home of the Tulalip, Muckleshoot, Duwamish and Suquamish tribal nations. Without them we would not have access to this healing, working, teaching and learning environment. We humbly take the opportunity to thank the original caretakers of this land who are still here.



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- > Funded by the National Center for Health Workforce Analysis (NCHWA), Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services (HHS) under cooperative agreement #U81HP32114. PI, Bianca Frogner
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# Context

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**Structural racism:** The macro-level systems, social forces, institutions, ideologies, and processes that interact with one another to generate and reinforce inequities among racial and ethnic groups (Powell, 2008)

# Implicit Bias: Definition

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“attitudes or stereotypes that affect our understanding, decision making, and behavior, without our even realizing it”

*“Implicit bias in the courtroom”*, UCLA Law Review (2012) by Jerry Kang, et al.



# Course Development 2017: Implicit Bias in the Clinical and Learning Environment

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- > A team at the UW Medicine Center for Health Equity, Diversity, and Inclusion (CEDI) developed a brief online course: LO: for clinical teaching faculty to:
  - Increase awareness of implicit bias
  - Understand how bias manifests in patient care and teaching
  - Learn ways to mitigate bias in teaching and clinical care
  
- > Considerations: must be brief, develop flow from history of racism -> social determinants -> implicit bias -> how to manage/mitigate bias, teaching, practice, individual, organizational

# Evaluate Course with National Sample

HRSA U81 HP32114, PI: Frogner

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**Sample:** Primary care providers + ED, academic centers

## **Research Questions:**

1. Does completing the course, *Implicit Bias in the Clinical and Learning Environment*, increase bias awareness, improve patient centered communication and stimulate reflection on teaching and practice?
  
2. Is the strength of provider implicit and explicit race and gender bias and other provider characteristics associated with **bias awareness, patient centered communication and reflection on teaching and practice?**

## Results: Sample Characteristics (N=114)

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- > Data collection complete: December 31, 2019
- > 57% MD, 21% NP/PA, and 23% other
- > 70% female
- > 73% White, 11% Black, 9% Asian, 7% other
- > Age: 34% (35-39), 26% (40-49), 23% (50-59), 17% (60+)
- > 73% academic healthcare system, 19% community health system, 8% other
- > Region: 40% South, 20% MW, 23% NE, 17% W
- > Mean: years in practice= 18.6, current position M=8.4, patients/week M=37.5
- > 67% (CE) on diverse populations, 45.0% CE gender equity, past 12 months



# Results: Implicit and Explicit Bias (N=114)

<b>Implicit and Explicit Measures (a)</b>	<b>M</b>	<b>SD</b>	<b>P (b)</b>	<b>Cohen's <i>d</i> (c)</b>
Implicit Race	0.29	0.44	<0.001	0.66
Implicit Gender	0.38	0.33	<0.001	1.15
Explicit Race	0.02	0.75	0.698	0.03
Explicit Career	0.64	0.98	<0.001	0.65
Explicit Family	-0.85	1.01	<0.001	0.84
Feeling thermometer difference			0.003	
Black People	7.40	1.75		
White People	7.09	1.74		

- (a) For implicit and explicit measures, a positive score favors White on Race IAT, male and career on the Gender IAT, and male with career on explicit measure, a negative score associates female with family on the explicit measure
- (b) T-test of significance [value=0]
- (c) Cohen *d* values are interpreted as follows:  $d = 0.2$ , small effect;  $d = 0.5$ , medium effect; and  $d = 0.80$ , large effect, Cohen, 1988
- (d) Feeling thermometer: My feelings toward White people are; My Feelings toward Black people are: scale 0 (extremely cold) -10 (extremely warm)

# Outcome: Bias Awareness

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Does taking the course *Implicit Bias in the Clinical and Learning Environment* change bias awareness?

Bias awareness: personal, societal, in-healthcare



## Results (N=114)

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- > A brief online course increased bias awareness among healthcare providers who teach or mentor ( $p=0.03$ )
- > Implicit, explicit attitudes, provider, practice characteristics not associated with increase in bias awareness
- > **Conclusion:** course is universally useful to increase bias awareness

# Outcome Measure: Patient-Centered Communication

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Does taking the course  
*Implicit Bias in the Clinical  
and Learning Environment*  
change patient-centered  
communication?



# Patient-Centeredness

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- > Two case vignettes role play, diabetes not controlled, heart failure
- > Analysis: empathy, partnering, express concern, reassurance

## Results: Patient Centered Communication (N=106)

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- > Overall, we found a significant positive, change in patient-centered communication after completing the course ( $p=0.004$ )
- > Data analysis in progress: improvement in PC communication is not associated with implicit/explicit bias
- > Provider <50 years ( $p= 0.04$ ) and being MD or NP ( $p=0.001$ ) greater improvement

# Outcome Measure: Reflection

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1. Reflecting on this course, how may the content of the course impact your teaching/mentoring?

2. Reflecting on this course, how may the content of the course impact your clinical practice?



# Results: Reflection Apply to Teaching? (N=106)

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0= no (N=2)

1= I already do this (N=13)

“It was a nice reminder of some constructs that I have heard before.”

2= moderate response (n=58)

“It helped me to reflect on any bias I might have but thinking that I didn’t.”

3= strong detailed response (N=33)

“I had never heard of the concept of aversive racism and unfortunately fear that I may have some degree of this. I like to think of myself as someone with egalitarian views and now fear that I may fall into this category to some extent. I also did not realize that stereotypes can be contagious in both negative and positive ways. This inspires me to continuously work to be a good role model for my students and residents.”



# Results: Reflection Apply to Practice? (N=104)

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0= No (N=13)

1= I already do this (N=7)

“It was mostly a review, but a good reminder to be intentional about considering biases in treatment options and patient interactions.”

2= moderate response (N=67)

“I will be more cognizant of how lack of diversity in the workforce impacts the care of diverse patient populations.”

3= strong detailed response (N=17)

“Continue to approach each patient as a whole person-- someone whose need for healthcare guidance and treatment is only one part of their life experience. Be particularly attentive to my stress levels, rushed days, times of ambiguous clinical situations to avoid giving bias/inequitable care.”

# Limitations

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- > Simulated case vignettes do not represent real world care
- > Increase in bias awareness does not necessarily lead to behavior change
- > Behaviors reflected were aspirational
- > Sample bias

# Conclusions

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Demonstrates that healthcare providers can benefit from brief course content regardless of the degree of implicit and explicit bias, other characteristics

It is not known whether aspirational actions will result in actual behavior change

Future research is needed to determine “lasting effects”

# Acknowledgement

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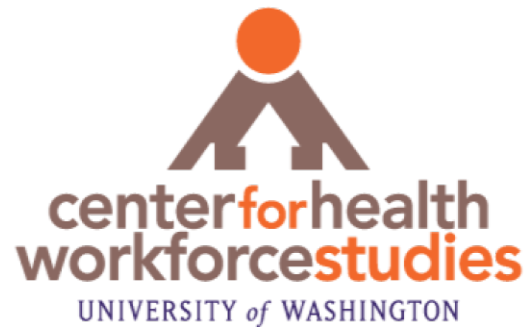
## Course Development:

Leo Morales, Dean Ramsey, Wendy Barrington, Marj Wenrich, Lynne Robins, Frederica Overstreet, Michael Ryan, Developer Team at UW SOMALT, WWAMI Deans

Course available to all:

**<https://catalyst.uw.edu/webq/survey/dolson/394766>**

Thank you!



Questions & Comments