

LEADERSHIP DEVELOPMENT: Unmasking Bias in Healthcare



President, Association of Women in Rheumatology

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Secretary and Co-Treasurer, Association of Women in Rheuma

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DISCLOSURES



GRACE WRIGHT, MD, PhD, FACR

President, Association of Women in Rheumatology

Consulting Fee: AbbVie, Amgen, AstraZeneca, Bristol-Myers quibb, Eli Lilly, GSK, Janssen, Novartis, Pfizer, Sanofi Genzyme, Schipher Medici UCB

Speakers Bureau: AbbVie, Amgen, AstraZeneca, Bristol-Myels Squibb, Eli Lilly, Novartis, Sanofi Genzyme, UCB

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Consulting Fee: AbbVie, Bristol-Myers Squibb, Eli Lilly, Janssen, Novartis, Sanofi Genzyme, Scipher Medicine, UCB, LabCorp, Horizon

Speakers: Bureau: AbbVie, Amgen, Exagen, Pfizer, UCB, Horizon

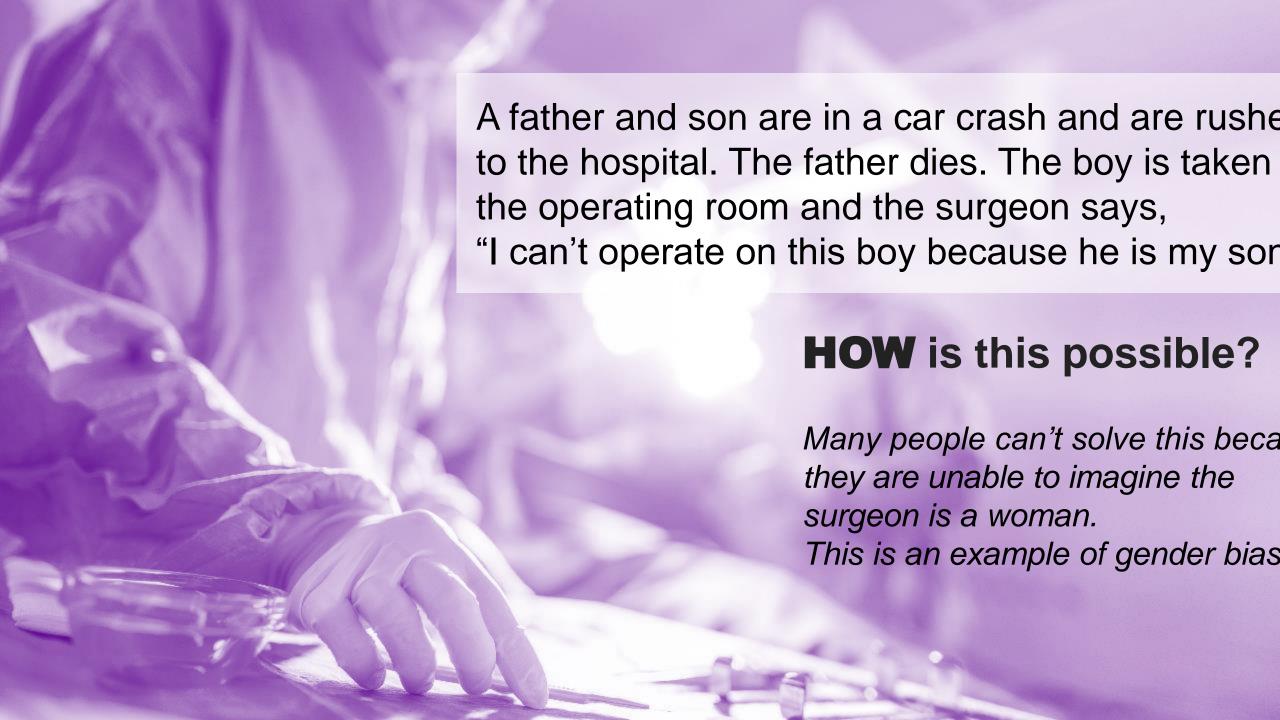
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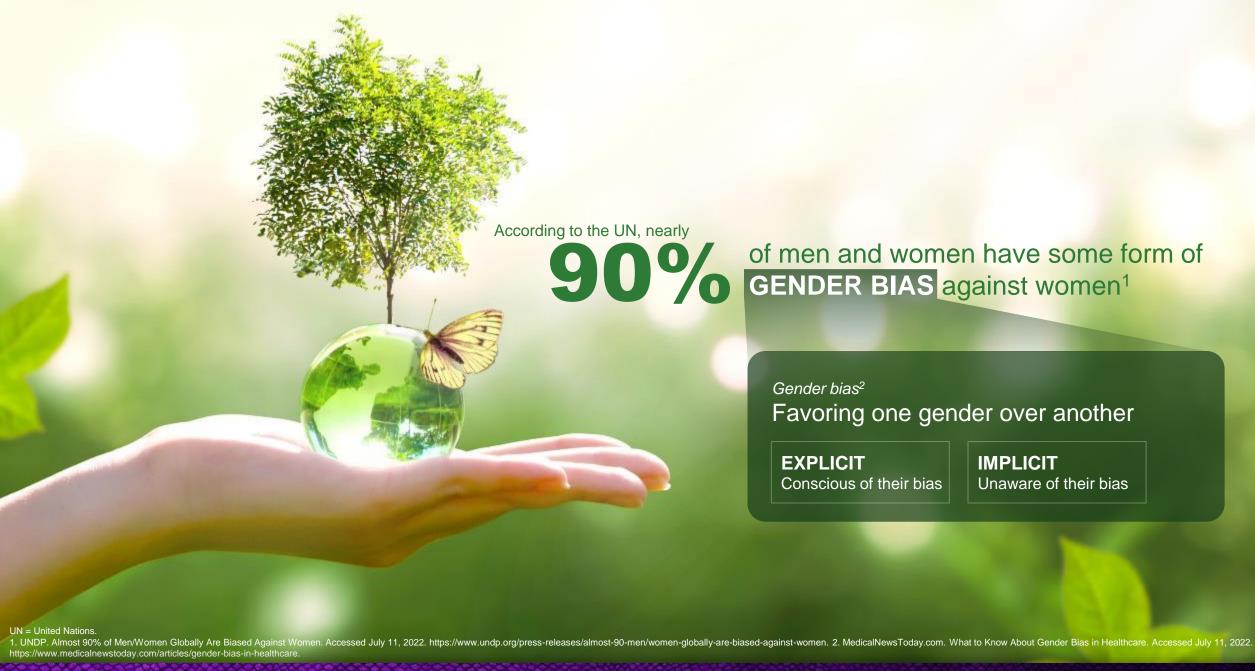
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Speakers Bureau: AstraZeneca, Aurinia, Alexion, GSK, Janssen











The Autocomplete Truth About Men



men should

men should be masculine men should be strong men should always pray men should be what they seem men should have a big nose men should wear pink



men should not wear skinny jeans men should not cry



men should not

men should not show emotion men should not take paternity leave men should not have long hair men should not divorce



men need

men need women men need space men need to be masculine men need to be tough men need to provide men need more calories than women

Actual captures from Google Scholar and Yahoo!



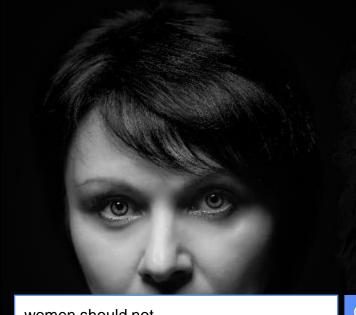


The Autocomplete Truth About Women



women should

women should stay in the kitchen women should be housewives women should be mothers women should go out and work women should be allowed in combat



women should not

women should not be in combat women should not be in politics women should not vote women should not be leaders women should not breastfeed in public women should not be paid equally



women need

women need saving women need a man women need protection women need attention women need to belong women need equal pay









WOMEN FACE INVISIBLE BARRIERS TO EQUALITY¹

BARRIERS
DO YOU FACE?

1. UNDP. Almost 90% of Men/Women Globally Are Biased Against Women. Accessed July 11, 2022. https://www.undp.org/press-releases/almost-90-men/women-globally-are-biased-against-women.

Conceptual Framework for Gender Bias in Healthcare^{1,2}

Gender Bias Scale for Women Leaders **DEVALUATION** MALE **DISPROPORTIONATE INSUFFICIENT** HOSTILITY **ACQUIESCENCE PRIVILEGE CONTRAINTS SUPPORT** Constrained Lack of Queen bee Glass cliff **Exclusion** Self-silencing communication acknowledgment syndrome Constrained Lack of Workplace Self-limited Male culture Salary inequity career choices mentoring harassment aspirations Unequal Lack of Two-person career structure standards sponsorship

1. Stephenson AL, et al. Adv Health Care Management. 2021;20. doi:10.1108/S1474-82312021000020004. 2. Diehl AB, et al. Human Resource Development Quarterly. 2020;31:249-280.

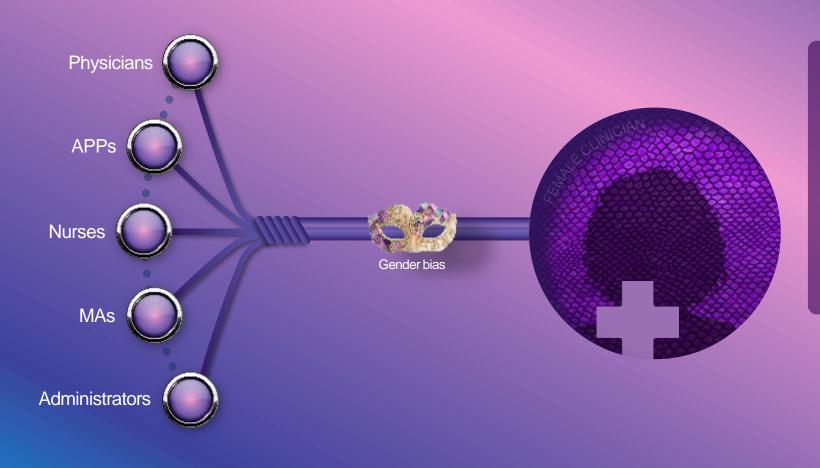




CONSEQUENCES OF GENDER BIAS TO THE PROVIDER



Clinical Practice



In a survey of senior women physicians (n=155)*1



More than 3 out of 4 experienced **Gender discrimination**



And approximately half experienced
Sexual harassment
Professional isolation
Salary inequity

ADDITIONAL GENDER BIAS CONSEQUENCES

Abilities underestimated²

Assigned mundane tasks²

Feeling excluded/marginalized²

Unequal promotion opportunities³

Pregnancy and childcare-related bias²

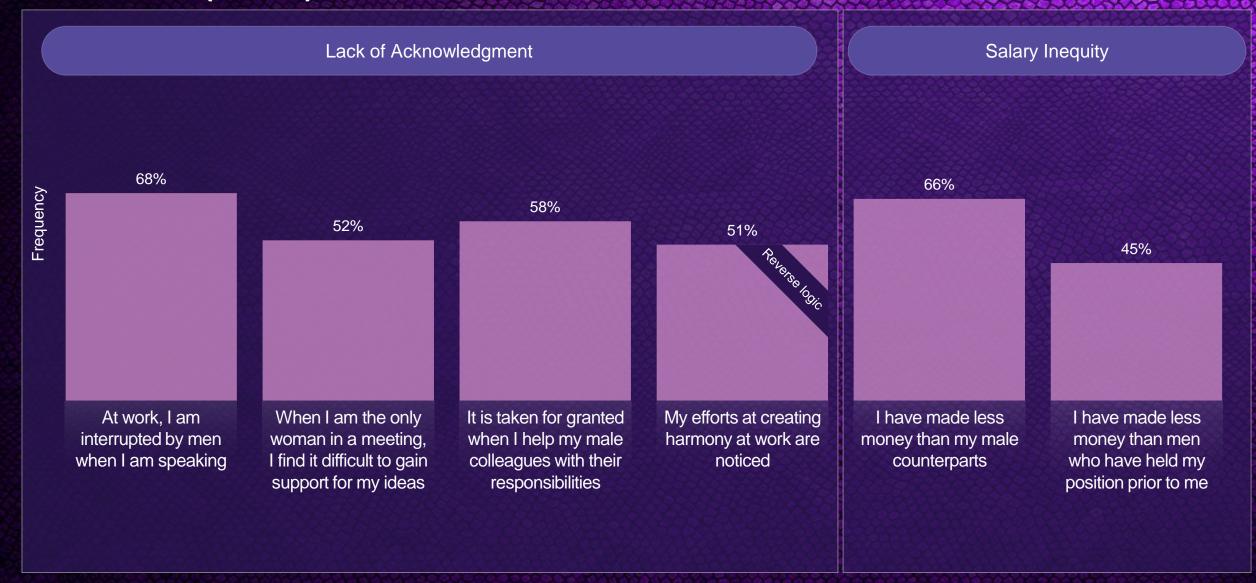
GENDER BIAS
IN THE HEALTHCARE ECOSYSTEM

APPs = advanced practice provider; MA = medical assistant. *Respondent ages ranged from 60-87 years.

I. Templeton K, et al. J Women's Health. 2020;29(7):980-988. 2. AMA. Gender Bias in Medicine. Accessed July 11, 2022. https://www.ama-assn.org/system/files/2019-11/i19-gender-bias.pdf. 3. Stephenson AL, et al. Adv Health Care Management. 2021;20. doi:10.1108/S1474-823120210000020004.



Devaluation (n=293)*1



*Participants included female physicians, physician leaders, physician faculty, and PhD-level researchers.

1. Stephenson AL, et al. Adv Health Care Management. 2021;20. doi:10.1108/S1474-823120210000020004.



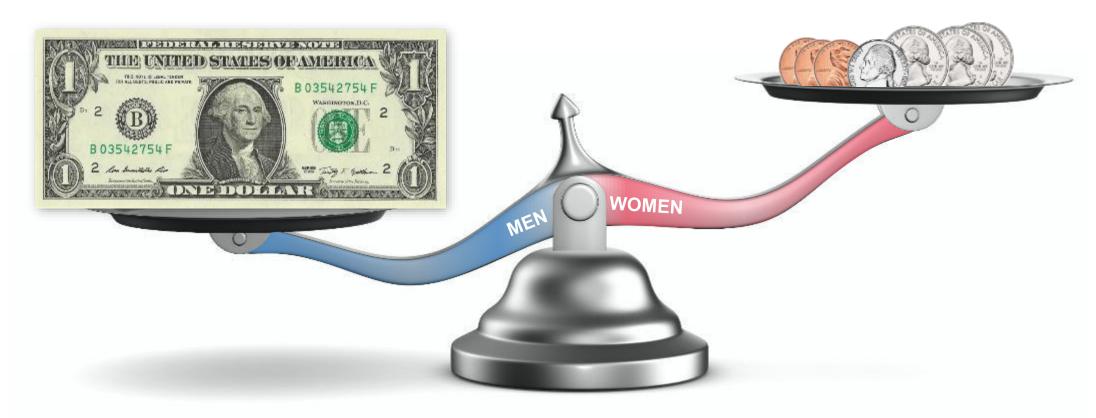
Polling Question

On average, how much does a female rheumatologist earn for every \$1 earned by a male rheumatologist?

- A. 75 cents
- B. 83 cents
- C. 92 cents
- D. 98 cents
- E. 1 dollar



Difference in Compensation* by Gender in Rheumatology¹⁻⁴



*Mean Compensation Calculated From 2016, 2017, 2018, And 2020 Annual Compensation Reports (The Compensation Reported Is Based On Full-time Positions).

- 1. Medscape. Https://Www.Medscape.Com/Slideshow/2020-compensation-rheumatologist-6012748#4. Accessed May 10, 2021.
- 2. Medscape. Https://Www.Medscape.Com/Slideshow/2018-compensation-rheumatologist-6009674. Accessed May 10, 2021.
- 3. Medscape. Https://Www.Medscape.Com/Slideshow/Compensation-2017-rheumatology-6008588. Accessed May 10, 2021.
- 4. Medscape. Https://Www.Medscape.Com/Features/Slideshow/Compensation/2016/Rheumatology. Accessed May 10, 2021.
- 5. Wright G. *J Rheumatol.* 2021; Doi:10.3899/Jrheum.210082.

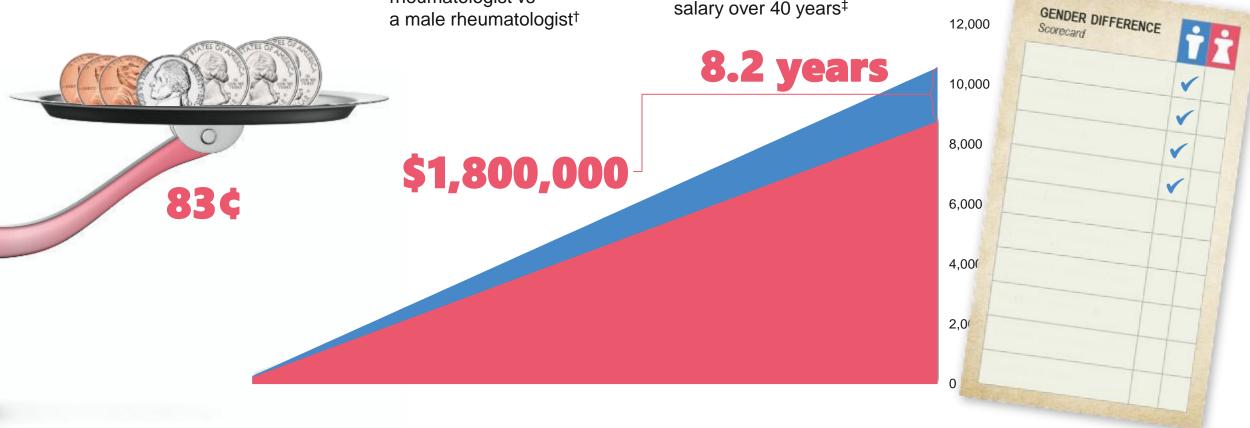


Lifelong Earnings Impact of Gender Compensation Difference*1-5

What a female rheumatologist makes for every dollar a male rheumatologist makes

The difference in mean salary over 40 years (lifelong earnings) for a female rheumatologist vs a male rheumatologist[†]

Additional years a female rheumatologist has to work to make up the difference in mean salary over 40 years[‡]



^{*}Mean compensation calculated from 2016, 2017, 2018, and 2020 annual compensation reports. †Mean compensation x 40 years used to estimate lifelong earnings4. ‡Difference over 40 years / female rheumatologist mean salary.

^{5.} Wright G. *J rheumatol.* 2021; doi:10.3899/jrheum.210082.

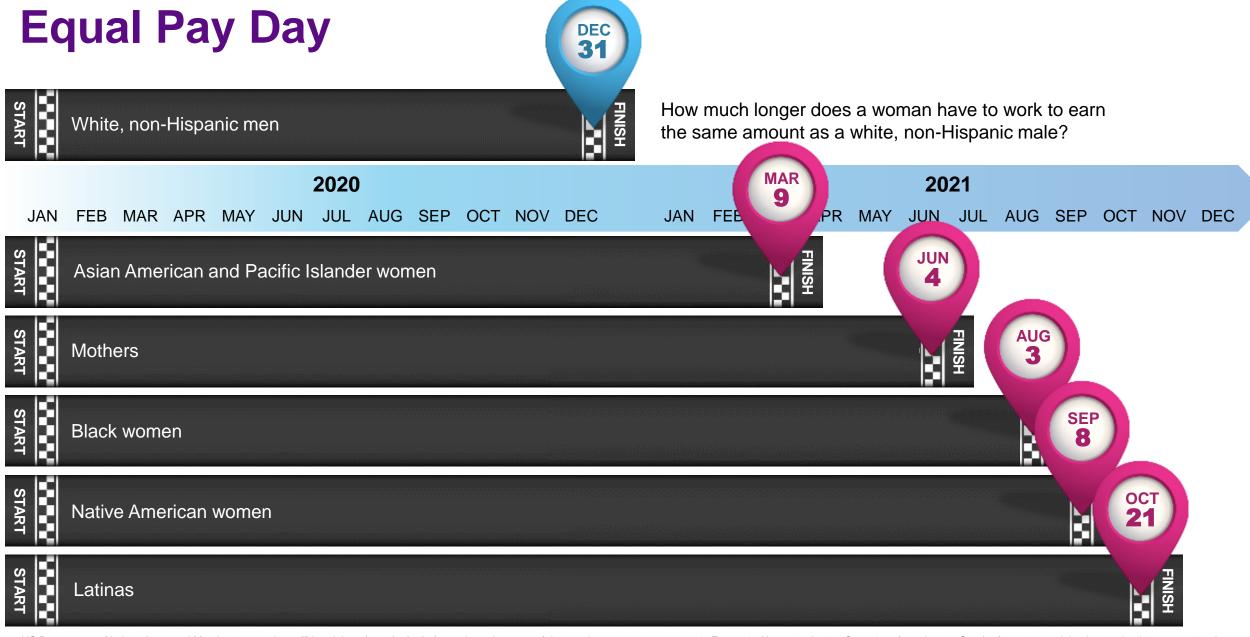


^{1.} Medscape. Https://www.Medscape.Com/slideshow/2020-compensation-rheumatologist-6012748#4. Accessed may 10, 2021.

^{2.} Medscape. Https://www.Medscape.Com/slideshow/2018-compensation-rheumatologist-6009674. Accessed may 10, 2021.

^{3.} Medscape. Https://www.Medscape.Com/slideshow/compensation-2017-rheumatology-6008588. Accessed may 10, 2021.

^{4.} Medscape. Https://www.Medscape.Com/features/slideshow/compensation/2016/rheumatology. Accessed may 10, 2021.



^{1.} US Department of Labor. Accessed March 14, 2022. https://blog.dol.gov/2021/03/19/5-facts-about-the-state-of-the-gender-pay-gap#:~:text=5%20Facts%20About%20the%20State%20of%20the%20Gender,force%20participation%20back%20more%20than%2030%20years.%20.

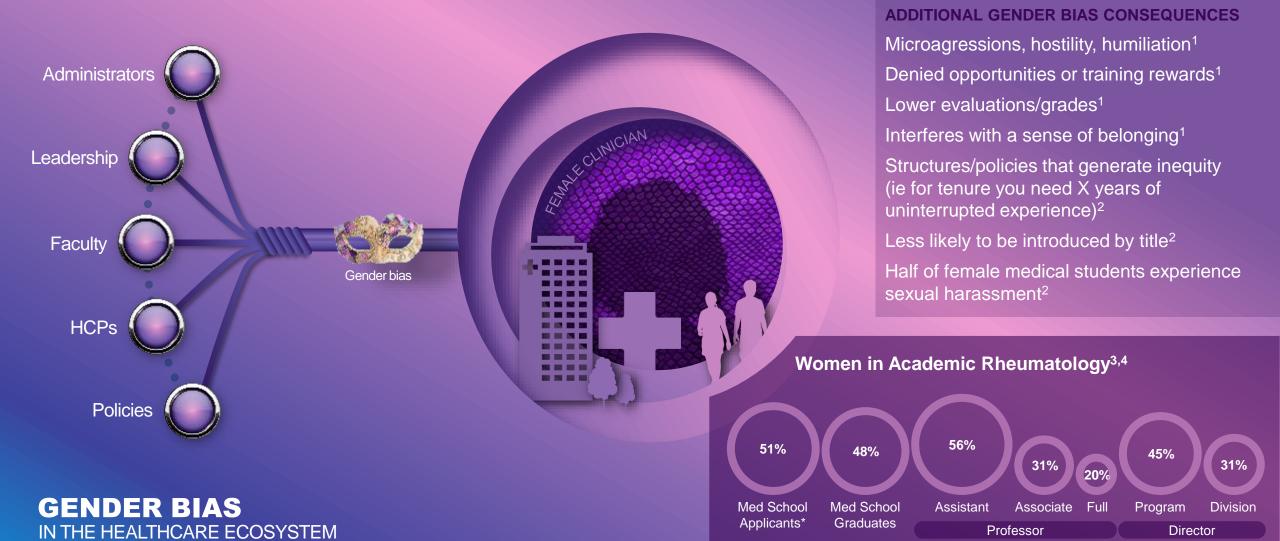




CONSEQUENCES OF GENDER BIAS TO PROFESSIONAL ADVANCEMENT



Institutions/Academia

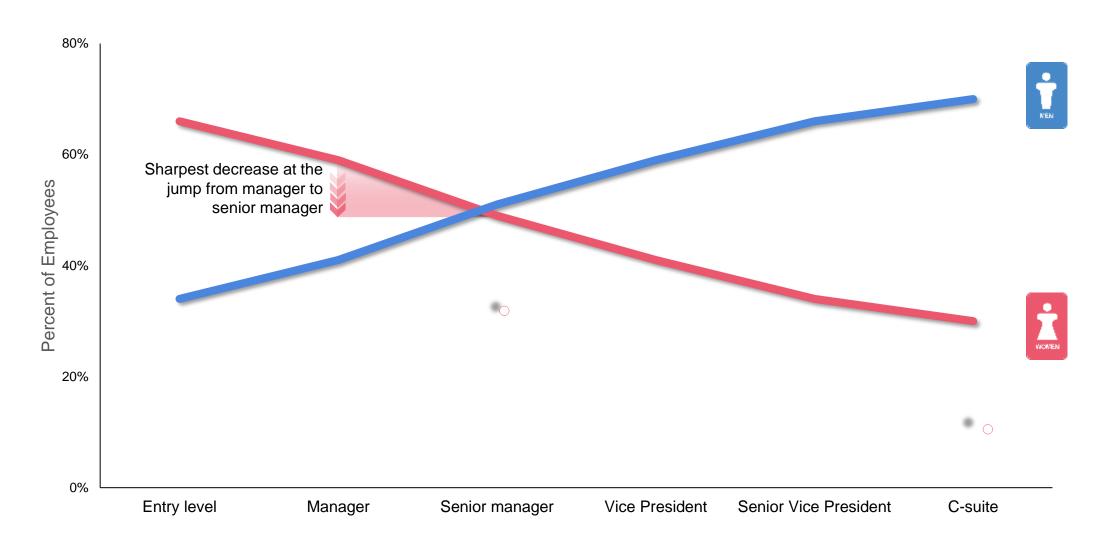


^{*}Not specific to academic rheumatology

1. Roberts LW. Acad Med. 2020;95(5):661-664. 2. AMA. Gender Bias in Medicine. Accessed July 11, 2022. https://www.ama-assn.org/system/files/2019-11/i19-gender-bias.pdf. 3. AAMC. The State of Women in Academic Medicine. Accessed July 11, 2022. https://www.aamc.org/data-reports/faculty-institutions/report/state-women-academic-medicine. 4. Jorge A. et al. Arthritis Rheumatol. 2021;73(1):168-172



Gender Inequities Across the Healthcare Pipeline



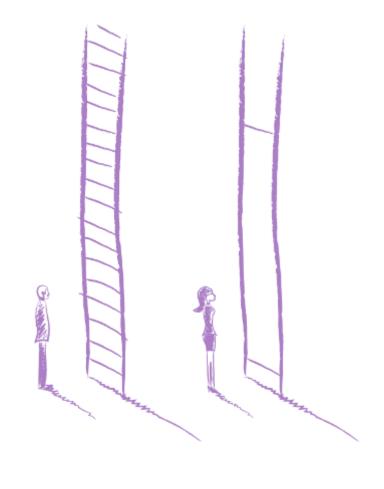
^{1.} McKinsey & Company, https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/women-in-healthcare-moving-from-the-front-lines-to-the-top-rung. Accessed May 12, 2021.



Inequality

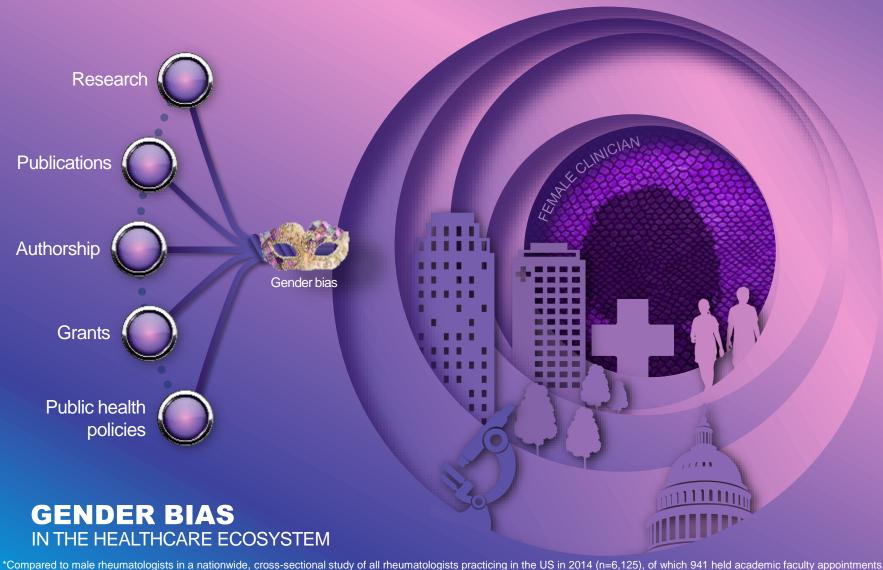
"An increasing number of companies are seeing the value of having more women in leadership, and they're proving that they can make progress on gender diversity. This is an important step in the right direction."

"Still, women continue to be underrepresented at every level."





Research/Public Health



Female rheumatologists have*1



HALF as many publications



HALF as many grants

than male rheumatologists

ADDITIONAL GENDER BIAS CONSEQUENCES

Research is dependent on mentorship and grants are dependent on prior grants²

Less likely to be a first author when their principal investigator is a male²

Gender blindness in research (women were not included in most clinical trials until the 1990s)^{2,3}

Most studies only involve male lab animals^{4,5}

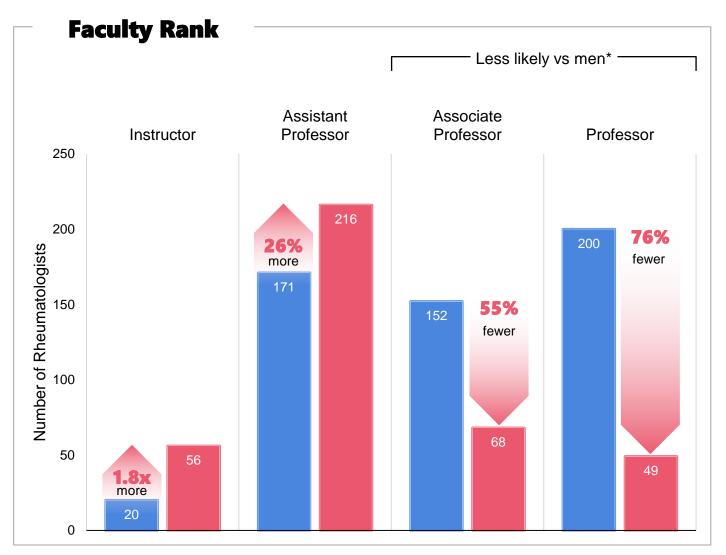
1. Jorge A, et al. Arthritis Rheumatol. 2021;73(1):168-172. 2. AMA. Gender bias in medicine. July 11, 2022. https://www.ama-assn.org/system/lies/2019-11/i19-gender-bias.pdf. 3. Healthline. Gender bias in healthcare is very real — and sometimes fatal. Accessed July 11, 2022. https://www.healthline.com/health/gender-bias-healthcare. 4. Cedars-final.com. Examining gender bias in medical care. Accessed July 11, 2022. https://www.cedars-sinai.edu/research/news/cedars-science/2019/examining-gender-bias-in-medical-care.html. 5. CNN, Lab rats are overwhelmingly male.

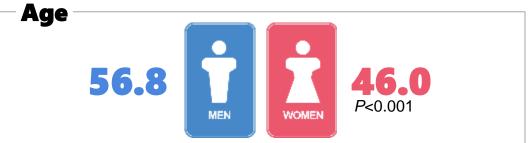
and that's a problem. July 11, 2022. https://www.com/2021/05/14/health/sex-biological-variable-research-science-drugs-scn/index.html.

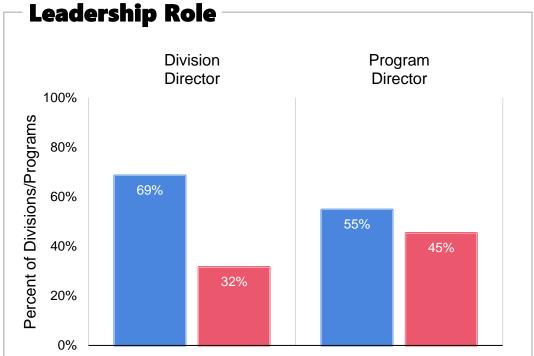


Gender Disparities in Academic Rheumatology









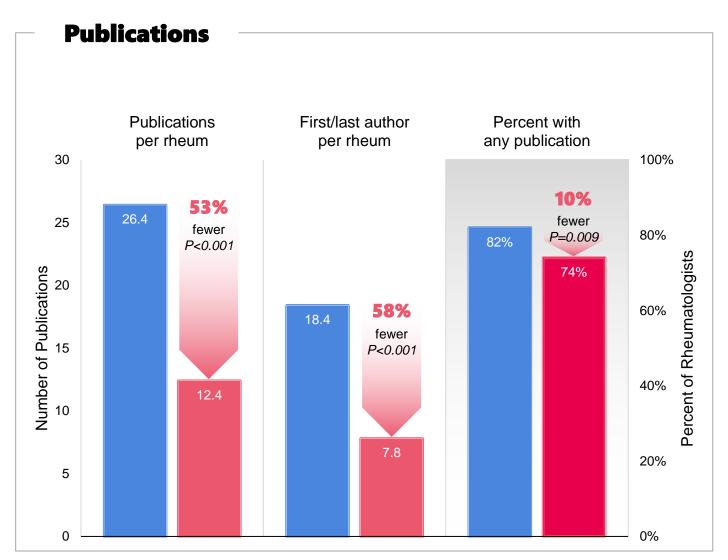
Nationwide, Cross-sectional Study Of All Rheumatologists Practicing In The US In 2014 (N=6,125), Of Which 941 Held Academic Faculty Appointments. *Unadjusted OR 0.52 [95% Ci 0.45–0.60]; Adjusted OR 0.78 [95% Ci 0.62–0.99]).

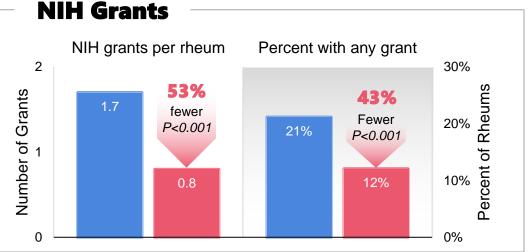
1. Jorge A, Et Al. Arthritis Rheumatol. 2021;73(1):168-172.

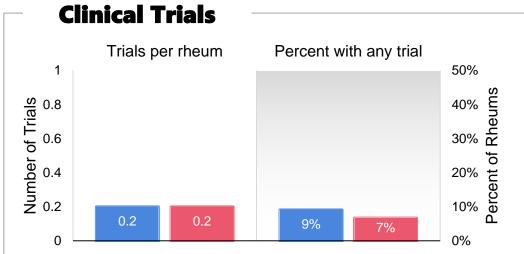


Gender Disparities in Academic Rheumatology





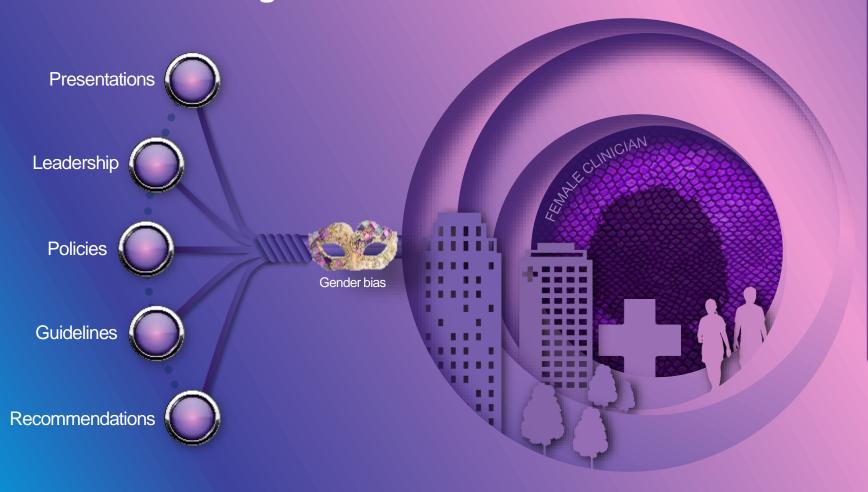




Nationwide, Cross-sectional Study Of All Rheumatologists Practicing In The US In 2014 (N=6,125), Of Which 941 Held Academic Faculty Appointments. 1. Jorge A, Et Al. *Arthritis Rheumatol.* 2021;73(1):168-172.



Professional Organizations/Guidelines



GENDER BIAS IN THE HEALTHCARE ECOSYSTEM

Proportion of Female Speakers at ACR¹ (by presentation type, mean 2017-2018) AHRP general 65% Study group 50% **Abstract** 49% 41% Pre-meeting ACR general 39% Meet the professor 34% Workshop 29% 46% of active

ADDITIONAL GENDER BIAS CONSEQUENCES

rheumatologists were female (2017)²

Underrepresentation of female mentors/role models in leadership positions³

Fewer female first authors on rheumatologic guidelines and recommendations⁴

ACR = American College of Rheumatology; AHRP = Association of Rheumatology Health Professionals.

1. Monga K, Liew J. Ann Rheum Dis. 2020;0:1. doi:10.1136/annrheumdis-2020-217673. 2. AAMC. Active Physicians by Sex and Specialty, 2019. Accessed July 11, 2022. https://www.aamc.org/data-reports/workforce/interactive-data/active-physicians-sex-and-specialty-2019. 3. Gupta S, Jordan K. Psychology Language Communication. 2022;26(1):18-41. 4. Adami G, et al. Ann Rheum Dis. 2020;79(8):1122-1123.

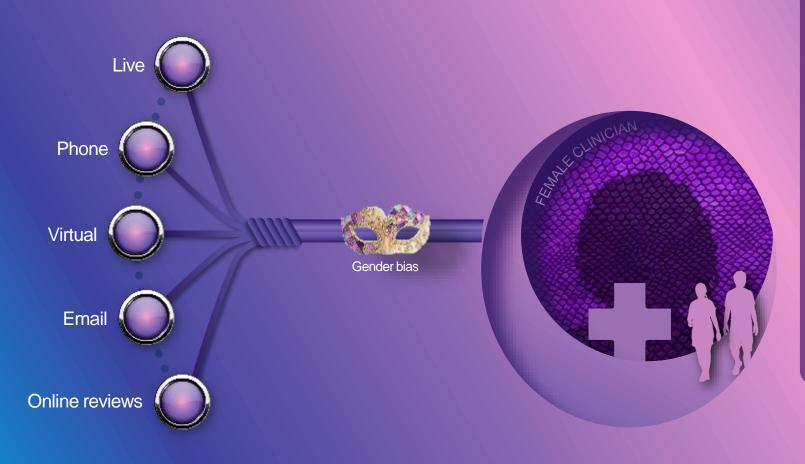




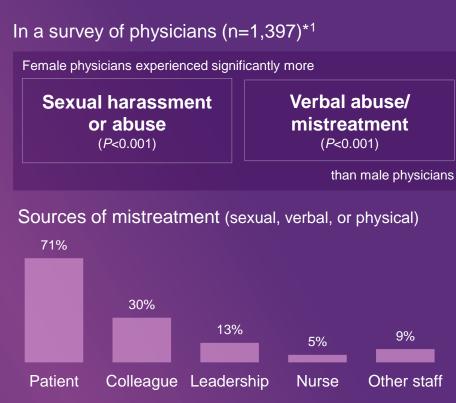
CONSEQUENCES OF GENDER BIAS TO THE PATIENT



Patients



GENDER BIAS
IN THE HEALTHCARE ECOSYSTEM



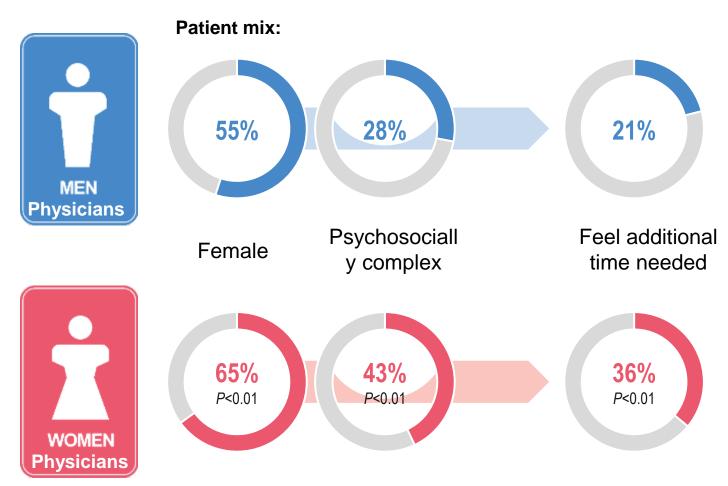
ADDITIONAL GENDER BIAS CONSEQUENCES

Lower patient satisfaction scores²

Less favorable online reviews³

Gender stereotyping (ie mistaken for a nurse)⁴

Significant Differences Exist in the Patient Mix by Gender*1





^{1.} Mcmurray JE, et al. *J gen int med.* 2000;15:372-380.



^{*}Based on a survey of primary care physicians.

Gender Differences in the Patient Visit¹

Patients



Speak more



Disclose more medical information

Make more positive statements



Report more participatory visits

Are more open with female physicians





Are more empathetic



Focus more on psychosocial question-asking and counseling

Are more patient-centered in their communications





1. Butkus R, et al. Ann int med. 2018;168:721-723.cpv



Patients Treated by Female Physicians May Have Better Outcomes¹

JAMA Internal Medicine | Original Investigation

Comparison of Hospital Mortality and Readmission Rates for Medicare Patients Treated by Male vs Female Physicians

Yusuke Tsugawa, MD, MPH, PhD; Anupam B. Jena, MD, PhD; Jose F. Figueroa, MD, MPH; E. John Orav, PhD; Daniel M. Blumenthal, MD, MBA; Ashish K. Jha, MD, MPH

IMPORTANCE Studies have found differences in practice patterns between male and female physicians, with female physicians more likely to adhere to clinical guidelines and evidence-based practice. However, whether patient outcomes differ between male and female physicians is largely unknown.

OBJECTIVE To determine whether mortality and readmission rates differ between patients treated by male or female physicians.

DESIGN, SETTING, AND PARTICIPANTS We analyzed a 20% random sample of Medicare fee-for-service beneficiaries 65 years or older hospitalized with a medical condition and treated by general internists from January 1, 2011, to December 31, 2014. We examined the association between physician sex and 30-day mortality and readmission rates, adjusted for patient and physician characteristics and hospital fixed effects (effectively comparing female and male physicians within the same hospital). As a sensitivity analysis, we examined only physicians focusing on hospital care (hospitalists), among whom patients are plausibly quasi-randomized to physicians based on the physician's specific work schedules. We also investigated whether differences in patient outcomes varied by specific condition or by underlying severity of illness.

- Editorial page 161
- Author Audio Interview
- Supplemental content
- + CME Quiz at jamanetworkcme.com and CME Questions page 296



^{1.} Tsugawa Y, et al. *JAMA int med.* 2017;177:206-213. 2. STAT news. Https://www.Statnews.Com/2016/12/19/patients-female physicians-live-longer/. accessed may 6, 2021.



Patients Treated by Female Physicians May Have Better Outcomes¹

Elderly hospitalized patients treated by female vs male internists



OBJECTIVE To determine whether mortatreated by male or female physicians.

DESIGN, SETTING, AND PARTICIPANTS W

fee-for-service beneficiaries 65 years or of treated by general internists from Januar association between physician sex and 30 patient and physician characteristics and and male physicians within the same host physicians focusing on hospital care (host quasi-randomized to physicians based or investigated whether differences in patient underlying severity of illness.

"The findings not only launch a grenade at the gender pay gap in medicine, they also suggest the methods of female physicians — if replicated broadly — could significantly improve the quality of medical care in the united states."²

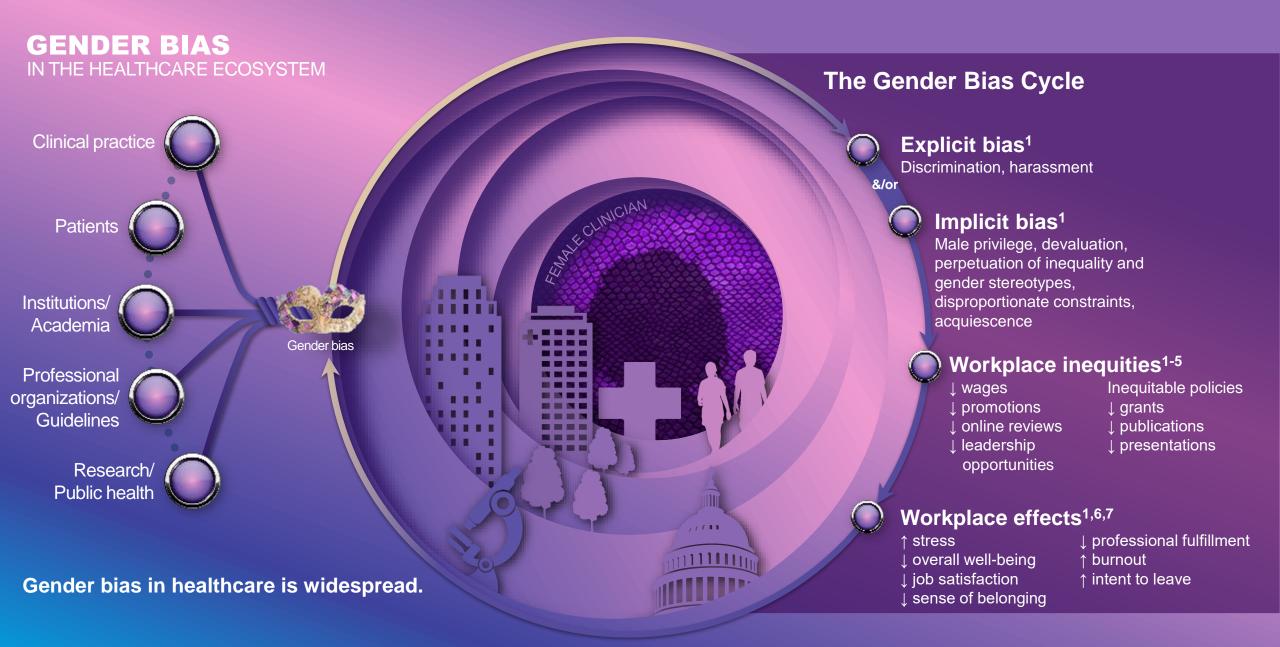


1. Tsugawa Y, et al. JAMA int med. 2017;177:206-213. 2. STAT news. Https://www.Statnews.Com/2016/12/19/patients-female-physicians-live-longer/. accessed may 6, 2021.



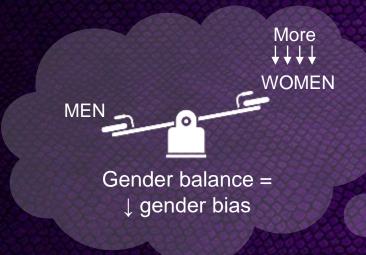
Cinderella Effect: Are Your Contributions Undervalued?





1. Stephenson AL, et al. Adv Health Care Management. 2021;20. doi:10.1108/S1474-823120210000020004. 2. Dunivin Z, et al. J Med Internet Res. 2020;22(7):e14455. 3. Jorge A, et al. Arthritis Rheumatol. 2021;73(1):168-172. 4. AMA. Gender bias in medicine. July 11, 2022. https://www.ama-assn.org/system/files/2019-11/i19-gender-bias.pdf. 5. Monga K, Liew J. Ann Rheum Dis. 2020;0:1. doi:10.1136/annrheumdis-2020-217673. 6. Rowe SG, et al. JAMA Network Open. 2022;5(5):e2210768. doi:10.1001/jamanetworkopen.2022.10768. 7. Roberts LW. Acad Med. 2020;95(5):661-664.







"But simply adding women into a workplace **DOES NOT CHANGE** the organizational structures and systems that benefit men more than women"¹

1. Harvard Business Review. Research: How Bias Against Women Persists in Female-Dominated Workplaces. Accessed July 11, 2022. https://hbr.org/2022/03/research-how-bias-against-women-persists-in-female-dominated-workplaces



Provide Education and Awareness^{1,2}

EDUCATION



What is gender bias?



We all have gender bias



Consequences of gender bias

AWARENESS



Gender bias exists



Equity is an organizational value

TRAINING



Bystander intervention



Implicit bias

1. Stephenson AL, et al. Adv Health Care Management. 2021;20. doi:10.1108/S1474-823120210000020004. 2. Rowe SG, et al. JAMA Network Open. 2022;5(5):e2210768. doi:10.1001/jamanetworkopen.2022.10768.

Establish Equitable Policies¹



Decisions made in formal meetings with all stakeholders



Open and equitable processes for promotion and hiring



Consistent baseline scheduling expectations with flexibility for family/personal obligations



Parental leave policies for all parents

1. Stephenson AL, et al. Adv Health Care Management. 2021;20. doi:10.1108/S1474-823120210000020004.



Enforce Accountability^{1,2}



Cultivate a safe environment for culture change



Hold staff
accountable for
gender discrimination,
harassment, and
abuse



Establish policies/ procedures for mistreatment by patients



Create safe reporting mechanisms

1. Stephenson AL, et al. Adv Health Care Management. 2021;20. doi:10.1108/S1474-823120210000020004. 2. Rowe SG, et al. JAMA Network Open. 2022;5(5):e2210768. doi:10.1001/jamanetworkopen.2022.1076



Facilitate Mentoring And Sponsorship¹



Develop formal pathway for career trajectory at onboarding



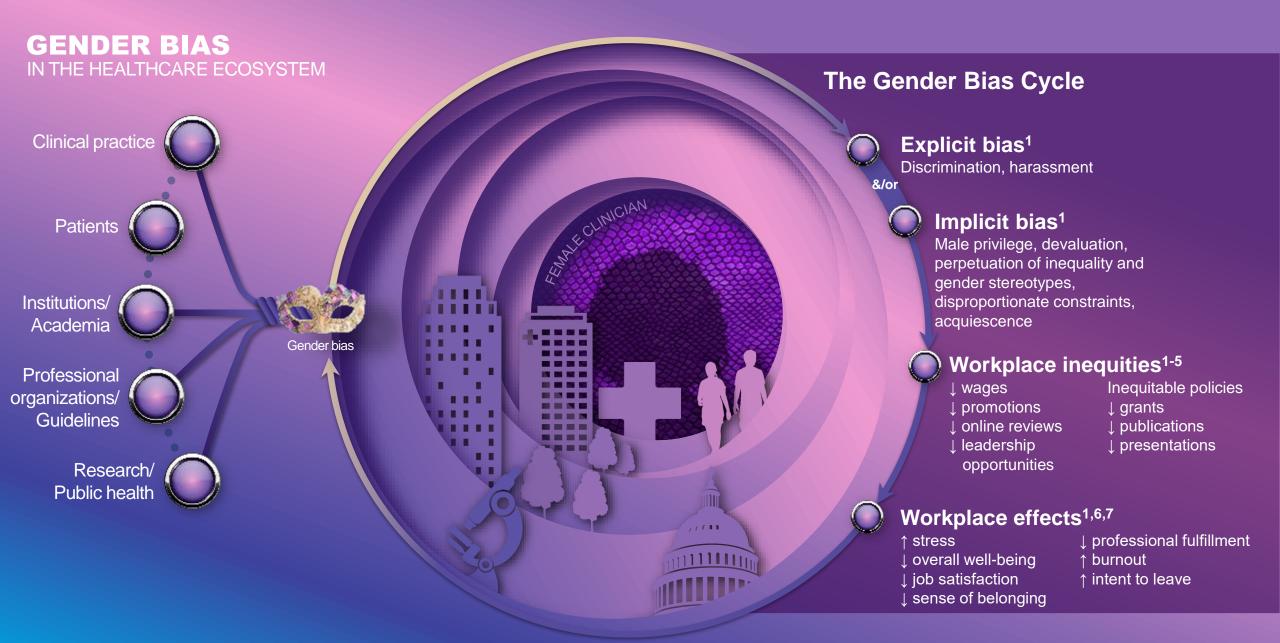
Establish formal mentor program including expectations and compensation



Assign mentors at onboarding



Establish sponsorship goals and expectations among leadership



1. Stephenson AL, et al. Adv Health Care Management. 2021;20. doi:10.1108/S1474-823120210000020004. 2. Dunivin Z, et al. J Med Internet Res. 2020;22(7):e14455. 3. Jorge A, et al. Arthritis Rheumatol. 2021;73(1):168-172. 4. AMA. Gender bias in medicine. July 11, 2022. https://www.ama-assn.org/system/files/2019-11/i19-gender-bias.pdf. 5. Monga K, Liew J. Ann Rheum Dis. 2020;0:1. doi:10.1136/annrheumdis-2020-217673. 6. Rowe SG, et al. JAMA Network Open. 2022;5(5):e2210768. doi:10.1001/jamanetworkopen.2022.10768. 7. Roberts LW. Acad Med. 2020;95(5):661-664.





Disrupt the Gender Bias Cycle¹

ACKNOWLEDGE IT

MEASURE IT

CORRECT IT

- Provide
 EDUCATION AND
 AWARENESS
- Establish EQUITABLE POLICIES
- Enforce
 ACCOUNTABILITY
- Facilitate

 MENTORING AND

 SPONSORSHIP





GENDER EQUITY SURVEY



https://survey.zohopublic.com/zs/5cbumd