Supplementary Appendix

The authors have provided this appendix containing additional information about their work.

Supplement to: Clark L, Hughes TM, Shah R, Trevedi A, Hess L. Medical Student-Driven Efforts to Incorporate Segregated Care Education Into Their Curriculum. *AMA J Ethics*. 2023;25(1):42-47. doi: 10.1001/amajethics.2023.42.

Appendix 1. Segregated Care and Medical Education: First-Year Medical Student Orientation

Segregated Care and Medical Education

First-Year Medical Student Orientation

August 2020

What is Segregated Care?

Segregated Care (n):

Definition: Differences in **where**, **when**, **how**, and **by whom** patients are cared for on the basis of **insurance status**

History: Segregated care is a nationally recognized reality

JAMA Otolaryngol Head Neck Surg. 2016 Jul 1;142(7):641-7. doi: 10.1001/jamaoto.2016.0509.

Domestic Travel and Regional Migration for Parathyroid Surgery Among Patients Receiving Care at Academic Medical Centers in the United States, 2012-2014.

Hinson AM[1], Hohmann SF[2], Stack BC Jr[1].

W V Med J. 2013 Jul-Aug;109(4):44-9.

Inter-hospital transfers from rural hospitals to an academic medical center.

Nair D[1], Gibbs MM.

J Health Care Law Policy. 2006;9(1):105-20.

Separate and unequal care in New York City.

Calman NS, Golub M, Ruddock C, Le L, Hauser D; Action Committee of the Bronx Health REACH Coalition.

Acad Med. 2014 Apr;89(4):540-3. doi: 10.1097/ACM.0000000000000182.

Academic health centers and care of undocumented immigrants in the United States: servant leaders or uncourageous followers?

Acosta DA[1], Aguilar-Gaxiola S.

Health Aff (Millwood). 2008 Mar-Apr;27(2):528-37. doi: 10.1377/hlthaff.27.2.528.

The characteristics and performance of hospitals that care for elderly Hispanic Americans.

Jha AK[1], Orav EJ, Zheng J, Epstein AM.

World J Urol. 2012 Aug;30(4):505-10. doi: 10.1007/s00345-011-0759-z. Epub 2011 Sep 9.

Does partial nephrectomy at an academic institution result in better outcomes?

Trinh QD[1], Schmitges J, Sun M, Sammon J, Shariat SF, Sukumar S, Zorn K, Bianchi M, Jeldres C, Perrotte P, Graefen M, Rogers CG, Peabody JO, Menon M, Karakiewicz PI.

Recognized Issue in New York State

Medicaid Redesign Team
Health Disparities Work Group
Final Recommendations – October 20, 2011

Recommendation Number:

Recommendation Short Name: **Address Disparities in Treatment at Teaching Facilities**

Workgroup members felt that faculty medical practices and general and specialty teaching hospital outpatient clinics differ in the services offered to patients. Workgroup members noted differences in continuity of care; patient access to physicians; on call after-hours; continuity through hospitalization; communication (reporting) back to referring physicians; access to appointments; and quality of supervision. Workgroup members felt that New York State is unique in the fact that it allows teaching hospitals (those that train residents) to establish two models of care within their walls that provide substantially different levels of quality in the care they deliver. Faculty practices, which may have agreements to use space within state licensed teaching hospitals, provide care to privately insured patients and those covered by Medicare in a setting that the workgroup believes provides better continuity of care with an attending physician, patient access to physicians on-call after-hours, and good communication with referring community providers. General and specialty teaching hospital clinics, which often provide care for the uninsured, people on Medicaid including those in Medicaid Managed Care, are staffed by rotating residents and fellows and rotating staffs of supervising attending physicians and therefore may provide little to no continuity of care over time, may have inadequate communication with referring community providers and may refer patients to the emergency room if they call after-hours. All providers, regardless of type of practice should be required to comply with a consistent set of standards that guides the quality of care provided to patients.

Medicaid Redesign Team (MRT) Health Disparities Workgroup Final Recommendations

HEALTH CARE DELIVERY STRUCTURE AT SINAI

FACULTY PRACTICE ASSOCIATES (FPA)

COMMERCIAL INSURANCE

CENTER FOR ADVANCED MEDICINE (CAM)

MEDICAID

HEALTH CARE DELIVERY STRUCTURE

	Mount Sinai Doctors Faculty Practice (FPA)	**Internal Medicine Associates and Center for Advanced Medicine clinics (IMA and CAM)**
Who gets seen there	Patients with private insurance	Patients with Medicaid or who are uninsured
Providers	Board-certified faculty physicians	Residents, fellows, and students with faculty supervision
Continuity	Each patient has their own private doctor	Rotating group of doctors in training
Coordination of Care	Good reports -- doctors want referrals	No coordination or communication
Night coverage	Doctors are on call for their practice	Patients are sent to the Emergency Room
If the person needs hospital care	Doctors or their partners take care of their own patients	Patients are cared for doctors who don't know them -- many of whom are trainees

Segregation by Insurance Status = Segregation by Race

- 1 in 4 non-elderly New Yorkers has Medicaid
- 73% of Medicaid enrollees in NY State are non-white versus 33% of overall NY State population is non-white

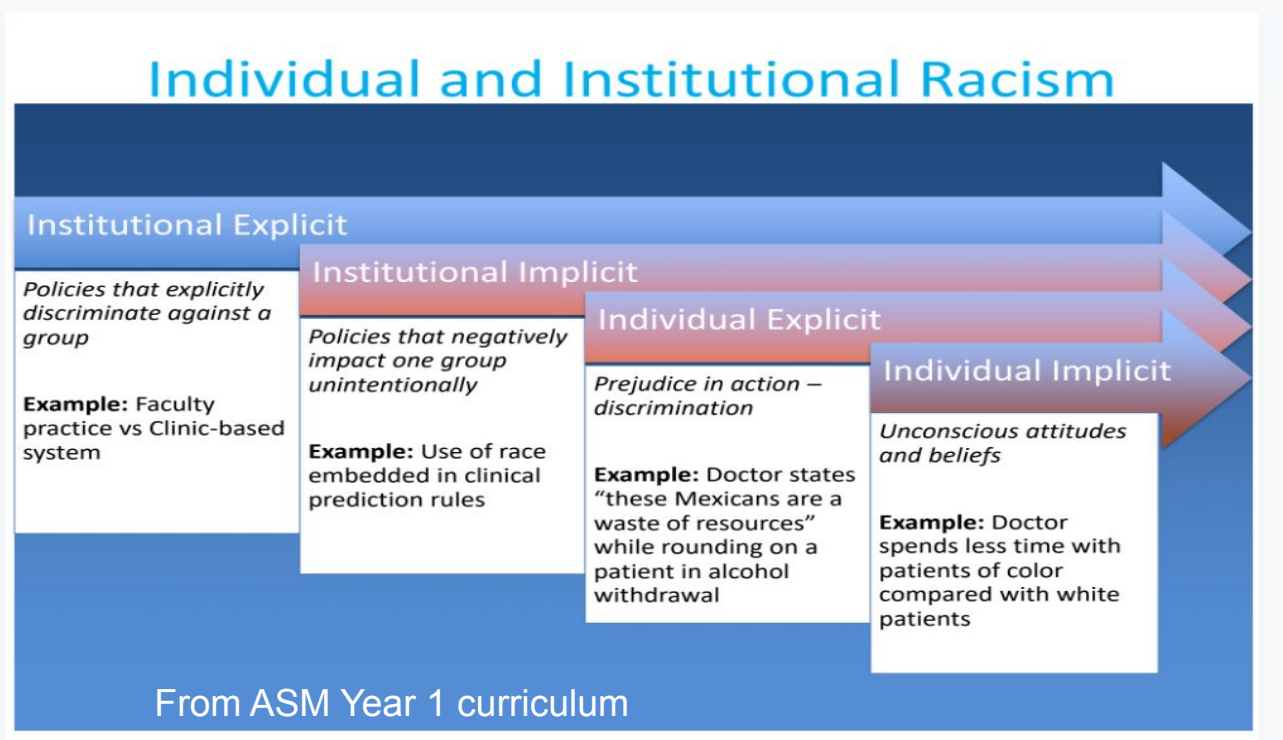
- New York Medicaid coverage for the non-elderly by race/ethnicity:
  - White: 18 %
  - Black: 38 %
  - Hispanic: 43 %
  - Asian/Pacific Island: 24 %
  - Native: 36 %
  - Multiracial: 32 %

Any system that separates patients by insurance status (Medicaid vs. private insurance) will de facto segregate patients by race

1.Healthcare Disparities in New York State. 2016.

Why is Segregated Care a Medical Education Issue?

Segregated Care Reinforces Institutional Racism



Mount Sinai has made great strides towards promoting anti-racism in its **preclinical curriculum**:

- Implicit Bias Training
- Curriculum Changes
- Deconstructing Race in Medicine Nexus Course

But these values are not consistently reflected during **clinical training**.

2019 - Third-Year Survey on Segregated Care

- Created to understand student experiences of segregated care during their third year.

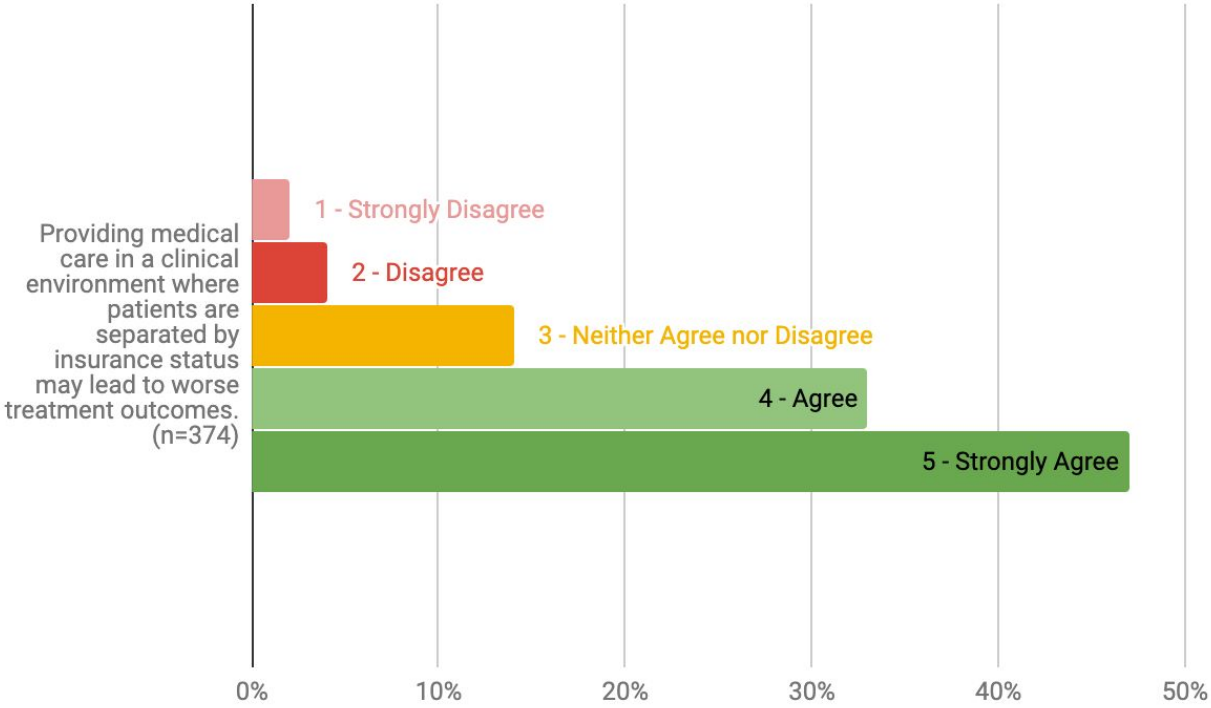
- Survey goals
  - In what ways, if any, are students experiencing segregated care?
  - How do students feel this affects patient care?
  - How do students feel this affects **their medical education?**

Spring 2019 Results -

56.3% report witnessing separation of care and 51.6% report witnessing difference in care

Clerkship	Total	Separation by insurance (not sure)	Difference in care by insurance (not sure)
Internal Medicine	N=39	53.8% (17.9%)	51.3% (5.1%)
Neurology	N=30	13.3% (6.7%)	6.7% (6.7%)
Psychiatry	N=29	6.9% (0%)	3.4% (3.4%)
Surgery	N=35	22.9% (8.6%)	25.7% (5.7%)
Pediatrics	N=25	24.0% (12%)	8.0% (16%)
Obstetrics and Gynecology	N=26	42.3% (7.7%)	50.0% (7.7%)
Elective	N=27	11.1% (3.7%)	14.8% (3.7%)

Comprehensive Survey 2018-19



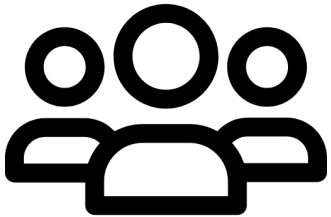
Counts/frequency: **Strongly Disagree** (9, 2%), Disagree (14, 4%), Neither Disagree Nor Agree (52, 14%), Agree (124, 33%), **Strongly Agree** (175, 47%)

Qualitative Analysis: Medical Student Reflections

It truly feels like every single aspect of patient care -- from the way physicians and ancillary staff speak about patients, speak to patients, formulate treatment plans for patients, teach medical students to treat patients and so on -- is different based on patient insurance status.

I was encouraged to introduce myself to all 'service' patients, typically those with Medicaid, to try to be part of their deliveries. However, I was often discouraged from talking to or taking part in the care of privately insured patients. There were, of course, exceptions to this but it was pretty striking.

[Training in a segregated system] makes me feel sort of disappointed to be a doctor but also feel sort of powerless to do anything about it.



Because [medical students] do so much observing and imitating third year, we have heightened ability to notice [segregated care] but also to subconsciously internalize and mimic certain aspects of these behaviors.

2018-19 Resident Surveys

Many hospitals separate patients on the basis of insurance status (uninsured vs publicly insured vs privately insured). We are hoping to better understand where in the Mt. Sinai health system this might be happening and the impact that may have on your education. Your clinical training experiences provide unique insights into the effects of this practice, commonly referred to as segregated care, on both patient care and education. *1 – 5 (Never– Always)*	Rating Avg 2018-19	Response Count 2018-19
During your training, have you observed physical or scheduling-based separation of patients based on insurance class (i.e. patients being seen in different clinical sites, in different areas of the same clinical site, or scheduled at different times)?	**3.86**	**754**
During your training, have you observed differences in care delivery depending on patients' insurance class (i.e. how you as a resident/fellow were asked to interact with the patient, the level of treatment offered, how patients were discussed by staff, etc.)?	**4.12**	**754**

	YES	NO
If you witnessed segregated care during your training, do you believe this impacted your education?	**34.21%** (117)	**66.08%** (226)
Did you report any of these incidents?	**9.24%** (22)	**91.18%** (217)

2018-19 Resident Surveys

Describe the impact you feel segregated care had on your education

- Rarely took care of patients with private insurance in the outpatient setting. Families from different socioeconomic backgrounds can have different challenges and different needs from an outpatient provider and I feel that I was only exposed to one group in the outpatient setting.
- We are provided with more autonomy in caring for patients with lower insurance status; however, this leads to lower levels of oversight for these patients by attendings.
- [Segregated care] created more administrative time attempting to get things done for my Medicaid patients and less time for studying, building relationships with patients and sleep.
- We often care for [the] sickest, most socially complicated patients at a time when we have the least training which can lead to burnout and feeling overwhelmed.
- I learned how to care for patients of different socioeconomic status and their different needs. I learned to appreciate the barriers to care that patients of lower socioeconomic status face.
- I would like to dedicate at least one day of my practice a week to Medicaid patients.
- It is explained that it is the culture here for "division/clinic" patients to be scheduled last in the OR. [This is] one of the main discrepancies.

What's Being Done
&
What Changes Can Be Made?

What is being done?

- System-wide resident and faculty anti-bias trainings
- Collaboration with individual departments
- Continued surveying third-year medical students, residents
- Health Equity Task Force

Action Items to Guide Further Engagement

For incoming first-year medical students:

- ❏ Seek out opportunities in your first-year of medical school to continue learning about how health systems and policies manifest as inequity, including segregated care
- ❏ Identify physician and peer role models that are challenging the status quo
- ❏ To engage further in this advocacy work, you can join the Segregated Care Student Workgroup by contacting any of today's speakers

Commit to Fully Integrating Clinical Spaces

ALL PATIENTS SEEN BY THE

SAME PHYSICIANS

IN THE **SAME LOCATION**

AT THE **SAME TIME**

REGARDLESS OF RACE.

Acknowledgements

Student Advocates: Rachel Wilkinson, Akila Pai, Conner Fox, James Blum, Zina Huxley-Reicher, Alec Feuerbach, Michelle Tong, Sofia Ahsanuddin, Seshat Mack, Giselle Lynch, Brielle Cardieri, Denisse Rojas Marquez, Hazel Lever, Kamini Doobay, Lily Ostrer, Charlotte Austin, Jeremy Levenson, Sarah Levy, Stephen Supoyo

Administration Partners: Dr. David Muller, Dr. Ann-Gel Palermo, Dr. Leona Hess, Dr. Joe Truglio