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A framework to promote equity in clinical clerkships

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... we conducted a multi-phased process to promote equity in the clerkship learning environment ...

SUMMARY

Background: Diversifying the medical student body without striving for equity in the clerkship (first full-time clinical training year) learning environment disadvantages under-represented in medicine (UIM) students and undermines the educational process.

Context: To characterise and address inequities within an internal medicine clerkship, we conducted a multi-phased process to promote equity in the clerkship learning environment at an urban medical school with multiple sites.

Innovation: The process to improve the learning environment and equity in the clerkship included: (i) a literature review and needs assessment (focus group) with UIM students; (ii) a medicine clerkship retreat with school leaders and diversity experts to reflect on the needs assessment data and generate interventions to improve equity; (iii) a member checking session with UIM students to ensure that the proposed solutions addressed the inequities that were noted in the needs assessment.

Implications: The needs assessment revealed eight themes in the

clerkship learning environment that were mapped to a published framework describing barriers encountered by UIM students. These themes informed the development of five clerkship pilot interventions. Implementing interventions inspired by UIM student perspectives may improve the learning environment in clinical clerkships by encouraging a culture of equity. The three-phased approach described here provides leaders who direct educational programmes with a framework to initiate change by characterising inequities as a springboard for developing solutions.

INTRODUCTION

Educating a diverse physician workforce is part of a strategy to eliminate health care disparities and to create a more innovative and equitable culture of medicine.^{1–3} There is increasing institutional support for diversity, equity and inclusion initiatives within medical schools globally.^{1,4} The goal of these initiatives is to achieve educational equity, a principle that, when adapted from the definition of health equity,⁵ can be conceptualised as ensuring everyone has the opportunity to attain their full learning potential, and that no one is disadvantaged from achieving this potential because of socially defined circumstances.

The American Association of Medical Colleges defines students from the following racial and ethnic groups as under-represented in medicine (UIM) relative to their numbers in the general US population: African American/Black, Hispanic/Latinx, Native American, Alaskan Native, Native Hawaiian, Pacific Islander and certain Asian subgroups. UIM students frequently encounter exclusion and inequities in their learning environment.^{2–4,6} For example, UIM students on their clerkship rotations (i.e. in the third year of medical school in the USA, which is also the first year of full-time training in clinical environments) often contend with a diminished sense of belonging, with supervisors and peers who often have different socio-economic and cultural backgrounds.^{3,6} Studies have raised the possibility of bias in evaluations, with associations between lower clinical grades and racial and ethnic minority,² lower academic performance compared with racial majority counterparts,^{2,7} and differential admission into honours societies based on race.⁸ Collectively, these inequities create disparities in career opportunities for UIM students, and lead to a

less diverse community of providers and academics.^{3,8,9}

We believe that clerkship leaders should lead transformations in the clinical years to encourage an equitable and inclusive learning environment for all students. The existing literature on supporting UIM students in their clinical years focuses on mentorship and preparation for examinations, rather than addressing underlying structural and cultural factors.^{6,10} We describe our process to characterise inequities within an internal medicine clerkship learning environment and initiate changes to promote educational equity and inclusion.

CONTEXT

Setting and participants

The University of California, San Francisco (UCSF) is a public medical school, with approximately 141 students in each class, where 26% of students self-identify as UIM based on the definition given by the American Association of Medical Colleges. The internal medicine clerkship is one of eight required clerkships and has five training sites, each led by a site director with a clerkship director overseeing the overall rotation. The UCSF Institutional Review Board approved this project.

INNOVATION

The medicine clerkship director and site directors partnered with

UCSF Differences Matters, an institutional organisation that fosters inclusiveness, to strategise about ways to improve the clerkship learning environment. The leaders used Smith's framework for increasing diversity and inclusion in academic medicine to guide a three-phased process, which began in April 2017 (Figure 1).¹

Phase 1: needs assessment

Phase 1 included a focus group to characterise the clerkship experiences of UIM students as a way to explore a specific issue (inequity in the learning environment) amongst participants, and to capture the richness and nuances of those experiences. We reviewed literature that reported disparities in the grading outcomes and the learning environment experienced by UIM students.^{8,9} Based on themes identified in the literature, we developed semi-structured questions focusing on the learning environment (Appendix S1). We sent an e-mail invitation with a description of the purpose of the focus group to eight UIM students who had completed their third-year clerkships and had been involved with school-based diversity initiatives. The invited participants were invested in achieving institutional inclusion and had a broader understanding of institutional policies and procedures than most medical students.

... clerkship leaders should lead transformations in the clinical years to encourage an equitable and inclusive learning environment ...

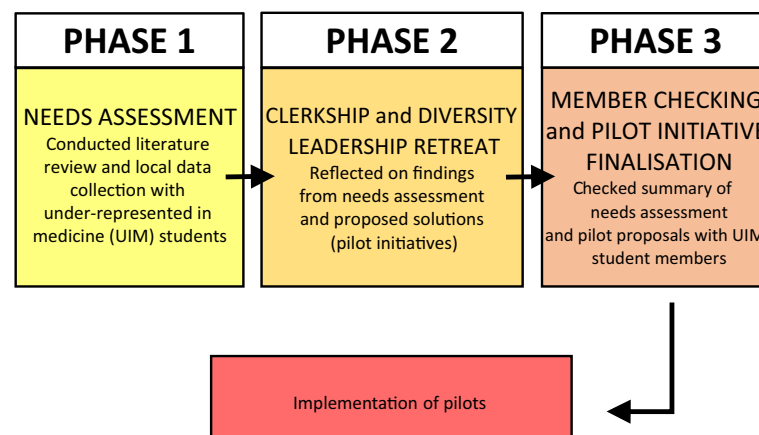


Figure 1. Three-phased process to promote equity within the clerkship learning environment.

We prioritised pilots that were within the scope of the clerkship administration and could be addressed by clerkship leaders at their clinical sites

The focus group was led by an investigator (AVJ) and a research assistant, and was audio-recorded and transcribed. To ensure anonymity, the transcript was de-identified prior to coding, and study identification numbers were assigned to participants. Investigators (CJL and AVJ) independently analysed the focus group transcripts using thematic analysis, and generated codes that were reviewed and consolidated into eight themes.¹¹ The final coding list was reconciled with a third investigator (AT) and applied to the transcript. We organised these themes using a conceptual framework developed by Teherani et al. (Figure 2) that delineates four factors (students, faculty member and resident raters, clinical learning environment, and school policies and procedures) that create inequities in clinical performance outcomes between UIM and non-UIM students.⁹

Phase 2: clerkship and diversity leadership retreat

The medicine clerkship leaders organised a retreat to review the Phase 1 findings and generate ideas for clerkship pilot interventions. Participants in the retreat included the medicine clerkship director, four medicine clerkship

site directors, two senior-year medicine rotation directors, the associate dean for students, an assessment director, and four faculty members with expertise in diversity research and initiatives.

The themes generated from the student focus group were presented to the retreat participants. Using the results of this needs assessment, participants proposed interventions that could improve the learning environment and assessment process of the clerkship to address shortcomings that were identified by the focus group. We prioritised pilots that were within the scope of the clerkship administration and could be addressed by clerkship leaders at their clinical sites.

Phase 3: member checking and finalisation of the pilot initiative

We reconvened the UIM students to conduct 'member checking', a trustworthiness technique used in qualitative research to confirm that the codified themes accurately represented the key ideas that were shared in the initial focus group.¹² We also shared the initiatives proposed at the Phase 2 retreat with the students. Their feedback on the proposals was incorporated into the clerkship

site directors' selection of pilots to develop and implement for the next academic year (January–December 2018).

OUTCOMES

Phase 1: needs assessment results

Eight invited students formed the group of four women and four men and self-identified as Black (five), Latinx (two), and Southeast Asian (one). The thematic analysis of the focus group revealed eight themes that negatively influenced the learning environment of UIM students on their clerkships (Table 1). The participants' comments also highlighted the positive aspects of their UIM status as a provider.

Phase 2: clerkship and diversity leadership retreat outcomes

The leadership retreat generated five pilot projects (Table 2), each addressing factors adversely affecting diversity, equity and inclusion in the clinical setting described in the framework.⁹

Phase 3: member checking and clerkship pilot development outcomes

Five students (three Black and two Latinx) from the original

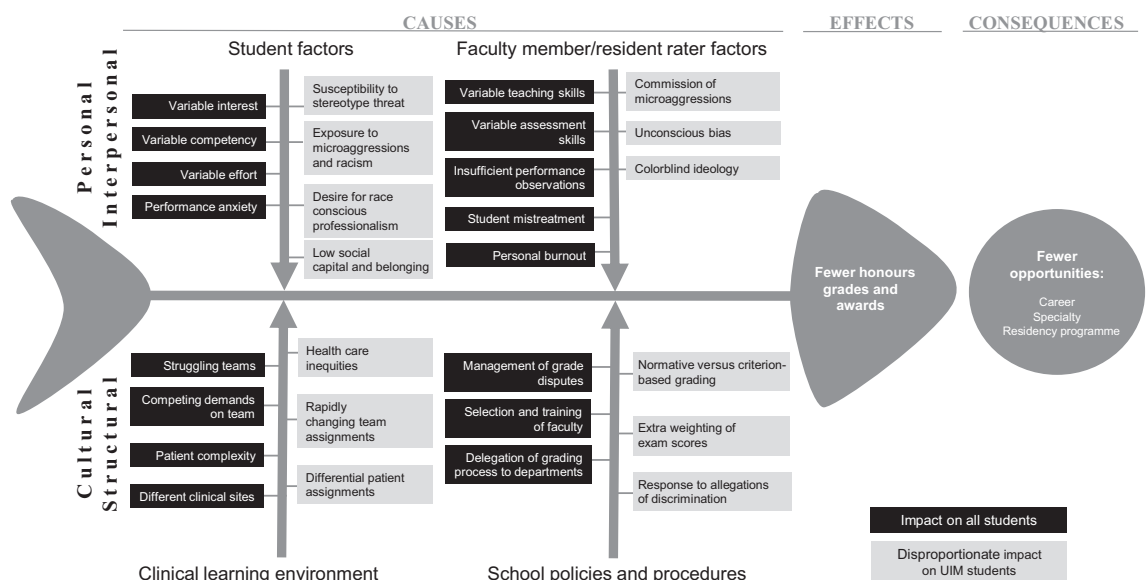


Figure 2. Fishbone diagram illustrating the causes, effects and consequences of lower assessed performance in under-represented in medicine (UIM) students compared with all students. Figure from Teherani et al.⁹ reproduced with permission from the publishers Wolters Kluwer Health, Inc.

Table 1. Themes describing the clerkship experiences of under-represented in medicine (UIM) students, organised by factors in the learning environment

Student factors

- 'Extra mental energy' associated with UIM status**
 - 'What do [patients] think of me? Do they respect me? If they're disrespecting me, is it because I'm Black, young, woman?'
 - 'Do I spend more time learning or do I spend more time making the [minority] patients have a better experience? Maybe that's something that another student has to weigh less'
- Advocating may be seen as confrontational**
 - 'One of my evaluations was ... really bad stuff said about me being confrontational ... I think I was just advocating for my patients'
 - '... who do you relate more with? The patient or with the team? ... [Do] they see that this provider is really advocating for the patient and they're helping? Or they might see that I feel a disconnect with the team or that I might be perceived as being defensive'

Faculty member/resident rater factors

- Undervaluing extracurricular activities related to advocacy issues**
 - 'I also struggle with the White Coats for Black Lives pin thing and I ultimately ended up doing it ... if we were using our free time to do research, cancer research or whatever, some virus research ... We would be accoladed, right?'
- Sense of not belonging in the dominant culture of medicine**
 - 'I feel they don't get to know you as well versus when they interact with some other student, who watches the same shows or went to the same school or has a dad who's a cardiologist. They are able to develop that connection and I feel like, a lot of the times, evaluations just come down to how well do people know you as a person, how much they like you'
- Importance of diversity of residents (junior doctors at the postgraduate training level) and faculty members in navigating clerkships**
 - 'My first two interns [postgraduate Year-1 resident] I had were both [UIM] interns. They were like, "Oh, we got to take care of you", and they then sort of guided me in the way that I needed'
 - '... before we started third year, we had a few faculty and a bunch of the fourth years sit down and gave us tips about third year and one of my favourites was there was this fourth year [student] who was like, "You know, you should really take the first three weeks to really get comfortable and figure out everything", and one of the [UIM faculty members], she was like, "No. You get three days". UIM faculty members tell you like it is'

Clinical learning environment

- Dealing with racist patients**
 - '... Patients would make comments ... and you kind of just like, "ha ha", and have to laugh and ignore it but it happened a number of times'
 - '... the most taxing was my interactions with patients and just the mental energy that gets spent on figuring out why they might disrespect me I think there's a price there'
- Dual role as learner and translator**
 - 'One that happened a lot, which is kind of troubling ... I would translate for the team ... and they would off-hand say, "Our translator". Or they would talk to the family and they were like, "The translator". I'm like, "I'm not your translator ... I'm their provider"'
 - 'It's like you have to carry two responsibilities when your primary reason for being there should be to learn, not to learn and interpret for the team'

School policies and procedures

- Contributions to patient care are unrecognised in assessment process**
 - 'Because we can speak a different language, especially one that's the same as a patient, there's an added responsibility ... how does that fit into [evaluations]? Is that valued? Is that not valued?'

Clerkship leaders should feel empowered to change the culture around equity and inclusion

focus group participated in the member checking session; the three other students were not

able to attend. They agreed that the themes from Phase 1 resonated with their clerkship

experiences and accurately represented their perspectives. They also expressed enthusiasm

Inequities that UIM students encounter define their educational experiences during medical school, shape their identity, and have a lasting impact on their academic performance and career opportunities

Table 2. Pilot projects to improve equity within the clerkship learning environment

Pilot project	Framework factor addressed ⁹	Project description	Rationale for project
Assessment of students' patient advocacy skills	Clinical learning environment School policies and procedures	New domain on resident and attending physician (consultant) evaluation form to assess degree of patient advocacy behaviours that student exhibited	- Incorporation of domain reflects the value that the medicine clerkship places on patient advocacy for vulnerable patients - Inclusion of this new domain signals the importance of advocacy to students and supervising physicians (assessment drives learning)
Patient advocacy curriculum	Clinical learning environment	Curriculum on advocacy skills to address social determinants of health during transitions of care, including a written reflection and a verbal and written report back to team	- Encourages and guides students to translate advocacy concepts into actions directly impacting patient care - Fosters team discussion around health equity - Increases the opportunity for the entire team to learn from students' advocacy behaviours and for students to be recognised for these efforts
Appreciative inquiry	Faculty member/resident factors	- Solicit student-generated exemplars of how residents or attendings advocated for patients to reduce health care disparities - Publicly recognise these role models through e-mails to supervisors or as accolades during divisional faculty member meetings	Signals advocacy as a core value of the department, publicly recognises supervising physicians for patient advocacy, and encourages future advocacy role modelling by supervising physicians
Faculty member/resident development	Faculty member/resident factors	Workshop and hand-outs explaining ways to acknowledge and address health inequities that might occur on the wards or clinic, and ways to address discrimination by patients towards students	Ensures that faculty members receive timely, brief, concrete suggestions on how to incorporate health equity concepts into their teaching, and how to support students who encounter discrimination from patients
Adding discussion of health equity concepts into assessment and plan during oral presentations	Faculty member/resident factors	Developed a 'health equity bundle' to allow students and team to systematically address issues related to health equity (e.g. social determinants of health) in the assessment and plan	- Provides an opportunity for students and the team overall to address issues facing vulnerable patients - Signals to the team the importance of discussing equity issues affecting patient care

for the pilots and agreed that the initiatives had the potential to improve the learning environment. Clerkship site directors

used the feedback from the member checking session to develop and implement these interventions.

IMPLICATIONS

Equity pedagogy is an approach to education that strives to create

learning environments, teaching strategies, and evaluation systems that allow students from every background to thrive.¹³ A core component of equity pedagogy involves dismantling the educational systems that create inequity.¹³ We used a systematic approach that included clerkship leader reflection, action, and continuing dialogue with UIM students as a springboard for identifying inequities and catalysing clerkship-based changes to address the barriers that hinder UIM students from achieving their full potential.

Pilot interventions highlighted the need for recognising health inequities, developing patient advocacy skills, providing faculty development to respond to microaggressions from patients towards students, and recognising physicians who promote health equity.

This work occurred in a single multi-site clerkship with a small number of UIM students in the focus group and in the member checking session, and may not represent the perspectives of all UIM students. Although we recognise that pilots might not be feasible at all institutions, we believe that the change process that was used to develop the initiatives has relevance and generalisability across institutions. The utility and effectiveness of any change – whether at the micro or macro level – will be determined by the students' perceptions of the learning environment and an assessment by all stakeholders of the culture surrounding equity and inclusiveness. We plan to assess the effectiveness of these pilot initiatives (e.g. changes in students' perceptions of the learning environment) in order to identify those that can be disseminated more broadly to other clerkships.

Clerkship leaders should feel empowered to change the

culture around equity and inclusion. We believe that the multi-phased process that we undertook (Figure 1) can be used as a framework for educational leaders seeking an approach to generate initiatives to improve equity at the course, clerkship or broader curricular level. The first phase requires leaders to collect local data and adapt the findings in the educational disparities literature to address the experiences of UIM learners at their institution. The second phase highlights the importance of engaging stakeholders, including leaders and content experts, to process local findings and formulate solutions. The final phase highlights the critical step of re-checking the assumptions and proposed solutions with UIM learners prior to implementation.

Inequities that UIM students encounter define their educational experiences during medical school, shape their identity, and have a lasting impact on their academic performance and career opportunities.^{8,9} An educational programme that does not systematically engage stakeholders in questioning its educational processes, and which does not incorporate the perspectives of UIM students, undermines the education of all students and the culture of medicine. The three-phased approach described here provides educational leaders with a framework to initiate change and foster a more equitable educational experience.

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Each intervention signalled respect for behaviours aimed at reducing health disparities and respect for the diversity of patient communities and student perspectives

The three-phased approach described here provides educational leaders with a framework to initiate change and foster a more equitable educational experience

SUPPORTING INFORMATION

Additional supporting information may be found online in the

Supporting Information section at the end of the article.

Appendix S1. Questions covered the general clerkship

experience, impact of race and ethnicity on the clerkship experience, and internal medicine clerkship experience.

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Ethical approval: The UCSF Institutional Review Board approved this project as exempt. The focus group and member checking sessions were voluntary.

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