Good day. And welcome to the Josiah Macy Junior Foundation’s webinar on recommendations from our conference on ensuring fairness in medical education assessment.

I am Peter Goodwin, chief operating officer and treasurer at the Josiah Macy Junior Foundation. Before we get started, a few housekeeping items.

This session is being recorded. The audio, video, and transcript, as well as the presenter’s slides, will be available next week on the Foundation’s website, at www.MacyFoundation.org.

We have live closed captioning for this webinar. Please select the "show captioning" box from your Zoom screen toolbar. If you are having problems accessing these services, you can enter it into the Q and A function on your Zoom screen, and a staff member will help you.

The chat function on your Zoom screen is currently disabled, and will be throughout the webinar. The Q and A function on your Zoom screen is active, and will be, throughout the webinar.

Please use it to pose questions to the panelists that relate to the content of this webinar. You may also use it to comment and like the questions that are being posed and answered.

And now I am pleased to introduce the president of the Josiah Macy Junior Foundation, Dr. Holly Humphrey. Holly?

>> Thank you, Peter. Hello, everyone. And thank you for joining us in this webinar. I want to welcome all of you, because this is a very important topic, on ensuring fairness in medical education assessment.

And this webinar comes out of a conference that the Macy Foundation sponsored last November. In November of 2022.

And for today’s webinar, I am very pleased to be joined by two co-hosts for this webinar. Dr. Lou Edje is the associate dean of graduate medical education and the designated institutional official at the University of Cincinnati’s College of Medicine, and Dr. Karen Hauer is the associate dean for competency assessment in professional standards and professor of medicine at the University of California, San Francisco, School of Medicine.

They were both members of the planning committee. They were also authors of papers that we commissioned for this conference. And obviously very important leaders in the development of the conference recommendations that we’re going to be reviewing in today’s webinar.

Now, in addition to doctors Edje and Hauer, the entire planning committee included those who you see pictured on the screen in front of you. Dr. Dowaing Boatright at NYU Langone Medical Center, Dr. Larry Gruppen at the University of Michigan Medical School, and Ms. Kayla Marcotte, a student at the University of Michigan, enrolled in their MD and PhD degree programs.

Let me begin today by providing some background for how this conference came to be. In 2018, the Macy Foundation undertook a strategic planning process, which led to the development of three
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priority areas, of which diversity, equity, and belonging in our clinical learning environments for future health professionals was one of the three major strategic priorities.

We convened a conference to help us develop a series of conferences and strategic tactics for how to accomplish our strategic plan. And the very first conference was held in February of 2020, focused on addressing harmful bias and eliminating discrimination in health professions learning environments.

The second conference actually grew out of that first conference, and that is the one that we are gathered here today to cover.

So our first conference focused on addressing harmful bias and eliminating discrimination in the clinical learning environment. And what you see on this particular slide is the vision statement that the conferees came up with, in February of 2020, for that conference. And I'll pause for just a moment to give you a chance to read that vision statement.

So the conference for which this vision statement was developed came up with five major recommendations. And you can find those recommendations in the supplement to Academic Medicine from December 2020, which is featured in the upper right-hand corner of this slide.

One of those five recommendations says that we should integrate equity into health professions curricula, explicitly aiming to mitigate the harmful effects of bias, exclusion, discrimination, racism, and all other forms of oppression.

That recommendation, along with each of the five recommendations, has a whole series of action steps. One of those action steps says the following: Health professions schools should conduct fair and equitable assessments of their learners. Schools should adopt a system of learner assessment that seeks to mitigate harmful bias, and provide frequent feedback, coaching, and transparency, in order to support mastery, learning, and growth mindsets.

Health professions leaders should also advocate on a national level for development and use of fair and equitable assessment tools. And so it's that third recommendation and that action step that accompanies that recommendation that led to our November 2022 conference on ensuring fairness in medical education assessment.

And that conference -- and the conferees who participated -- developed the vision statement that you see in front of you. And I will give you a moment to read this vision statement.

You can also see that this vision statement, our commissioned papers, and the recommendations are part of a supplement to Academic Medicine, which you see featured in the upper right-hand corner, published this month.

Now, this particular conference had two major goals. Those goals were to advance equity in medical education assessment and to develop recommendations with action steps to achieve fairness in the assessment of learners in medical education.
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Our group had 50 conferees, who you see pictured here, including 12 learners, residents, fellows, and other leaders in academic medicine, and they began the work to getting to consensus, by developing presentations around our commissioned papers and case studies on the topics, and then ultimately developing the recommendations that are the focus of today's webinar.

Now, the recommendations that this group came up with ultimately coalesced around five major areas that you see pictured here. Culture, in our health professions learning environments, systems, knowledge and skills, data, and commitment.

Each of these recommendations are followed by a series of action steps that build on one another. The recommendations reflect consensus, and not necessarily unanimity in each area. Also, the recommendations reflect the expertise, experience, and perspective of the individual participants, and not necessarily their institutions.

And now I would like to turn this over to Dr. Hauer, who is going to cover the first two recommendations and their action steps. Karen?

>> Thank you, Holly, for that overview of the conference. As a reminder to listeners, the full report is available on the Academic Medicine website. In that more detailed set of information, we share who should be responsible for implementing each action step, based on the discussions we held at the conference.

In the next slides, we will give an overview of our recommendations and specific action steps. Recommendation one is to create a culture, climate, and learning and working environment that promotes, values, and demonstrates fairness in learner assessment.

Many learners, especially from groups historically marginalized in medicine, experience harmful bias, discrimination, and mistreatment in our environments every day.

This includes unfair assessments of their performance that interfere with their progress along the MedEd continuum. Remediying this situation and ensuring fairness in assessment requires that all of us as leaders, teachers, and colleagues intentionally develop environments that prioritize diversity, equity, inclusion, and belonging.

We must foster cultures of psychological safety, trust, and respect among all members of our communities. And we also need to identify and eliminate the systems, structures, and behaviors that interfere with our learners' abilities to perform at their best and be assessed at their best.

So the specific action steps for recommendation one are, first, to investigate your institution's history and share that information publicly. Who has been privileged at your institution? Who has been excluded or marginalized?

Number two, evaluate and improve accessibility in learning and working environments. We discussed principles of universal design at the conference that could accommodate all learners. This recommendation also involves providing resources, dedicating them, to have the right expertise, to create accessibility and also to use best technologies that support accessibility.
Three: Co-create centralized reporting systems for evaluating the inclusivity of educational environments. Co-create means that this is not work to be done top-down, but rather, that learners, staff, faculty are working together, patients may be involved, to develop policies and processes for reporting mistreatment, discrimination, and harmful bias.

Recognizing these problematic circumstances is the first step to taking action to mitigate them. Four: Identify processes and outcome metrics that advance diversity, equity, and inclusion and bias-free systems of assessment.

Identifying these metrics is important to be able to mark progress or identify where progress is lacking, so that you can assess outcomes of your interventions.

Five: Co-create a culture with transparent and constructive bidirectional feedback. We heard particularly from the learners at the conference the importance of their being able to speak up and share their observations, their feedback, about what's working or what could be working better to create equitable, welcoming learning environments and assessment procedures.

Six: Design physical and virtual spaces that reflect the institutional commitment to diversity, equity, and inclusion. This includes the design of spaces. The symbols, the artwork, the language that is used, to represent the diversity of individuals who learn, work, and seek care in those spaces.

On the next slide, I'll move to recommendation two, which is to design, implement, and continuously improve learner assessment systems that promote fairness and equity.

The medical education community, in consultation with the broader health care community, must agree on and articulate the purpose of assessments. This is something that we struggle with a lot in this country.

Right now, the purposes of assessment are often unclear and conflicted. For example, are assessments of students for the purpose of promoting learning, or for the purpose of ranking learners for future selection? Defining the purpose of assessment is the first step for creating new systems of fair and equitable assessment for a more diverse workforce. Ultimately, our goals are to improve health outcomes for our patients.

These purposes should be used to design assessment systems that align with core institutional values, such as our commitment to equity, minimizing harmful bias, maximizing fairness, and effectively capturing and promoting each learner's growth along a developmental continuum.

Inclusive assessment design processes should involve individuals with diverse backgrounds and perspectives to represent our communities, including learners and patients. This requires resources to support and design these systems, conduct ongoing data collection and analysis, to evaluate the validity and impact of assessment information, and ensure that our assessment systems are achieving our desired outcomes.
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I'll share action steps for recommendation two on this slide and the next one. One: Align assessment systems with commitments to diversity, equity, inclusion, and improving health equity. If you could please go back a slide too, thank you. Prioritize assessment for learning in combination with assessment of learning.

Assessment for learning entails assessments that provide feedback and guide learning. These promote growth mindsets. Assessment of learning is the summative, higher stakes assessment at the end of a period of learning, used to make decisions about advancement or graduation.

Three: Design and implement an evidence-based assessment system that uses qualitative and quantitative data from diverse sources. There's lots of literature available about how to use best evidence in designing an assessment system, and this literature emphasizes that no one tool or approach should drive high stakes decisions.

Rather, multiple assessments using different types of assessment tools reflect all of the competencies needed for practice. Four: Summative assessment decisions about learners should be conducted by committees, such as competency committees or progress committees, that review these multiple sources of data and information and make judgments about learners' accomplishment of expectations.

On the next slide, action step five is to monitor assessment data for group differences that could signal harmful bias. For example, has the institution looked at group differences based on gender or race/ethnicity in outcomes for learners?

Six: Co-create processes for identifying learners' strengths, according to clear criterion-referenced and competency-based standards. Learners should be able to self-assess their progress on your milestones or competencies and should be able to engage in discussion with a trusted coach or mentor about next steps in their learning.

This leads to action step seven to foster development of longitudinal relationships between learners and coaches. No two coaching programs are the same, but resources to build a coaching program and recruit coaches with the backgrounds and skills to support learners are very helpful for learners to be assessed fairly and to be co-participants in monitoring their own progress.

Coaching programs also require robust faculty development about the coaching approach and working with diverse learners. Eight: Develop a safe and transparent mechanism through which learners may access, reflect on, and respond to assessments. Transparency is clear here. How can learners clarify an assessment or appeal something that they feel is biased or unfair?

Nine. Adapt assessment tools and mechanisms that allow for broad input on competencies. For example, patient feedback or data from the electronic health record may reflect the patient's outcomes related to your assessments. Observer feedback from different types of observers can give a well-rounded view of how the learner is performing and avoid overemphasizing things that might be easier to measure, like medical knowledge in the examination format.

I'll now turn the discussion over to Lou, to review the next recommendations. Thank you.
Thank you, Karen, for that overview of the first two recommendations. I’m Dr. Lou Edje, and I’m not speaking as chair of the family medicine review committee of the ACGME or representing AMA in any way. I will take us through the next three recommendations and their action step.

The recommendation three is to equip faculty and other assessors with the knowledge and skills, as well as time and other resources, needed to create, implement, and continuously improve learner assessment systems that eliminate harmful bias and foster trusting relationships.

Faculty development is critical to successfully implementing a system of critical assessment. Every person, be they administrator, a faculty member, program director, a member of a selection, nomination, or clinical competency committee, responsible for assessing learners and/or making decisions about their advancement, must receive training in avoiding bias in assessment.

They should understand what harmful bias is and how to address it in themselves and others. They should also understand the issue of structural bias in assessment, including how it can differentially affect learners' opportunities to demonstrate their competency and lead to unhelpful or less meaningful assessments.

Faculty should know what fair and critical assessment looks like and how it functions, including how to assess and use proper assessment strategies. Faculty who work with learners should receive training in mentoring and coaching, fostering growth mindsets, and building trusting relationships.

So action steps one through four -- action step number one: To provide professional development for everyone involved in learner assessment. That is a critical piece.

Inviting experts in DEI and belonging to critically evaluate faculty development resources, assessment, coaching, and feedback strategies, protect time for those who provide faculty development programming and serve as coaches and mentors. I think this is one of the most important pieces, creating the space for all of that to happen.

Provide training, support, and resources for all faculty who participate in direct observation of learners. On the next slide, we have recommendation steps five through eight.

Number five: Review faculty assessments to identify harmful bias. Again, this is part of this PDSA cycle. Make sure that what we're actually doing is working.

Require training in accessibility and accommodations for faculty who are responsible for assessing learners who have disabilities.

Ensure ready access to experts in learning and assessment, particularly when faculty are assessing, mentoring, and/or coaching learners struggling to meet performance expectations.

Here we have -- at my institution, we have an assessment road show, basically. Basically our assessment team goes to different residencies, as requested, to assess what is going on in their space.
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Number eight: Structure meaningful educational handovers to support individual identify learning plans and maximize learner growth in collaboration with learners.

On the next slide, we'll go over recommendation four. And this is dealing with assessment data. Specifically including exam scores. And also making sure that those are shared and used for purposes for which an assessment is actually intended.

To avoid overreliance on certain metrics, medical school admissions, residency selection, and similar processes should use holistic review and other approaches found to help eliminate harmful bias.

Medical education, fair and equitable assessment systems, and selection processes, should be used to advance those learners and trainees who can best meet the needs of patients. This means the assessment data used for high stakes decisions should be shared and used in a manner that neither over nor underpredicts subsequent performance in the context for which the assessment was designed.

Similarly, competitive screening processes that include high stakes assessment results, such as those to make decisions regarding medical school admissions, residency program selections, and fellowship recruitment should start using holistic review and stop using assessments that are not designed to serve as selection criteria.

The action steps associated with this are, number one: Implement learner performance dashboards that facilitate transparent sharing of performance information.

And I think the keyword there is transparent. Align admissions and selection processes with commitments to DEI and improving health equity. Again, keeping the long game in mind.

Using holistic review in admissions, hiring, promotion, and selection processes. Provide faculty on selection committees with regular training on managing harmful biases. Not just a one-time thing, but ongoing. And access the data to assess the processes, and lastly, share and utilize normative performance information only in accordance with each assessment tool's intended purposes.

And moving on, then, to recommendation number five. All members of the medical education community, and this includes everyone who leads, works, and/or learns in medical schools, academic health systems, medical education associations, professional societies, accreditation and assessment organizations, licensing and certification bodies, as well as government regulators, must commit to work toward achieving fairness and equity in learner assessment. Much of the work required to shift medical education toward fair and unbiased systems of learner assessment should be done together with leaders, administrators, faculty, and learners within institutions that comprise and contribute to medical education's learning and work environments.

Further, redesigning assessment systems to align with the mission of achieving DEI and improving patient care and outcomes also requires collaboration across these institutions and the entire field of medical education.
Action steps associated with this recommendation number five are: Hold accrediting organizations and leaders accountable for examining their roles and the roles of their organizations in fostering and perpetuating harmful biases and unfair learner assessment.

Require the leaders of UME and GME institutions to demonstrate policies and procedures to achieve and sustain equitable assessment.

Require assessment and accreditation organizations to include specific requirements for achieving equity and avoiding harmful bias in learner assessment, and lastly, require licensing and certifying bodies to demonstrate equitable processes.

Number five: Develop systematic strategies for incorporating patient and family experiences and outcomes data into learner assessments. Promote collaboration and use shared best practices, tools, and strategies for equitable assessment.

Make funding contingent upon demonstrating commitment to equity in learner assessment. Make, commit, and share and distribute funding to support research that advances equitable assessment.

I will turn it back over to Holly.

>> Thank you, Lou, and thank you, Karen. That's a lot of information that you both just shared with all of our listeners. And I want to remind everyone who is joining us for this webinar that you can read the commissioned papers and these recommendations with the action steps in whatever detail you would like, in this supplement to Academic Medicine, published this month.

So I do recognize that we have covered a lot of information. We do want to get to your questions, and a number of you have submitted questions in advance of today's webinar. And we also have questions that have been submitted during the course of the webinar.

So consider the supplement a resource to you. But right now, I'd like to turn this back to Peter, to begin putting the questions in front of us. Peter?

>> Thank you, Holly. As Holly indicated, there are several questions that were submitted in advance, and we're also seeing questions coming in through the Q and A function. As a reminder, please use that function to pose questions of the panelists, and we will do our best to get to all the questions that have been asked of us, both prior to this and today.

The first question to the panelists is this: What important lessons should front line clinical faculty take from these recommendations and operationalize in the clinical learning environment?

>> Great question. Karen, would you like to take that one?

>> Yes. Thank you. So we have been discussing how equity and assessment requires a systems approach. But what about the front line clinical teacher who isn't maybe charged with designing the whole system?
Equity and fairness in assessment require commitment to those values in all of this work. So the individual teacher would be thinking about: How do I first set the learning climate in which students and residents will be working with me?

How do I promote psychological safety? How do I go about knowing my learners’ names? And something about them? Inviting their feedback and discussing my feedback? Making the environment one in which all learners will feel that they belong and can contribute?

Another step for a front line clinical teacher would be: Participating in training about bias in assessment. No one short training will solve that issue, but bringing to awareness: What are my own implicit biases? Taking an IAT, an implicit association test, discussing with colleagues, often, divisions or departments will be offering trainings on that recognition of one's potential biases -- is a helpful starting point.

And then advocating for, participating in training about how to apply those lessons in written evaluations to avoid some of the biases that arise when learners of different backgrounds are systematically scored differently or described differently with narrative comments.

Those would be my recommendations for front line clinical teachers.

>> That's a great start, Karen! Thank you very, very much. Peter, what's next?

>> Yes, this next question relates to the recent decision by the Supreme Court. How do you envision the Supreme Court's decision on affirmative action affecting the role of bias in medical education, and do you have any recommendations on how to support diversity, equity, inclusion in a race-neutral way to achieve our goals?

>> Well, that's definitely the question of the hour in a very real sense. And just before the webinar started, we actually had a chance to talk among ourselves a little bit about this.

So Lou, would you be willing to share some of your thoughts?

>> Absolutely. I think those who believe will find a way. And that's a very general statement. But the point of the matter is: Students preferred admission at entities both private and public to use race as a criterion in which they are admitted. This ruling undermines the fairness in our nation.

We had states that had a preview of this. Here in Ohio, we had senate bill 83 and in Michigan they had prop 2. And they had creative ways that were found in each of those states to still achieve the goal of getting qualified applicants across the range of diversity.

And so I think there are academic institutions in states whose practices can be used as a model for other states trying to maintain the North Star.

>> Thank you, Lou.
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>> The next question comes from a learner's perspective. How can we rebuild learner trust in assessment and engage learners as partners in assessment?

>> Oh, I love that question. Trust is an issue at every level of our society right now. And I especially respect when that question comes from a learner. So... Lou? Would you like to try that?

>> Absolutely. I think... Growth mindset is critically important in any learning environment. And trust is one of the ingredients for that to occur.

If a learner knows that we are committed to keeping our Match Day promises with them and use assessment for learning, they are much more likely to be engaged in that space.

And at our institution, we've really had some great successes with that. And so, again, number one: Making sure that they know what our motivation is. And what that information is gonna be used for. And also making sure, number two, that we are involving them in co-production. As was mentioned earlier. In assessment tools. And how we help them to understand exactly what that tool and data is going to be used for.

>> Thank you, Lou. I would just add, in that whole spirit of co-creation and co-production, checking in regularly about how are they experiencing the assessment process. I know that when I've asked that question of learners, I always learn something I wasn't expecting.

In ways that involve perception and experience. So I think keeping the communication channels bidirectional are very important. And I think we can all learn a lot.

>> Thank you. This next question gets at the intersection between competency-based approaches and assessment. There is a large push for competency-based approaches in all levels of medical education.

How do fair and equitable assessments align with competency-based assessments?

>> Great question. Karen, are you willing to take that one?

>> Sure. Competency-based medical education, implemented well, I think, can help with achieving our aims of fair and equitable assessment. So CBME is more than just having a list of competencies and saying that that frames what you do.

Competency-based medical education is a whole approach to design of the curriculum, including the approach to assessment. So things that would be encompassed within CBME, that would help with fairness and equity in assessment, would be: Transparent outcomes-based expectations, assessing learners against criteria instead of in comparison to each other, as Lou was showing in her slide.

Engaging teachers with learners, and together supporting that learner and their progress. And emphasizing feedback and formative assessment as an important part of the assessment process. So not saving it all up to the end, to that high stakes moment.
Another way that CBME helps is around the role that diverse learners play in clinical spaces. At our institution, we've taken a deep dive into the concept of patient advocacy, and what it means to be a trainee and provider who is spending time with patients, really understanding their experience and their family's experience, and maybe sharing some similar background that makes that relationship particularly strong.

So CBME, with its emphasis on all competencies, including patient care and communication, is helpful to avoid overweighting performance based on medical knowledge, which might -- for structural reasons -- put some learners at a disadvantage.

>> Thank you, Karen. And thank you for bringing up the important perspective of patients and families.

>> Holly, this next question gets at the effect that bias has on the diversity of the medical profession. We've seen data and evidence from the ACGME that residents who are underrepresented in medicine are disproportionately dismissed from programs.

How can these recommendations be utilized to minimize this bias, which is impacting the diversity of the profession?

>> Well, thank you very much for that question. I think we have talked many times about the fact that we can have a holistic review process that invites individuals to join our profession by being admitted to our medical schools.

But if we do not similarly have a holistic way of assessing people's progress, throughout medical school, residency, and fellowship, we are potentially creating more harm and missing out on the real opportunities to diversify the profession, long-term.

And so thank you for the question. And Lou, I wonder if you'd like to help answer that.

>> Absolutely. I mean, this is horrific data. I'm grateful for it, because really, that gives us additional blocks in our foundation for ongoing change. I'm a huge Cotter fan. So looking for sustainable change, the first three steps, are creating a climate for change. And I think society writ large has had a change in climate. With the death of George Floyd, and a number of other things that have occurred.

And then more specifically, that's occurred within medicine as well. We know that patients who are cared for by physicians with the same ethnicity do have better health outcomes than otherwise. And better health outcomes include life expectancy, and includes morbidity and mortality. So what more urgent issue could there be in medicine than these?

And then more specifically, that's occurred within medicine as well. We know that patients who are cared for by physicians with the same ethnicity do have better health outcomes than otherwise. And better health outcomes include life expectancy, and includes morbidity and mortality. So what more urgent issue could there be in medicine than these?

So action steps one through three -- the recommendations in one through three, that Karen just went through -- those action steps can definitely be put into play for sure.

And I think also step 5, which is for me one of the most important steps, and that's empowering action, is important. And so when I think about that, I think about the role of accrediting bodies, setting expectations with accountability as part of a successful strategy.
And so again, engaging our accrediting bodies, our certifying bodies, in this, and setting expectations.

>> Thank you, Lou.

>> This next question gets at detecting bias. How would a clerkship director know if a particular teacher were biased?

>> That’s a great question. And I think a lot of clerkship directors and program directors are asking themselves that question on a regular basis.

And Karen, I think I’ve heard you talk about some ways in which you have tried to get at the answer to that, with data. Do you want to talk about that?

>> Sure. I think informally, the efforts that you make to create a positive psychologically safe learning environment are helpful. So would a student feel comfortable talking with a clerkship director or a site director or would a resident feel comfortable coming to someone if they thought that they were observing bias or experiencing it personally?

For some learners, that opportunity to have a conversation with those individuals, or maybe a trusted, supportive person who’s outside the role of running an education program would be available and be better suited to take in that information in a way that the learner would feel comfortable with.

Most of us have reporting systems now where learners provide some rating of their teachers. So that’s another place where you might ask about this information, or even if you are just asking: What are the strengths and growth areas for this teacher?

Is someone in your program evaluation unit reading those comments carefully to find any evidence of teachers who are biased or demonstrating discrimination? It might only be one or two comments. You don’t want to overlook those, because the average rating for that teacher seemed okay.

So using the data that you already have is very important. And making sure you’re reading it carefully for the opinions of people who might only be small in number, but having biased learning experiences.

And then I think a next step would be to look at the design of the way that you collect information about teachers and about the learning environment. Are you asking the right questions? At the medical school level, we’re attuned to mistreatment, because of LCME, but there might be other questions we would want to ask about bias, about equity, about inclusion.

To gather the information that we need to continuously improve our learning environments.

>> Thank you, Karen.

>> This next question asks: Are there better practices, especially medical student performance, that can be used within the medical student performance evaluation, to help provide better resident selection information?
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>> Oh, well, that's a question of the moment. As residency selection will soon be getting underway yet again. Lou, you're very much on the front lines with that. Do you want to comment on that?

>> Yes, absolutely. Thank you for that question. We actually had a plenary panel discussion on this at the annual NBME meeting earlier this year. We know from the article in Academic Psychiatry in 2021 that assigning value to lived experiences, leadership, community, distance traveled, and the emphasis on scores actually aids in the selection of qualified underrepresented in medicine learners.

In fact, relative to traditional, holistic review significantly increased the odds of underrepresented in medicine applicants for resident interviews with a holistic odds ratio of 3.5 versus a holistic odds ratio of 0.84. So again, putting in a plug for holistic review, and doing it with the utmost sincerity and engagement, I think, is critically important.

>> Yeah. Karen, I don't know if you want to add anything to that. When you think about what goes into the MSPE, are there other data points or other ways in which to convey information to residency programs, beyond what we're already doing?

>> Well, I think some schools have presented competency-based information, for example. Something about a learner's competency trajectory or their achievement of expected competencies. We discussed earlier in the webinar the risk of doing that for the purpose of providing normative comparisons to the class, because we're not necessarily looking for the learner who got there fastest, or got to a higher point,

if we don't know that that higher point represents that they will do something differently in residency than their colleague. The holistic review approach would encourage us to not rely on any one tool to give the quick, easy answer, but rather encourage us to look at a variety of information sources in making those decisions.

And a lot of the pilots that programs have done have also shown that it matters what you look at when. For example, do you look at a licensing score first? As a screening tool? Or do you look at it at the end, after you've reviewed other information, to make sure that that learner meets whatever minimum criterion you think is important.

So the details of how you use this information is also very important.

>> Thanks for mentioning that, Karen. That point hadn't come up yet. So I appreciate that.

>> This next question is along the lines of professional development. The panelists mentioned the importance of professional development and the impact of bias and mitigation. Are there strategies that you know or think have the best quality of evidence of its value?

>> Okay. Very good question. Karen, do you want to take that? I think that in many ways fits with your day job.
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>> Mm-hm. Yeah. I think the literature looking at the ways to do training around diversity, equity, and inclusion, avoiding bias, promoting equity suggest that it's a multistep process, and something that probably needs to unfold over time for people.

Starting with bringing awareness to what might be your own biases, your own ways of thinking that have been shaped by living in our world. That's where implicit bias training or implicit bias recognition and management comes in. Creating a training space where people can reflect upon their results of an IAT or their other experiences with privilege, with bias, with discrimination.

Trainings typically will advise participants that the process can be uncomfortable, and that we should expect discomfort. If you're not uncomfortable, are you in a position to change something about how you're thinking and behaving? Maybe not as much.

And then translating that into transformative actions. So the literature on implicit bias recognition and management suggests that it's really a process that an individual undergoes to think and act differently.

I'd love to hear, Lou, if you want to add anything to that.

>> No, I don't have anything. That's excellent. The process part is important. I know for myself, I do my implicit bias training and assessment on a semi-annual basis, actually.

And I try not to make any assumptions about how well I'm doing. And I think progress is important.

>> Thanks.

>> Thank you. This next question is actually quite simple, but has a very long answer. How is equity different from fair?

>> Ah, okay. Very important question. Lou, do you want to take that?

>> Absolutely. So I will just -- since we're sort of emerging from a pandemic, I'll just use a vaccine example. And I'm gonna step back a little bit and add equality in that equation as well. So equality would be that everyone gets free vaccines.

With this, some still may not have access to that free vaccine. With equity, everyone gets vaccinated. It's outcomes-based. And the appropriate accommodations are made to make sure that that outcome is achieved. Fairness would be: There are no hecklers or vaccine deniers at the vaccine site.

If we were to translate that into something to do with assessment, maybe equality is everyone gets to take the test for the same price. Equity would be everyone is provided what they need to do their best on the test. Whether it's additional extra time, wheelchair accommodations. Fairness would be the test and testing environment do not have any discriminatory tenor to them.

>> That was a very comprehensive answer. Thank you for that, Lou. I appreciated the analogy as well.
This next question is: We often worry that learners entering a medical location trained on a performance mindset from their assessment experiences along the pathway -- and to that end, how can we share these recommendations with undergraduate and other educators? Beyond medical education?

That is a wonderful question. And I don’t even remember, but Lou and Karen, you may remember whether or not we considered this at the conference.

You know, how far back into the educational continuum did we go? And to what extent do we know: Does the growth mindset emanate within our high schools and undergrad colleges and university experiences, prior to coming to medical school?

Karen, what do you think? I’m gonna ask both of you to way in on this.

Yeah. So we have found in training our faculty that actually faculty with children in, like, K through 8 education are hearing a lot about growth mindset through their kids’ schools. And the schools are coaching the parents on things like praising effort and praising strategies instead of praising kids around using language that would convey fixed trait mentality.

So I think that there is increasing understanding of the value of a growth mindset. In the education system. There’s no question that the process of getting into college and then even worse getting into medical school is one that rewards performance metrics. So… Maybe some of that is on us to think about the hypercompetitive process of getting into medical school.

We find, in our system, that just saying that out loud to our early medical students is helpful. Like, how is assessment different in medical school at this institution than it was in college?

And we also look for ways that we might be inadvertently conflicting ourselves. Like, if you say we value a growth mindset, but we’re going to showcase the student who gets the top score with some award, then you are potentially contradicting your own message.

So trying to build the culture that you want to see in the medical school is possible, even if learners came in experiencing something different, previously.

Great. Well, it sounds like it’s not only possible, but in your examples, intentional as well. So that’s helpful. Lou, what about you?

Yeah. So my mom was a K through 12 teacher, a reading specialist. And growth mindset was sort of inculcated through all of that space. So very familiar with that. One of the things -- I don’t think we did discuss that in detail at the conference.

But I will say as a DIO, I do end up going ahead during orientation. We have an entire hour on mastery adaptive learning and growth mindset. And we have to make sure that the receivers of those new learners are also privy to what those things mean. So we level set, we make sure everyone understands that we are really committed to their best education and commitment to equitable assessment systems.
And that they understand what growth mindset is, and that we really are here for their best outcome.

>> Oh, that's very interesting. Thank you both. And thank you for that question.

>> This next question asks: Should we eliminate all grading for medical education and provide only formative assessment, and then a determination of competence? And if so, how will the UME/GME transition be managed?

>> Okay. Very important question. And I think I'm gonna invite both of you to comment on this as well. Because, Karen, this is how you, I think, spend a good deal of your own professional thinking and writing, and then Lou, being on the receiving end, so to speak, of the medical students joining residency programs, it would be terrific to hear both your perspectives. So Karen?

>> That is a great question. I think it can be helpful to think about systems where what was described in the question are happening. For example, in residency, there are no grades. And colleagues in other countries will tell us in the United States how surprised they are that the transition from UME to GME is so high stakes and so fraught in this country.

So we may be able to learn from looking beyond the usual go-to people, in thinking about this question. From the perspective of the conference and the conference proceedings, we would say that you need to look at the purpose of that assessment, and is the assessment information being used for the intended purpose?

Is the assessment data that's being generated being generated using processes that are fair and equitable? Are the data that are resulting from the assessment system putting some groups of learners at an advantage over others?

And how is all of that contributing to the learning environment that you're achieving? And contributing to the mindset of the people within that learning environment?

Schools have published, including our own school, but also others, that grade assignments are inequitable. Because the data used to generate those grades are inequitable.

So if you find that, you are confronting your values, and you need to make a decision about if you're going to continue that system. So if we didn't have grades, what do we do about residency selection? I think that the recommendations from the Coalition for Physician Accountability and the pilots that are happening with other ways of doing the residency selection process are definitely needed.

And no one pilot, probably, will give all the answers. But I think the interventions around preference signaling and other ways of managing data to make committee work feasible at the selection level are helpful. And I think Lou has more to say to those points.

>> Yeah. So this is actually very timely. Because I had the privilege of being at a conference about 7 days ago. It was the UME to GME transition innovation conference. Where the AMA has convened a number of different entities on both sides of the aisle. UME and GME.
And I think one of the things that we discussed is the fact that if we're looking at competence-based medical education, the transition actually is not necessarily a single point in time. We may have time variability that becomes part of that. And therefore the transition is a range of dates and times. And over time, we might find that different learners are transitioning at different times.

So I think we really do need to make sure that we understand that it is really a continuous process. Even though we have sort of this very finite UME and GME space. It really is a continuous learning process.

And again, summative -- you know, does that come at the end of residency, as opposed to the end of medical school? And that's a very scary thought, but do we continue formative all the way through medical school and formative into residency? It's something to consider.

Future thoughts.

>> Yeah. Well, I think... To some extent, we really do, as a profession, need to speak with one voice, ideally.

And to have views that are aligned at the undergraduate level and at the graduate medical education level, around assessment, professional identity formation, and so on.

So -- great question, again, and terrific answers.

>> Holly, we're approaching the top of the hour. That, unfortunately, has to be our last question, as we're running short on time. And we should move to the wrap-up portion of this webinar.

>> Okay. Well, thank you, Peter, and Karen, and Lou, thank you very much for those answers.

Okay. I would like to begin to wrap up today's webinar by inviting all of our listeners to know that there is a podcast series that is also going to feature the work of this conference, the recommendations, the action steps that you heard about today.

I also want to specifically thank doctors Hauer and Edje for their time and incredible thinking and creativity around not only the conference planning and their commissioned papers, but their participation here today.

I also want to thank all 50 of our conferees, because this was a real challenge to undertake, and obviously the work is not yet done.

But I think we've put a stake in the ground around our recommendations and action steps.

I also want to thank today's participation by our designated interpreter, performing the live captioning.
And you will have an opportunity to hear more from those who have authored our commissioned papers, specifically that are part of that Academic Medicine supplement, as part of the podcast series from Academic Medicine, and we are expecting the podcast series is going to drop in early September.

Peter, I'd like to turn it back to you for closing remarks.

>> Thank you, Holly. For any questions we were unable to take during the webinar, or additional questions, feel free to contact us at info@MacyFoundation.org, and we will follow up with you.

You can find the webinar recording from today's session, the slides, and the transcript on our website. www.MacyFoundation.org. And that will be posted within the next week. Where you may also sign up for email alerts from the Macy Foundation.

Thank you to all of our panelists today for joining us. Thank you to all of the attendees for being part of this session with us, and have a good day.