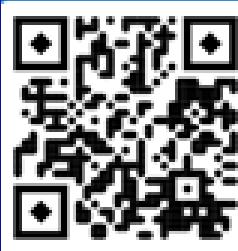




The DRIVE Initiative: Diversity, Representation, and Inclusion for Value in Education

Addressing **Bias** in the Curriculum



Our intent is to promote inclusive learning while avoiding bias.

At UMass Chan, if you identify opportunities for addressing bias or improving representation in the course content or instructional delivery, we encourage you to share them with either:

- Your course faculty or leadership
- The Drive Initiative at DRIVE@umassmed.edu or you can scan the QR code to send feedback **anonymously** to DRIVE

Disclosures

We have no actual or potential conflict of interest
in relation to this presentation

Learning objectives

By the end of this session, learners will be able to

- Recognize **six categories for improvement** of diversity, representation and inclusion in our teaching included in the DRIVE Appraisal tool
- **Locate** and **apply** the DRIVE Curriculum **Appraisal Tool** to teaching materials

Foundational definitions

The DRIVE goal is to promote a representative and bias-free curriculum across our learning environments.

For the purpose of DRIVE,
we **define** bias as a preference.

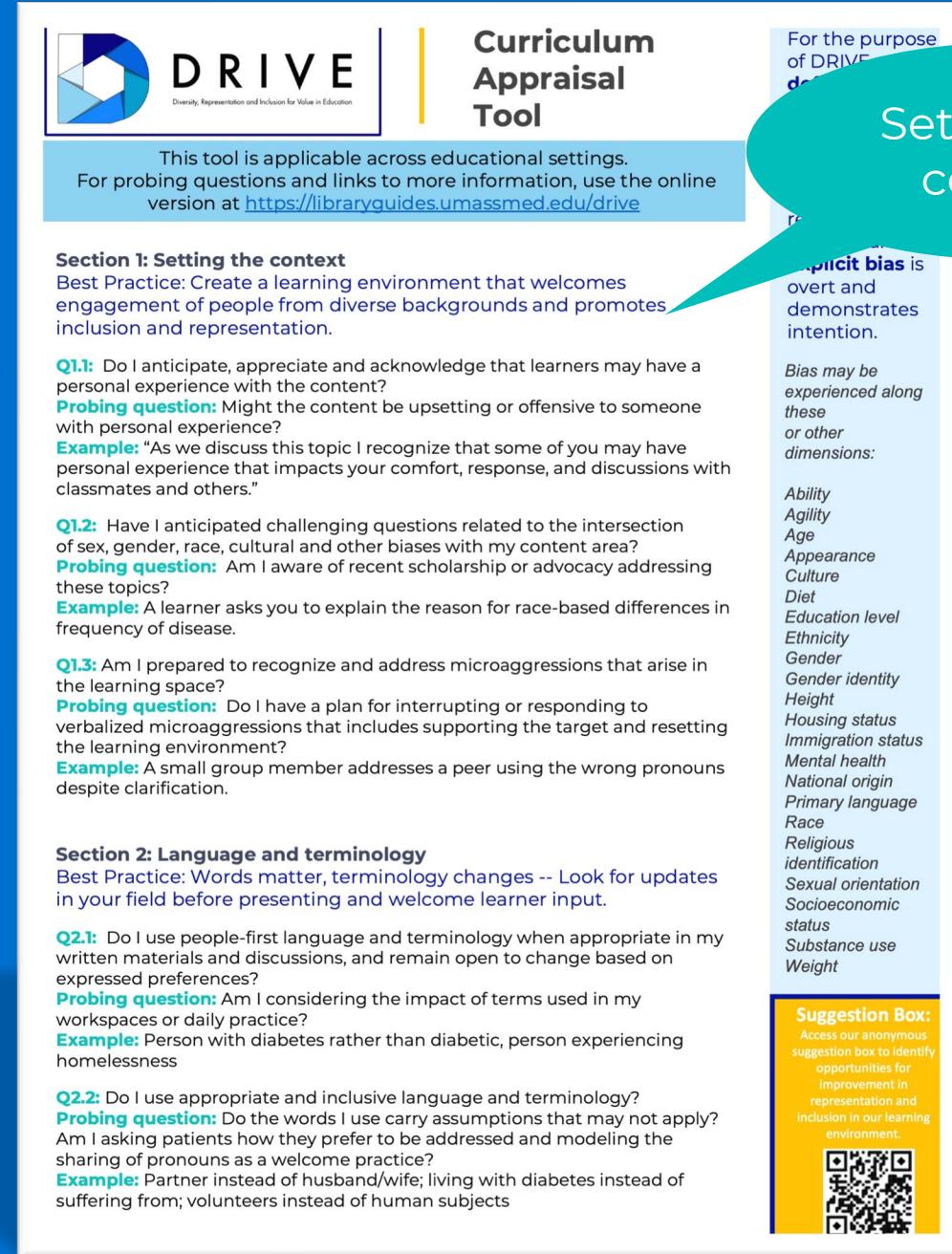
Implicit bias is an unconscious response
which can be recognized and mitigated.
Explicit bias is overt and demonstrates intention.





Organized into
6 sections each
with a best practice

Language
and
terminology



Section 1: Setting the context
Best Practice: Create a learning environment that welcomes engagement of people from diverse backgrounds and promotes inclusion and representation.

Q1.1: Do I anticipate, appreciate and acknowledge that learners may have a personal experience with the content?
Probing question: Might the content be upsetting or offensive to someone with personal experience?
Example: "As we discuss this topic I recognize that some of you may have personal experience that impacts your comfort, response, and discussions with classmates and others."

Q1.2: Have I anticipated challenging questions related to the intersection of sex, gender, race, cultural and other biases with my content area?
Probing question: Am I aware of recent scholarship or advocacy addressing these topics?
Example: A learner asks you to explain the reason for race-based differences in frequency of disease.

Q1.3: Am I prepared to recognize and address microaggressions that arise in the learning space?
Probing question: Do I have a plan for interrupting or responding to verbalized microaggressions that includes supporting the target and resetting the learning environment?
Example: A small group member addresses a peer using the wrong pronouns despite clarification.

Section 2: Language and terminology
Best Practice: Words matter, terminology changes -- Look for updates in your field before presenting and welcome learner input.

Q2.1: Do I use people-first language and terminology when appropriate in my written materials and discussions, and remain open to change based on expressed preferences?
Probing question: Am I considering the impact of terms used in my workspaces or daily practice?
Example: Person with diabetes rather than diabetic, person experiencing homelessness

Q2.2: Do I use appropriate and inclusive language and terminology?
Probing question: Do the words I use carry assumptions that may not apply? Am I asking patients how they prefer to be addressed and modeling the sharing of pronouns as a welcome practice?
Example: Partner instead of husband/wife; living with diabetes instead of suffering from; volunteers instead of human subjects

For the purpose of DRIVE, define implicit bias as:

Implicit bias is overt and demonstrates intention.

Bias may be experienced along these or other dimensions:

- Ability
- Agility
- Age
- Appearance
- Culture
- Diet
- Education level
- Ethnicity
- Gender
- Gender identity
- Height
- Housing status
- Immigration status
- Mental health
- National origin
- Primary language
- Race
- Religious identification
- Sexual orientation
- Socioeconomic status
- Substance use
- Weight

Suggestion Box:
Access our anonymous suggestion box to identify opportunities for improvement in representation and inclusion in our learning environment.



Setting the
context

Printable 2-sided
worksheet
OR
Online extended
guide with
resource links

Images and media

Section 3: Images & Media

Drive Best Practice: Utilize images and videos that invite connection, promote recognition and improve diagnosis across skin tones and physical features.

Q3.1: Do the images or media in my materials represent a range of characteristics?

Probing question: Have I illustrated the ways in which the condition may present differently in patients with a variety of characteristics such as skin tone, body habitus, hair?

Example: Provide more than one illustrative image.

Q3.2: Could the images or media that I am using be perceived as promoting a stereotype?

Probing question: Do I ensure that tables, graphs, and images do not reinforce unintended bias?

Example: Using multiple images when discussing specific conditions may reduce stereotypes.

Section 4: Research and References

Drive Best Practice: Select research that is inclusive in the populations being studied and the individuals directing the research.

Q4.1: Is race defined in the paper appropriately as a social construct?

Probing question: Am I able to describe the role of genetics versus socioeconomic factors?

Example: Recognition of race as a surrogate for socio/politics and not differences in biology has many rethinking the use of race in clinical calculators and the role it should play when we share demographic data.

Q4.2: Who are the researchers whose work I am citing?

Probing question: Am I including a variety of perspectives, research traditions and the full international literature on the topic? How are the people being studied represented in the research design process and authorship?

Example: Citing literature from global journals advances the state of the science, while use of local data can advance understanding.

Section 5: Population and Patient Cases

DRIVE Best Practice: Ensure that cases lead the learner to question rather than reinforce bias/assumptions.

Q5.1: Do I include demographic characteristics (like race or ethnicity) for social context instead of as biological factors or physical findings? Am I clear on how inclusion of relevant social variables supports my learning objectives?

Probing question: Do my teaching examples encompass and normalize a range of patient characteristics similar to the mix in a diverse community like ours in Worcester?

Example: Including demographic or social data only when medically relevant may lead to over-association.

Q5.2: Do I include relative impact of cultural or socioeconomic determinants of health on case pathology?

Probing question: If I connect a demographic with a medical outcome, am I explaining the causal pathway?

Example: When presenting a case associating asthma rates with racial categories, do we explain the social and environmental factors contributing to this association? A woman of color with high blood pressure may be suffering from chronic stress from structural racism.

SECTION 6: CLOSING THE LOOP

DRIVE Best Practice: Recognize that change is iterative; utilize evaluation data and feedback to drive continuous quality improvement.

Q12: Am I gathering and examining evaluation data from all sources for evidence of improvement?

Probing question: Am I aware of all the sources of feedback available to me? Reach out to DRIVE if you don't know how to address the feedback. Content experts are available to help.

Example: Contact course or program leaders to request formal evaluation data and informal feedback relevant to diversity and inclusion; incorporate feedback in ongoing development and improvement.

Population and patient cases

Research and references

Closing the loop



Section 1: Setting the Context

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Best Practice: Create a learning environment that welcomes engagement of people from diverse backgrounds and promotes inclusion and representation.

Q1.1: Do I anticipate, appreciate and acknowledge that learners may have a personal experience with the content?

Probing question: Might the content be upsetting or offensive to someone with personal experience?

Example: “As we discuss this topic I recognize that some of you may have personal experience that impacts your comfort, response, and discussions with classmates and others.”

Q1.2: Have I anticipated challenging questions related to the intersection of sex, gender, race, cultural and other biases with my content area?

Probing question: Am I aware of recent scholarship or advocacy addressing these topics?

Example: A learner asks you to explain the reason for race-based differences in frequency of disease.

Q1.3: Am I prepared to recognize and address microaggressions that arise in the learning space?

Probing question: Do I have a plan for interrupting or responding to verbalized microaggressions that includes supporting the target and resetting the learning environment?

Example: A small group member addresses a peer using the wrong pronouns despite clarification.



Setting the Context: Best Practice

“Create a learning environment that welcomes engagement of people from diverse backgrounds and promotes inclusion and representation.”



Setting the context **questions:**

Q1. Do I anticipate, appreciate and acknowledge that learners may have a personal experience with the content?

Q2. Have I anticipated challenging questions related to the intersection of sex, gender, race, cultural and other biases with my content area?

Q3. Am I prepared to recognize and address microaggressions that arise in the learning space?



Example from a UMMS **learner**

“

I spent three years prior to med school focused on PrEP research.

When I commented on the inaccuracies presented, I was dismissed.”

Discussion
Prompt

Q: How might you introduce topics in a way that allows for learners to share existing knowledge?

Example of a Curriculum Appraisal Tool question:

Am I prepared to recognize and address microaggressions that arise in the learning space?



What are 'microaggressions'?

“ Microaggressions are the everyday verbal, nonverbal, and environmental slights, snubs, or insults, whether intentional or unintentional, which communicate hostile, derogatory, or negative messages to target persons based solely upon their marginalized group membership. ”

Microaggressions in Everyday Life: Race, Gender, and Sexual Orientation - Derald Wing Sue Ph.D.



Microaggressions: Setting the context

Q: What are some of the ways **you** can help set the tone and space to preempt potential microaggressions and harm?

Examples:

- Give an opening statement
- DRIVE disclosure slide
- Advocate for appropriate school-wide policies and procedures i.e. event and exam timing around religious holidays



Open Discussion



Section 2: Language and terminology

Section 2: Language and terminology

Best Practice: Words matter, terminology changes -- Look for updates in your field before presenting and welcome learner input.

Q2.1: Do I use people-first language and terminology when appropriate in my written materials and discussions, and remain open to change based on expressed preferences?

Probing question: Am I considering the impact of terms used in my workspaces or daily practice?

Example: Person with diabetes rather than diabetic, person experiencing homelessness

Q2.2: Do I use appropriate and inclusive language and terminology?

Probing question: Do the words I use carry assumptions that may not apply? Am I asking patients how they prefer to be addressed and modeling the sharing of pronouns as a welcome practice?

Example: Partner instead of husband/wife; living with diabetes instead of suffering from; volunteers instead of human subjects

Language and Terminology: Best Practice

“Words matter, terminology changes -- Look for updates in your field before presenting and welcome learner input.”

Language and terminology **questions**:

Q1. Do I use people-first language and terminology when appropriate in my written materials and discussions, and remain open to change based on expressed preferences?

Q2. Do I use appropriate and inclusive language and terminology?

Example of a Curriculum Appraisal Tool question:

Do I use people-first language and terminology when appropriate in my written materials and discussions, and remain open to change based on expressed preferences?

- Some commonly used terms are **good-to-go**
- Some should only be used according to the **personal preference of members of that community**
- and some terms should **not be used at all**

Person with hypertension



Person experiencing homelessness

Person with substance use disorder

Diabetic

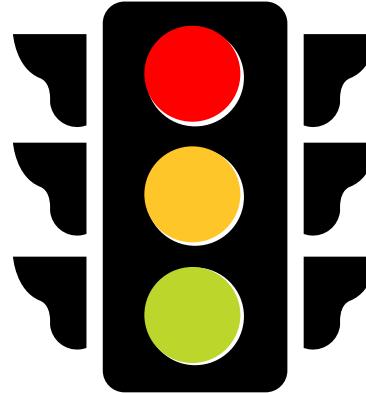
Disabled

Alcoholic

Transsexual

Frequent-flyer

Wheelchair bound



What 'color' would you make these terms?

Hearing Impaired

Person with hypertension

Normal

Stroke victim

Developmentally delayed

Learning Disabled

Deaf

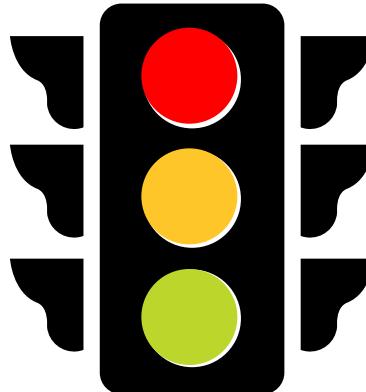
Person with autism

Handicapped

Non-compliant



Relapsed ₂₁



What 'color' would you make these terms?

Hearing Impaired

Person with hypertension

Normal

Stroke victim

Developmentally delayed

Learning Disabled

Deaf

Person with autism

Handicapped

Non-compliant



Let's Practice – where can the language be improved?

• Management of Addiction

- Medication Assisted Treatment (MAT)
 - Methadone – dosed daily, federally regulated, can't have dirty tox so
 - Buprenorphine – can be dosed by PCP, patient can take this home
- Naltrexone
 - Once monthly shot to reduce cravings
 - Drugs addicts and alcoholics can both use this medication
- Counselling Services/Peer to Peer Support
 - 12 step programs
 - Recovery coaches

A combination of these treatments is very effective in helping curb a drug habit!



- Management of Addiction -> Substance Use Disorder
- Medication Assisted Treatment (MAT) -> Medication for Addiction Treatment or Medication for Opioid Use Disorder (MOUD)
 - Methadone – dosed daily, federally regulated, can't have **dirty** -> positive tox screen
 - Buprenorphine – can be dosed by PCP, patient can take this home
- Naltrexone
 - Once monthly shot to reduce cravings
 - **Drugs addicts and alcoholics** -> person with alcohol use disorder or opioid use disorder or polysubstance (alcohol and opioid) use disorder can both use this medication
- Counselling Services/Peer to Peer Support
 - 12 step programs
 - Recovery coaches

A combination of these treatments is very effective in helping curb a **drug habit** -> Substance Use Disorder



Example from a UMMS **learner**

“

Terminology is pretty inconsistent;
core faculty may be using
appropriate terms but then visiting
lecturers don't. The clinical years
are even worse.

”

Discussion Prompt

Q: How do we extend the learning to
our colleagues?



Terminology is not fixed; it changes over time:

Sex Reassignment Surgery (SRS)



Gender Reassignment Surgery (GRS)



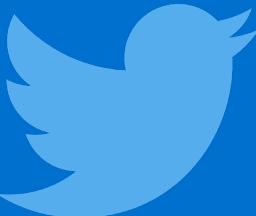
Gender Confirmation Surgery (GCS)



Gender Affirming Surgery (GAS)



How can I keep up-to-date?



- Create a culture of feedback to enable constructive criticism and lean in to learning opportunity
- Follow patient's and learner's lead.
- Consult online resources (including #medTwitter!) or peers
- Different specialty societies or groups often have updated language (i.e. UCSF – resources for care of trans individuals)
- Adopt a Growth Mindset; you will be wrong, these terms change! That is okay!



Open Discussion



Section 3: Images & Media



Section 3: Images & Media

Drive Best Practice: Utilize images and videos that invite connection, promote recognition and improve diagnosis across skin tones and physical features.

Q3.1: Do the images or media in my materials represent a range of characteristics?

Probing question: Have I illustrated the ways in which the condition may present differently in patients with a variety of characteristics such as skin tone, body habitus, hair?

Example: Provide more than one illustrative image.

Q3.2: Could the images or media that I am using be perceived as promoting a stereotype?

Probing question: Do I ensure that tables, graphs, and images do not reinforce unintended bias?

Example: Using multiple images when discussing specific conditions may reduce stereotypes.

Images and Media: Best Practice

“Utilize images and videos that invite connection, promote recognition and improve diagnosis across skin tones and physical features.”

Images and media questions:

Q1. Do the images or media in my materials represent a range of characteristics?

Q2. Could the images or media that I am using be perceived as promoting a stereotype?

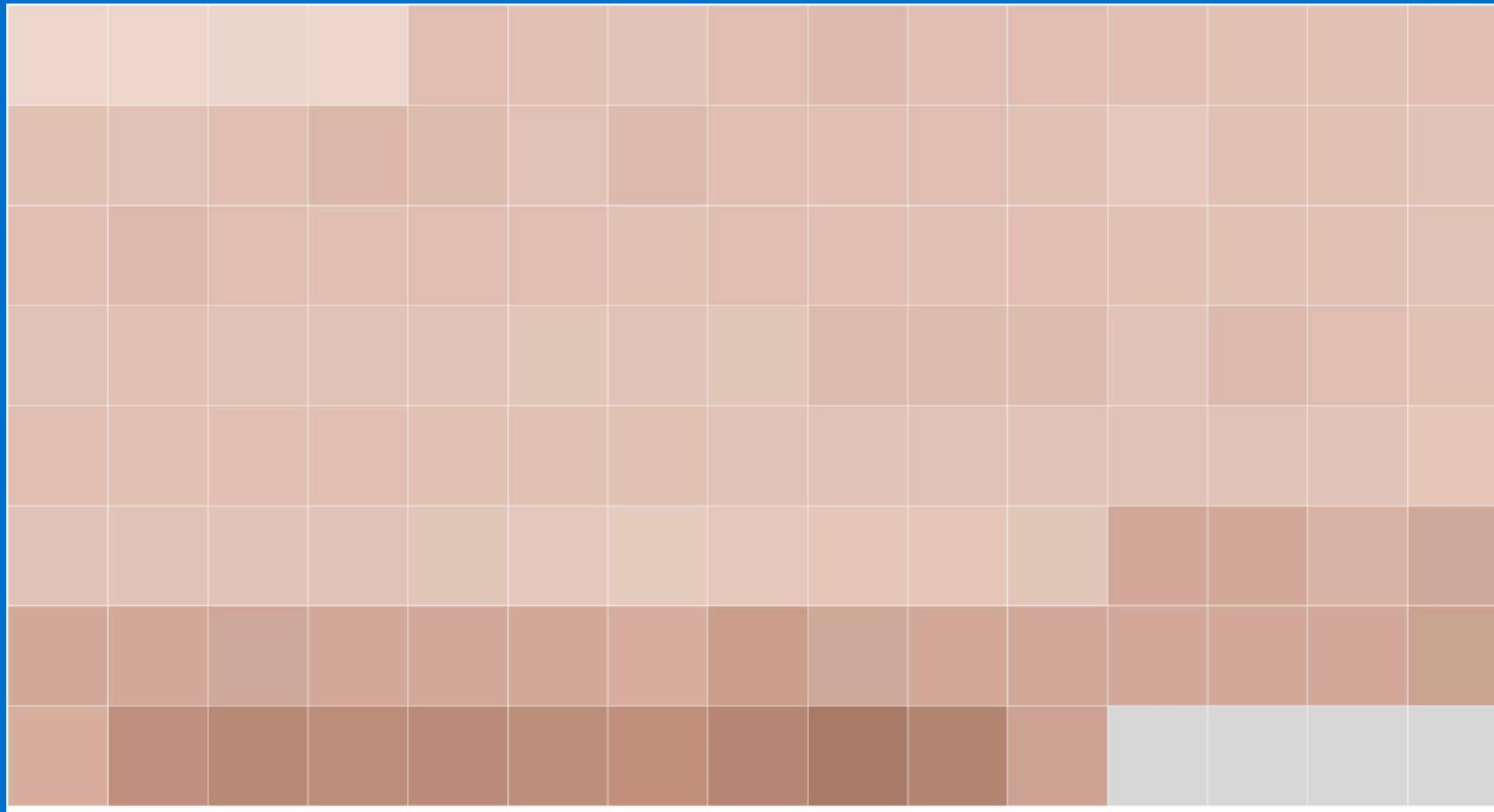


Example: Cutaneous Manifestations of COVID-19



Lester, J. C., et al. "Absence of images of skin of colour in publications of COVID-19 skin manifestations." *The British journal of dermatology* (2020).

Q: What might be the impact of an image like this?



Lester, J. C., et al. "Absence of images of skin of colour in publications of COVID-19 skin manifestations." *The British journal of dermatology* (2020).



Example from a UMMS **learner**

“

People come in a diversity of shapes and sizes, yet when we are shown images of "healthy" people it is predominately people with a specific body shape, and when we see images of those with conditions like diabetes we tend to see stock photos of a specific body size.

It unnecessarily pathologizes larger bodies, and adds to the bias that many health professionals unknowingly have towards patients of different sizes.

”

Discussion
Prompt

Q: How might you address the concerns
of this learner?

Having trouble finding suitable images and videos?

Resources: Images and Media

- [VisualDx](#) – Image database of clinical findings; searchable by gender, complexion, age, etc.; license includes access to images; images can be used for educational purposes
- [AccessMedicine](#) - Database of core textbooks in medicine; license includes access images; images can be used for educational purposes
- [Flickr](#)
- [Google](#) - Images for with licensed for re-use
- Other resources with Creative Commons license

• [Positive Exposure Image Gallery](#)
POSITIVE EXPOSURE promotes a more inclusive world through award-winning photography, films, exhibitions, lectures and educational programs. For more than 20 years, POSITIVE EXPOSURE has collaborated globally with nonprofit organizations, hospitals, medical schools, educational institutions and advocacy groups to promote a more equitable and compassionate world where individuals and communities at risk of stigma and exclusion are understood, embraced and celebrated.

•  [Mind the Gap: A handbook of clinical signs in Black and Brown skin](#) 

A blurred background image of a group of people in a meeting setting. Several individuals are visible, some wearing headsets, suggesting a video conference or a workshop environment.

Open Discussion



Breakout rooms

Choose the breakout room topic based on what is most applicable to your education materials

- Room 1: **Research and References**
- Room 2: **Population and Patient Cases**
- Room 3: **Closing the Loop: Feedback and Evaluation**



Section 4: Research and References

Section 4: Research and References

Drive Best Practice: Select research that is inclusive in the populations being studied and the individuals directing the research.

Q4.1: Is race defined in the paper appropriately as a social construct?

Probing question: Am I able to describe the role of genetics versus socioeconomic factors?

Example: Recognition of race as a surrogate for socio/politics and not differences in biology has many rethinking the use of race in clinical calculators and the role it should play when we share demographic data.

Q4.2: Who are the researchers whose work I am citing?

Probing question: Am I including a variety of perspectives, research traditions and the full international literature on the topic? How are the people being studied represented in the research design process and authorship?

Example: Citing literature from global journals advances the state of the science, while use of local data can advance understanding.

Research and References: Best Practice

“Select research that is inclusive in the populations being studied and the individuals directing the research.”

Research and references **questions**:

Q1. Is race defined in the paper appropriately as a social construct?

Q2. Who are the researchers whose work I am citing?



Did you know?

- **Race** refers to a person's physical appearance, such as skin, hair or eye color.
- **Ethnicity** refers to common cultural heritage, language, social practice, traditions, and geopolitical factors.
- **Genetic ancestry** is based on genetic/genomic data.
- Studies show that genetic diversity in humans is higher between individuals of the same race (~85%) than between races (~15%)



There are two major considerations in applying race/ethnicity categories in biomedical research

- Is race/ethnicity **valid** and **reliable** in determining individual ancestry?
 - If so, should race be considered by those who study diseases and patient responses to treatment?
- How do we **define** race/ethnicity in the context of biomedical research?
 - people usually self-report major population descriptions accurately (Caucasian, African-American, Asian, etc.), but these descriptions do not indicate genetic composition of individuals
 - Genetic analysis shows some self-identified African Americans have up to 99% European ancestry; African ancestry in the Latino population varies between 3% in Mexican Americans to 16% in Puerto Ricans.

Mersha, T.B., Abebe, T. Self-reported race/ethnicity in the age of genomic research: its potential impact on understanding health disparities. *Hum Genomics* **9**, 1 (2015). <https://doi.org/10.1186/s40246-014-0023-x>



Example from a UMMS **learner**

“

We are often presented with research during medical school but are not often provided with the context in which it was completed. Was it ethically conducted? Who bore the burden of being the study participants vs. who benefited from findings in the study?

”

Discussion Prompt

Q: How might statements like this from learners affect your teaching or your educational materials?



Open Discussion





Section 5: Population and Patient Cases

Section 5: Population and Patient Cases

DRIVE Best Practice: Ensure that cases lead the learner to question rather than reinforce bias/assumptions.

Q5.1: Do I include demographic characteristics (like race or ethnicity) for social context instead of as biological factors or physical findings? Am I clear on how inclusion of relevant social variables supports my learning objectives?

Probing question: Do my teaching examples encompass and normalize a range of patient characteristics similar to the mix in a diverse community like ours in Worcester?

Example: Including demographic or social data only when medically relevant may lead to over-association.

Q5.2: Do I include relative impact of cultural or socioeconomic determinants of health on case pathology?

Probing question: If I connect a demographic with a medical outcome, am I explaining the causal pathway?

Example: When presenting a case associating asthma rates with racial categories, do we explain the social and environmental factors contributing to this association? A woman of color with high blood pressure may be suffering from chronic stress from structural racism.

Population and Patient Cases: Best Practice

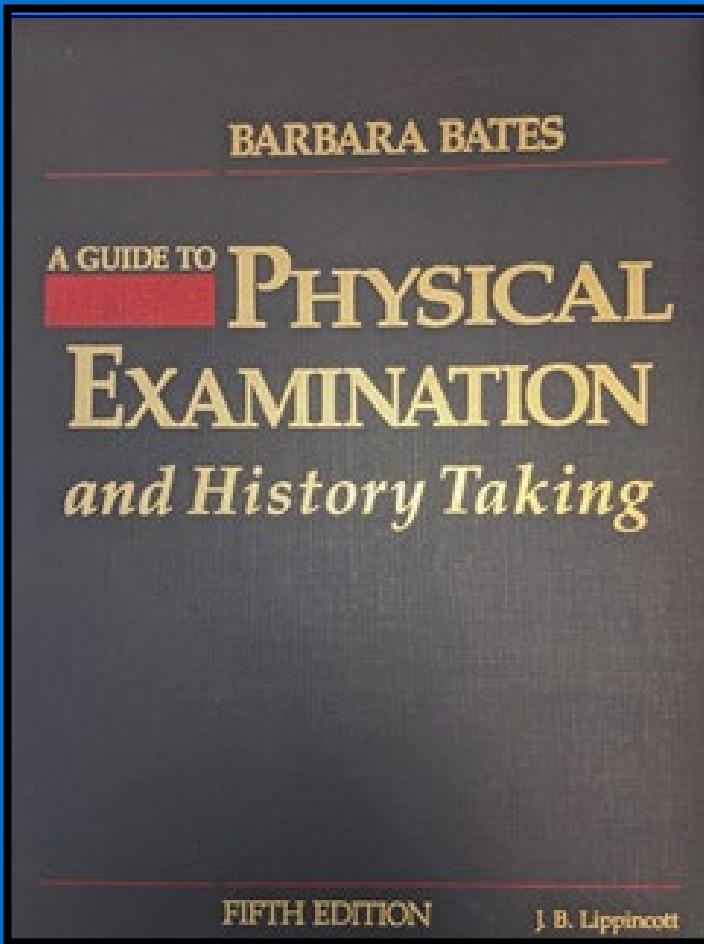
“Ensure that cases lead the learner to question rather than reinforce bias/assumptions.”

Population and patient cases **questions:**

Q1. Do I include demographic characteristics (like race or ethnicity) for social context instead of as biological factors or physical findings? Am I clear on how inclusion of relevant social variables supports my learning objectives?

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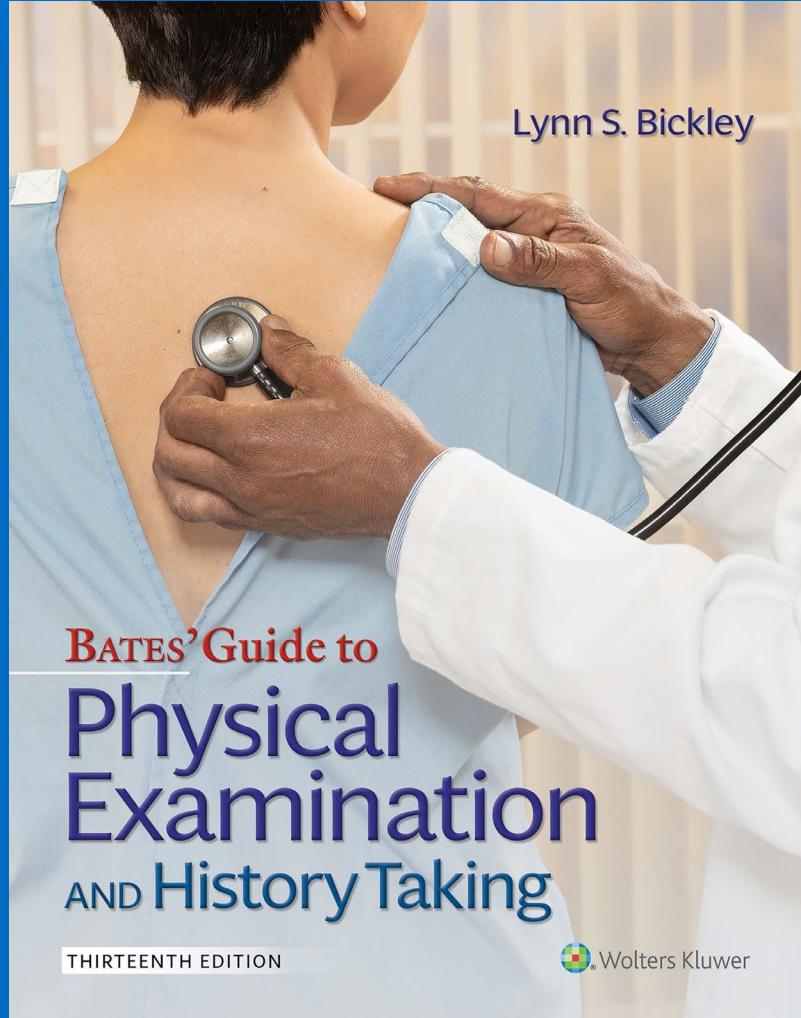
This work requires some people to UNLEARN what they were taught



Identifying data includes:

- Age
- Race
- Place of birth
- Marital status
- Occupation
- Religion

Bates 13th Edition 2020



“ Opening statements for the health history documentation provide a foundation for the reader to begin to think of possible causes for the patient’s condition. This first statement should be the CC stated within the patient’s clinical context [e.g., critical historical elements most related to the CC that hints to possible causes of the patient’s condition]. ”



Some guidelines recommend the removal of race altogether from case documentation



Q: What do you think of that?



Antiracist Clinical Case Documentation Tips

These are suggestions provided to students in the classroom to help mitigate stigmatizing language. We recommend they use utilize these principles when completing clinical case presentations (oral presentations and write-ups).

Antiracist idea: any idea that suggests racial groups are equal in all their apparent differences—that there is nothing right or wrong with any racial group

Racist idea: any idea that suggests one racial group is inferior/superior to another racial group in any way

Avoid race as a descriptor Race has no biological basis and does not belong in oral or written documentation. Use: "34-year-old who has hypertension" rather than "34-year-old African American who has hypertension"	Do not label patients hypertensive → patient with hypertension obese → patient with obesity diabetic → patient with diabetes
Use the patient's perspective no show → did not keep appointment patient admits → patient describes patient denies → patient reports no	Avoid blame "Did not refill diabetes meds" ↓ "Transportation barriers prevented patient's ability to refill diabetes medications"



Example from a UMMS **learner**

“

Beware of encouraging stereotypes...Within the LGBTQ+ context it is common to only discuss this population when talking abcut STI's.

”

Discussion Prompt

Q: What is likely to be the effect of this “stereotyping”?



Consider the limitations of each example:

- Identifying an obese individual as having a sedentary lifestyle emphasizes personal responsibility at the expense of important genetic/epigenetic, social and structural risk factors.
- Including only minority patients in cases related to blood-borne pathogens
- Using an older adult to illustrate auditory impairments when younger people may have the condition as well (concert-goers, those who work around machinery, etc).



Open Discussion





Section 6: Closing the Loop

SECTION 6: CLOSING THE LOOP

DRIVE Best Practice: Recognize that change is iterative; utilize evaluation data and feedback to drive continuous quality improvement.

Q12: Am I gathering and examining evaluation data from all sources for evidence of improvement?

Probing question: Am I aware of all the sources of feedback available to me? Reach out to DRIVE if you don't know how to address the feedback. Content experts are available to help.

Example: Contact course or program leaders to request formal evaluation data and informal feedback relevant to diversity and inclusion; incorporate feedback in ongoing development and improvement.

Closing the Loop: Best Practice

“Recognize that change is iterative; utilize evaluation data and feedback to drive continuous quality improvement.”

Closing the loop question:

“

Am I gathering and examining evaluation data from all sources for evidence of improvement?

”



What sources of feedback are available to me?

Conversations with
Students

Peer-to-Peer



Realtime Polling

End of Course
Evaluations

Class representatives

Exam and Course
Results

Zoom Chat Box

Course Director
Feedback

Instructor Feedback from Oasis

Unsolicited Emails
from Learners



How do we ensure learner feedback is addressed?

What are some of the barriers?





Example from a UMMS **learner**

“

Honestly...what's the point in feedback? It doesn't seem to be anybody's responsibility to make sure changes are made. ”

Discussion
Prompt

Q: How do you make learners aware of improvements?



Open Discussion





INDIVIDUAL CHARGE

.....

- **Complete the post workshop survey**
- Select a set of your existing teaching materials
- Apply Curriculum Appraisal Tool:
 - <https://www.umassmed.edu/dio/initiatives/drive/>
- Use online resources to dig deeper
- Engage learners – describe your changes and invite feedback
- Share successes and challenges with the DRIVE team
- Share the tool with colleagues and friends

How can you get involved with DRIVE?

Use our **library guide** at
<https://libraryguides.umassmed.edu/drive>

Reach out via email:
DRIVE@umassmed.edu

Or **visit the DRIVE Café**
Thursdays at 3, Fridays at 4
<https://umassmed.zoom.us/my/ummsdrive>
(PW= 2020)



THANK YOU

for your

ENGAGEMENT!

