

Appendix 2. Action steps for curriculum audit and reform in visual learning for preclinical medical education

- 1. Perform curriculum audit
 - Assemble a taskforce of faculty educators, dermatologists, and medical students
 - Divide learning material to review among taskforce members
 - Save each image to be scored into shared file
 - Record information on course, title of presentation, and diagnosis for each image in a standardized data collection sheet
 - Identify one reviewer to score skin color of all images and sub-reviewers to score subset of the total images for inter-rater agreement
- 2. Distribute course audit results and suggestions for improvement
 - Create "report card" of distribution of skin color in each preclinical course to make medical education faculty and individual course directors aware of current gaps
 - Share examples of common skin conditions on different skin colors and provide support to non-dermatologist instructors on how to highlight differences
 - Tip: Use text in figure legends and online image descriptions to help describe rash appearance to learners
 - Encourage educators to question classic, white-centering rash descriptions in their learning material (for example "dew drops on a rose petal" for varicella infection, red scaly plaques with white scale for psoriasis)
- 3. Provide resources with high-quality images of skin conditions on brown and black skin for editing learning material
 - Search institutions' online library collection for skin of color textbooks, examples:
 - Kelly, A. Paul. et al. *Taylor and Kelly's Dermatology for Skin of Color*. Second edition. New York: McGraw-Hill Medical, 2016.
 - Alexis, Andrew F., and Victoria Holloway Barbosa. *Skin of Color: a Practical Guide to Dermatologic Diagnosis and Treatment*. New York, NY: Springer, 2013
 - Silverberg, Nanette B., Carola Durán-McKinster, and Yong-Kwang Tay. *Pediatric Skin of Color*. New York: Springer, 2015.
 - Jackson- Richards, Diane, and Amit G. Pandya. *Dermatology Atlas for Skin of Color*. Heidelberg: Springer, 2014
 - Refer instructors to free online skin of color image databases to supplement textbooks
 - Mind the Gap (<u>https://www.blackandbrownskin.co.uk</u>), Skin Deep (<u>https://dftbskindeep.com</u>), Brown Skin Matters (<u>https://brownskinmatters.com</u>)
 - Use VisualDx Dermatology Skin of Color section to find additional images of brown and black skin (if institution has license)
- 4. Continue regular course auditing and provide support to instructors

- Set realistic goals and a timeline to monitor improvement
- Solicit feedback from educators on difficulties implementing curricular changes and offer guidance/support
- Gather medical students' input on curriculum changes and areas for improvement