HPEC 2024

Health Professions Education Conference 2024

Cultivating Excellence:
Building Essential Skills in Health Professions Education

Saturday, February 10, 2024

Sponsored by the Office of Medical Education and
HMSA Center for Learning Innovation
John A. Burns School of Medicine, University of Hawai‘i

Welcome to the 2024 Health Professions Education Conference

UH Mānoa John A. Burns School of Medicine
UH Mānoa Nancy Atmospera-Walch School of Nursing
UH Mānoa Thompson School of Social Work and Public Health
UH Mānoa Department of Kinesiology and Rehabilitation Science
UH Mānoa Dietetics Program
UH Hilo Daniel K. Inouye College of Pharmacy

Aloha! Welcome to our seventh Health Professions Education Conference, and the first one to be in-person since the start of the COVID-19 pandemic. This conference focuses on faculty development and the sharing of educational scholarship to teach and train high-quality health professionals. It is designed to support improvements and enhancements to our educational methods and outcomes and to stimulate academic exchange between programs, departments, schools and institutions.

The COVID-19 pandemic was devastating and continues to affect us. It also revealed health disparities in BIPOC and marginalized populations, from infection rates, hospitalizations, to immediate and long-term complications. And although these health disparities are not unique to COVID-19, the rapid spread across the globe and number of people affected has definitely brought it to the forefront. As health professionals and health professionals in training, we all have a responsibility to advocate for equity in healthcare and in training the future generations. For this reason, we are very pleased to welcome our plenary speaker, Evan Adams, Acting Associate Dean for Indigenous Health at the Simon Fraser University Medical School and Deputy Chief Medical Officer for both the First Nations Health Authority and the First Nations & Inuit Health Branch Headquarters for Indigenous Services Canada. He will discuss "Equity of Service, Equity of Outcomes: Advancing Healthcare and Cultural Safety in Learning Environments". His plenary will be preceded by an oral abstract of our 'Imi Ho'ōla program, which is celebrating its 50th anniversary of providing a pathway to medicine for underrepresented populations.

A special thanks to our HPEC 2024 Conference Planning Committee, our HPEC 2024 Program Planning Committee, and to all the individuals who submitted proposals for sessions, oral abstracts and posters and who served as proposal reviewers. The theme of our conference is "Cultivating Excellence: Building Essential Skills in Health Professions Education", and we have a wonderful assortment of peer-reviewed topics ranging from improving skills in communication, teaching, building resiliency and addressing burnout, and well as understanding social determinants of health and disability, and much more!

Thank you for joining us at this conference and for participating in the collaborative spirit of teaching and learning from one another.

Pūpūkāhi I holomua
Unite to move forward; by working together, we make progress

Sincerely,

Sheri F.T. Fong, MD, PhD — Conference Chair
Kori-Jo Kochi — Conference Coordinator

Acknowledgements

We would like to sincerely thank and gratefully acknowledge the following individuals who have guided and helped us in the planning and implementation of this conference. Mahalo nui loa!

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**Member of Continuing Education Planning Team, along with Sheri Fong, Office of Medical Education; Robin Arndt, School of Social Work and Public Health, and Bridget Lai, Hawaii Pacific Health*

Acknowledgements

We would also like to acknowledge our wonderful volunteers.

Thank you so very much for all your time and effort – you are amazing people!

Noelani Ching
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Nancy Ho
Erin Jyo
Nicole Liberato
April McConnell
Kelli Morikuni
Risa Tanaka
Leah Taylor

A very special thank you to Yawen Hsiao, who designed the
HPEC logo, website and title slide used at the start of the sessions and maintained the website.

And lastly, we would like to thank ~

Hawaii American Nurses Association

for their support of our educational conference by being an exhibitor.

Mahalo for your generosity!

Within one week, you will receive an email link to a survey from Hawaii Pacific Health, our Continuing Education provider.

Members of the conference continuing education committee, and speakers/presenters for continuing education-eligible sessions had no relevant financial relationships with commercial interests to disclose.

Proposal Reviewers

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Lorrie Wong, *School of Nursing*

Vanessa Wong, *Department of Native Hawaiian Health and Office of Medical Education*

Stacey Woodruff, *Department of Surgery*

Yiqiang Zhang, *Department of Anatomy, Biochemistry and Physiology*

Continuing Education

The overarching learning objectives of this faculty development conference is for participants to be better able to:

- Apply and utilize the knowledge, tools and skills associated with providing engaging and innovative teaching, and using artificial intelligence and technology to enhance teaching in health professions education.
- Identify ways to demonstrate, teach and promote non-cognitive attributes such as professionalism, leadership, teamwork, working with difficult patients/people/students, and resiliency and well-being, associated with providing comprehensive education.

CE is available for all sessions except the poster session.

CONTINUING EDUCATION:

JOINTLY ACCREDITED PROVIDER™ INTERPROFESSIONAL CONTINUING EDUCATION In support of improving patient care, this activity has been planned and implemented by Hawai‘i Pacific Health and the John A. Burns School of Medicine (JABSOM). Hawai‘i Pacific Health is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

Hawai‘i Pacific Health designates this live activity for a maximum of 6.0 *AMA PRA Category 1 Credits*™ for physicians. Physicians should only claim credit commensurate with the extent of their participation in the activity.

Hawai‘i Pacific Health designates this live activity for 6.0 contact hours for nurses. Nurses should only claim credit commensurate with the extent of their participation in the activity.

Hawai‘i Pacific Health is accredited by the Accreditation Council for Pharmacy Education (ACPE) as a provider of continuing pharmacy education. This activity is accredited for 6.0 contact hours for attendance at the entire CE session.

ACE ASWB approved continuing education As a Jointly Accredited Organization, Hawai‘i Pacific Health is approved to offer social work continuing education by the Association of Social Work Boards (ASWB) Approved Continuing Education (ACE) program. Organizations, not individual courses, are approved under this program. State and provincial regulatory boards have the final authority to determine whether an individual course may be accepted for continuing education credit. Hawai‘i Pacific Health maintains responsibility for this course. Social workers completing this course receive 6.0 continuing education credits.

General Information

For questions related to the conference, please email HPECinfo@hawaii.edu.

HPEC Program Summary

TIME	Library Stacks		Pages
8:00-8:15	Welcome and Opening	N/A	
8:15-8:30 **Oral Abstract**	Assessing the Impact of ʻImi Hoʻōla: A Survey Analysis of 50 Years in Advancing Healthcare Equity in Hawaiʻi and the Pacific Basin Morgan Quinley, Jasmine Padamada, Juyoung Chong	N/A	14
8:35-9:50 **Plenary**	EQUITY OF SERVICE, EQUITY OF OUTCOMES: Advancing Healthcare and Cultural Safety in Learning Environments Evan Adams, MD, MPH	N/A	15
9:50-10:00	Break	Break	
	MEB 301 (for remainder of sessions)	MEB 314	
10:00-10:15 **Session I Oral Abstracts**	Counteracting Student Empathy Erosion in Clerkships Through an In-Patient Interview and Reflection Exercise Kara Wong Ramsey, Barry Mizuo, Kelley Hutchins, Yolanda Wu, Kyra Len	COVID-19 Curricular Innovations: Efficacy of Pre-clerkship Hybrid Case-based Female Pelvic Anatomy Curriculum Lynne Saito-Tom	16 17
10:20-11:35 **Session I Workshops**	"You're Right": The Art of Rapport Building in the Face of Disagreement Bryan Brown, Taryn Park	The Health Professions Educator's Buffet Station: How to Improve your Bedside Teaching, your Slide Presentations, and your Virtual Presentations All in One Workshop Kara Wong Ramsey, Barry Mizuo, Kyra Len, Mari Ueno, Nanea Cavaco, Mari Grief	18-19 20-21
11:35-11:45	Break	Break	
11:45-1:15	Poster Session (Lobby)		
1:15-1:25	Break	Break	
1:25-1:40 **Session II Oral Abstracts**	Enhancing Pediatrician Preceptorship Satisfaction: Empowering Through Training and Recertification Incentives Kyra Len, Barry Mizuo, Kara Wong Ramsey	Problem-Based Learning: Perspectives from the End of the Road Danielle Sato, Anna-Kaelle Ramos, Davis Wong	22 23
1:45–3:00 **Session II Workshops**	Who are you calling DIFFICULT? Preparing Learners to Care for ALL Patients Lynn Iwamoto, Holly Olson, Susan Steinemann, Crystal Costa	Work Smarter, Not Harder! Applications of AI in Developing Clinical Reasoning Exercises Kyra Len, Jannet Lee-Jayaram, Jennifer Di Rocco, Marissa Fakaosita (Limit 30 participants – first come, first serve)	24 25-26
3:00-3:10	Break	Break	
3:10–3:25 **Session III Oral Abstracts**	Learning Communities: Building Resiliency in Medical Education Maya Ushijima, Selena Vanapruks, Jaymie Masuda	Interprofessional Education in Social Determinants of Health: The Houseless Simulation Exercise Kimm Teruya, Sheri Tokumaru, Lisa Kehl	27 28
3:30-4:45 **Session III Workshops**	Burnout – "Heal Thyself": Tips on Overcoming Burnout and Creating an Action Plan Towards Wellness Manon Kwon	Disability in Medicine Curriculum at the John A. Burns School of Medicine Lauren Sternberg, Jeffrey Okamoto, Violet Horvath, Sarah Bellatti	29 30
4:45-4:50	Break	Break	
4:50-5:00	Closing	N/A	

Poster Session Summary

Poster #	TITLE and PRESENTER(S)	PAGES
1	**Faculty Development: JABSOM Partnering with HPMG Clinical Sites** Presenters: Dee-Ann Carpenter, Department of Native Hawaiian Health and Office of Medical Education, JABSOM; Marcus Iwane, Department of Medicine, JABSOM and Kaiser Permanente West Oahu	33-34
2	**Embarking on the RIDGETrail: A Novel Educator Certificate Pathway for the Busy Clinical Teacher** Presenter: Zia Khan, Department of Medicine, JABSOM	35-36
3	**Building on Project ECHO® Methods to Develop Capacity for Hepatitis C Elimination** Presenter: Daniel Saltman, Department of Medicine, JABSOM	37-38
4	**Assessing Interest and Awareness Among Japanese Medical Students in International Standardized Testing: The Introduction of the National Board of Medical Examiners (NBME) Comprehensive Basic Science Examination (CBSE) in Japan** Presenters: Emi Saegusa-Beecroft, Department of Surgery and Office of Global Health and International Medicine, JABSOM; Kentaroh Takagaki, Department of Anatomy and Systems Biology, University of Yamanashi, Japan	39-40
5	**Evidence-based Instruction Strategies to Improve Drug Calculation Skills** Presenter: Samia Valeria Ozorio Dutra, Nancy Atmospera-Walch School of Nursing	41
6	**Implementing Phenobarbital Protocol in Alcohol Withdrawal Syndrome** Presenter: Maxwell Shen, Department of Internal Medicine, Tripler Army Medical Center Faculty Sponsor: Francisco Mercado, Jr, Department of Medicine, JABSOM, Department of Internal Medicine, Tripler Army Medical Center	42-43
7	**Partnering with *AlohaCare* to Deliver a Health Systems Science Curriculum for JABSOM Medical Students: A Pilot Curriculum** Presenter: Gary Okamoto, Aloha Care	44
8	**A Qualitative Study to Understand the Opportunities and Challenges of Integrating ʻŌlelo Hawaiʻi (Hawaiian Language) into Medical Education in Hawaiʻi** Presenters: Ashley M. Lee, MS3; Kaitlyn A. Aoki, Department of Native Hawaiian Health, JABSOM Faculty Sponsor: Marjorie K.L.M. Mau, Department of Native Hawaiian Health, JABSOM	45
9	**Screening for Adverse Childhood Exposures** Presenter: Kassidy Kanja, MS4 Faculty Sponsor: Nicole Sun, Department of Pediatrics, Kaiser Permanente	46
10	**Improving Depression Screening and Follow Up for Adolescents and Adults in the West and Central Oahu Communities of Hawaii: A Root Cause Analysis** Presenters: Marissa Miyagi, MS2; Milton Vuong, MS2; Braden Yoshinaga, MS2 Faculty Sponsor: Jimmy Chen, Department of Family Medicine, JABSOM	47

Select Non-Profits/Programs Related to Our Conference Program

Aloha Care: https://www.alohacare.org/

Aloha Care is a non-profit health plan founded in 1994 by Hawaii's Community Health Centers and is the only health plan solely dedicated to serving those eligible for Hawaii's QUEST integration (Medicaid) and Medicare program. Our passion is to serve the people of Hawaii in the true spirit of aloha. We are mission driven to care for people who are underserved with specific health needs.

Mission: Support individual wellness and promote community access to quality care in collaboration with community health centers and others who share our commitment.

Project ECHO: Hawai'i Learning Groups: https://www.hawaiilearning.org/

Hawai'i Learning Groups is a partner with Project ECHO® (Extension for Community Healthcare Outcomes) - a successful, innovative medical education and mentoring program whose goal is to increase access to specialty care, especially for rural and under-served populations. The ECHO model emphases case-based learning, the promotion of best practices, measured outcomes, and leveraging technology. During an ECHO session, participants present real (anonymized) cases to the specialists – and each other – for discussion and recommendations. Participants learn from one another, as knowledge is tested and refined through a local lens. This continuous loop of learning, mentoring and peer support is what makes ECHO unique, with long-lasting impact far beyond that of an in-person training, webinar or e-learning course. Our knowledge-sharing model brings together specialists from multiple focus areas for a robust, holistic approach.

Hawaii Learning Groups was started in 2017 with a curriculum centered on diabetes. Recent programs have focused on hepatitis B and C. We welcome local collaborators to develop additional tracks. Our goal is to be part of the transformation and improvement of healthcare.

Mission: Promote collaboration among diverse groups in order to improve healthcare for under-served populations in Hawai'i. Be a resource that delivers high-quality Continuing Education experiences and meets our user's needs. Build capacity for improved patient care. Promote best practices.

Hawaii Interprofessional Education: https://nursing.hawaii.edu/hipe/

The Hawaii InterProfessional Education (HIPE) committee is a consortium of educators whose goal is to train students in a way that improves interprofessional team-based care for current and future patients.

Mission: To prepare all health professional students to collaborate in providing a safe, effective, and sustainable patient/consumer-centered and community/population-oriented health care system within the sociocultural contexts of the communities within the Asia-Pacific Region.

The RIDGETrail Pathway

The Recognizing, Inspiring, and Developing Great Educators pathway or "trail" is the Center for Learning Innovation's medical education skills certificate for the busy clinical faculty. With an emphasis on a flexible yet meaningful credit-based certification system, we meet the clinician where they are at and help them get recognized for the teaching they already do, while building on skills most immediately relevant to their particular needs. For the coming AY24-25, we are currently looking for a few new highly motivated groups of faculty (approx. 4-15 participants per cohort) who wish to participate, and we are also in need of additional volunteer experienced educators to help serve as volunteer observers for these activities. Please direct inquiries to Dr. Zia Khan (zkhan@queens.org) and Dr. Bryan Brown (bbrown3@hawaii.edu).

Plenary Speaker

Evan Adams, MD, MPH

Acting Associate Dean Indigenous Health
Simon Fraser University Medical School

Deputy Chief Medical Officer
First Nations Health Authority and
First Nations & Inuit Health Branch Headquarters
Indigenous Services Canada

Evan *Tlesla* Adams is a Coast Salish physician from Tla'amin First Nation near Powell River, BC, Canada.

Dr. Adams completed his Medical Doctorate at the University of Calgary and a residency in the Aboriginal Family Practice program at UBC in Vancouver. Dr. Adams has a Master of Public Health from Johns Hopkins University in Baltimore, Maryland. He was the Deputy Provincial Health Officer for BC (2012 to 2014), the Chief Medical Officer of the First Nations Health Authority (2014-2020), and then the Deputy Chief Medical Officer of First Nations & Inuit Health Branch, Indigenous Services Canada (2020-2023). He has recently returned half-time to the FNHA as their Deputy CMO and half-time to Simon Fraser University's new Medical School as an Acting Associate Dean.

Session and Oral Abstract Descriptions

Oral Abstract
8:15 am – 8:30 a.m.
Library Stacks

Assessing the Impact of ʻImi Hoʻōla: A Survey Analysis of 50 Years in Advancing Healthcare Equity in Hawaiʻi and the Pacific Basin

Morgan Quinley MS2[1], Juyoung Chong MS2[1], Jasmine Padamada MS2[1], Meliza Roman MS[2], Winona K. Lee MD[1,2], Kimberly B. Yamauchi MPA[1,2]

[1]ʻImi Hoʻōla Post-Baccalaureate Program, Department of Native Hawaiian Health, JABSOM; [2]Native Hawaiian Center of Excellence, Department of Native Hawaiian Health, JABSOM

Introduction: ʻImi Hoʻōla (IH) is a 12-month post-baccalaureate program at the John A. Burns School of Medicine that provides educational opportunities to disadvantaged premedical students with ties to Hawaiʻi and the U.S. Affiliated Pacific Islands. Its mission is to increase the number of physicians who demonstrate a strong commitment to practice in underserved communities and primary care. Since its establishment in 1973, 306 participants have completed IH.

Objectives: To commemorate IH's 50th anniversary, this study aimed to determine whether IH has worked towards its goal of improving healthcare equity in Hawaiʻi and the Pacific Basin by collecting feedback from alumni regarding the program's impact on their careers.

Methods: An electronic survey was sent to 263 IH alumni by email from April 2023 to August 2023. The survey collected data on alumni demographics, current working status including specialty, location of practice, populations served, and their perceptions of working in underserved areas before and after completing IH based on a Likert scale. The data was summarized by descriptive statistics.

Results: The survey received responses from 100 IH alumni. The majority of IH alumni are practicing or training in primary care specialties such as internal medicine, family medicine, and pediatrics. For IH alumni who are current medical students, the most interested specialty is internal medicine. Before enrolling, a large number of alumni expressed a strong desire to practice in underserved communities in Hawaiʻi and the Pacific Basin. After completing IH, an even greater percentage expressed their dedication, with over 75% of practicing alumni serving in these areas of need. Furthermore, a majority of residents and medical students expressed a strong desire to practice in Hawaiʻi and the Pacific Basin. The top ethnic populations that practicing and retired IH alumni serve are Native Hawaiians and Pacific Islanders, Asians, and Whites.

Discussion: IH alumni's choice of specialty shows that IH generates physicians who are willing to fill the primary care gap in Hawaiʻi and the Pacific Basin [1]. The alignment between IH alumni's origins and choice of practice locations reflects the program's success in retaining current and future healthcare professionals in areas with underserved populations. Although IH is not ethnicity based, many participants come from ethnic minority groups, populations, and communities that are medically underserved. Physicians who come from underserved and minority communities are more likely to provide care to underserved populations [2]. The populations served by IH alumni support that IH is creating alumni who are providing greater access to healthcare in historically underserved populations.

This research is limited by a small sample size due to outdated contact information of alumni and collection of data through electronic surveys. The absence of investigation into other predictive factors on IH alumni's specialty and location of practice limits the scope of the study. It can be concluded though, that IH has contributed to its goal of improving healthcare equity in Hawaiʻi and the Pacific Basin by increasing primary care physicians and healthcare access to underserved communities. The IH program's infrastructure works in providing disadvantaged students an opportunity to attend medical school, and it can serve as a template for other medical schools interested in providing alternative pathways for disadvantaged students.

Target Audience: Medical Educators, University Administrators, Diversity Officers

References:
[1] Withy K. *University of Hawai'i System Annual Report on Findings from the Hawai'i Physician Workforce Assessment Project*. University of Hawai'i; 2022.
[2] Rumala BB, Cason FD. Recruitment of underrepresented minority students to medical school: minority medical student organizations, an untapped resource. *Journal of the National Medical Association*. 2007;99(9):1000-1009. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2575864/

Key Phrases: *Disadvantaged* *Medically Underserved* *Primary Care*

Plenary
8:35 am – 9:50 a.m.
Library Stacks

EQUITY OF SERVICE, EQUITY OF OUTCOMES:
Advancing Healthcare and Cultural Safety in Learning Environments

Evan *Tlesla* Adams, MD, MPH
Acting Associate Dean Indigenous Health, Simon Fraser University Medical School
Deputy Chief Medical Officer, First Nations Health Authority and First Nations & Inuit Health Branch Headquarters, Indigenous Services Canada

Objectives:
1. Describe approaches in learning environments to optimizing Indigenous health through a just allocation of health care resources, balancing effectiveness, efficiency and access, employing evidence-based and Indigenous best practices.
2. Discern concepts, for learners, of community development, ownership, consultation, empowerment, capacity-building, reciprocity and respect in relation to health care delivery in, by, and with Indigenous communities.
3. Recognize the importance of giving equitable or more generous space to ensure Indigenous voices and perspectives in learning environments.

Brief Description of Session:
It's a new day: a tired medical system after COVID, new expectations around a balanced workplace and home, and ongoing demands for a responsive system from Indigenous peoples and equity-seeking populations. How do we deliver community-embedded, socially accountable and culturally safe health care? We must be brave in reimagining the training of the next generation of health professionals who will add much-needed capacity to our health system and community care, particularly where needed most.

Target Audience: Students, staff, faculty and administrators of health professions schools

Session I: Oral Abstracts

10:00 am – 10:15 a.m.
MEB 301

Counteracting Student Empathy Erosion in Clerkships Through an In-Patient Interview and Reflection Exercise

Kara Wong Ramsey MD, Kelley Hutchins DO MPH, Yolanda Wu MD, Barry Mizuo MD, Kyra Len MD
Department of Pediatrics, John A. Burns School of Medicine

Context: Empathy erosion amongst trainees towards patients is a significant concern in medical education during the clinical training years. While students learn about empathy during the preclinical years, studies have shown there is a steady decline in empathy during the clinical years.[1-2] To help address this issue, we implemented a reflection exercise for third-year medical students at the University of Hawai'i John A. Burns School of Medicine during their pediatric clerkship. We modeled this exercise after a previously published patient experience debrief interview which was shown to deepen student self-reflection about patient care experiences.[3]

Objectives: The objective of this project was to improve students' ability to empathize with their hospitalized patients and enhance their patient-centered care approach.

Description of Innovation: Since the beginning of the 2022-2023 academic year, third year medical students were instructed to interview one of their patients (or patient's caregiver) during their inpatient pediatric rotation. Interview questions were focused on eliciting opinions from the patient/caregiver on various aspects of the hospital care experience and were standardized according to a previously published exercise.[3] After the interview, students summarized what they learned in a one-page written reflection exercise. They also discussed their interview experience with an assigned preceptor. During the 2023-2024 academic year, faculty reviewed 29 essays written by these students to identify major themes. 25 of 29 students completed an anonymous survey using a four-point Likert scale to help assess the impact of the reflection exercise on their perception of empathy and patient-centered care.

Evaluation of Innovation: 62% of student essays identified themes centering around the importance of developing patient rapport and clear, consistent, open communication with patients; 93% reflected on developing a greater sensitivity to the various coping behaviors that patients or caregivers displayed; 86% planned to incorporate newly learned patient communication strategies in their future careers as physicians. Upon review of available student survey data, 80% of students felt the exercise improved their ability to empathize with the experience of their hospitalized patients and 72% felt that the exercise would change their future approach to patient-centered care. While written feedback from the students highlighted valuable insights gained about the patient/caregiver perspective on being hospitalized, feedback from 10% of students felt that only the interview but not the written essay portion should be continued.

Discussion/Key Message: Implementation of a patient interview/reflection exercise within our pediatric clerkship appears to help ameliorate empathy erosion among students. Students reported that this exercise improved their ability to empathize with their patients and positively influenced how they will approach patient care as practicing physicians. In addition to completing data collection this year, other future goals include assessing the effect of this reflection exercise on measures of student empathy using previously validated rating scales and assessing whether positive changes in student empathy are perpetuated even when eliminating the written essay portion of this exercise.

Target Audience: health care professions faculty, health care professions learners

References (optional, but if included, 3 or less):

1. Hojat M, Vergare MJ, Maxwell K, et al. The devil is in the third year: a longitudinal study of erosion of empathy in medical school [published correction appears in Acad Med. 2009 Nov;84(11):1616]. *Acad Med*. 2009;84(9):1182-1191. doi:10.1097/ACM.0b013e3181b17e55
2. Neumann M, Edelhäuser F, Tauschel D, et al. Empathy decline and its reasons: a systematic review of studies with medical students and residents. *Acad Med*. 2011;86(8):996-1009. doi:10.1097/ACM.0b013e318221e615
3. Chua IS, Bogetz AL, Bhansali P, Long M, Holbreich R, Kind T, Ottolini M, Park YS, Lineberry M, Hirshfield LE. The Patient Experience Debrief Interview: How Conversations With Hospitalized Families Influence Medical Student Learning and Reflection. Acad Med. 2019 Nov;94(11S Association of American Medical Colleges Learn Serve Lead: Proceedings of the 58th Annual Research in Medical Education Sessions):S86-S94. doi: 10.1097/ACM.0000000000002914. PMID: 31365398.

Key Phrases: *Patient Centered Communication* *Empathy* *Medical Student*

Session I: Oral Abstracts

10:00 am – 10:15 a.m.
MEB 314

COVID-19 Curricular Innovations: Efficacy of Pre-clerkship Hybrid Case-based Female Pelvic Anatomy Curriculum

Lynne Saito-Tom MD[1], Gunes Aytac PhD[2], Kalawena Kalehuawehe BS[2], Shawnea Pagat BS[2], Maia Kawelo BS[2], Scott Lozanoff PhD[2]

[1]Department of Obstetrics, Gynecology and Women's Health, John A. Burns School of Medicine; [2]Department of Anatomy, Biochemistry and Physiology, John A. Burns School of Medicine

Introduction: A case-based female pelvic anatomy instructional program was developed and delivered to medical students to compensate for canceled dissection laboratories during Covid-19 and continued post-pandemic in preparation for the Ob/Gyn clerkship.

Objectives: To assess the efficacy of a female pelvic anatomy curriculum in preparation for the Ob/Gyn clerkship on three medical student cohorts (2021-2023).

Methods: Six online modules covering pelvic osteology, pelvic floor musculature, pelvic vasculature, perineum, uterus, and adnexa were created on a local network website enabling rich content presentation. Medical students studied the modules and attended an in-person female pelvic anatomy laboratory. Summative data derived from pre- and post-test multiple choice questions (MCQ) and website analytics enabled quantitative comparisons while surveys (5-point Likert scale) comprised qualitative data. Paired t-tests compared pre- and post-event MCQ scores within cohorts while ANOVA compared data between cohorts.

Results: Among 232 medical students, pre-test MCQ scores were low (<66%, except pelvic floor musculature with 72-82%). Post-test MCQ scores improved significantly by 17-51% ($P<0.01$). Pre-test surveys indicated that a minority (~26%) agreed/strongly agreed they were confident in their understanding of female pelvic anatomy based on their gross anatomy experience. However, the majority (99-100%) agreed/strongly agreed that the laboratory improved their understand of female pelvic anatomy. Between cohorts, there were no statistically significant differences between pre- and post-test MCQ scores for all stations, confidence scores and website usage.

Discussion: Despite the second two cohorts having full female pelvic anatomy instruction during their pre-clerkship education, their pre-test MCQ and confidence scores were low and similar to the cohort affected by COVID-19. This curriculum provides beneficial preparation for the Ob/Gyn clerkship.

Target Audience: Pre-clerkship and Clerkship Faculty, Medical Students

Key Phrases: Innovative Curriculum *Female Pelvic Anatomy* *Preparation for Clinical Clerkships*

Session I: Workshops

10:20 am – 11:35 a.m.
MEB 301

"You're Right": The Art of Rapport Building in the Face of Disagreement

Bryan Brown, MD, MHS
Assistant Professor, Office of Medical Education, Department of Medicine
Taryn Park, MD
Assistant Professor, Office of Medical Education, Department of Psychiatry

Objectives:

1) Identify opportunities to implement the Five Secrets of Effective Communication in clinical, educational, and interpersonal contexts.
2) Define and avoid common pitfalls in addressing another person's adverse reactions.
3) Practice and distinguish thought empathy and feeling empathy.
4) Formulate uses of the "disarming technique" even in situations of marked disagreement.
5) Value the role of explicit rather than implicit teaching of communications skills at all levels of medical education.
6) Value improvisatory roleplay as a pedagogical strategy in teaching patient-centered communication skills.

Session description: This workshop will teach participants all about the Five Secrets of Effective Communication, which were originally proposed by cognitive behavioral therapy expert Dr. David Burns.[1] These techniques are meant to have broad applicability, from maintaining rapport with an angry patient, to working out disagreements with loved ones in our personal lives. Though simple to describe, the five secrets can be deceptively challenging and foreign to implement when we need them most.

Methods: The session will begin with briefly asking the audience for a few examples of difficult encounters with learners, colleagues, or patients and what strategies went well or not so well. Then, the facilitators will demonstrate a difficult situation, running the scene multiple ways to show differing communication approaches and how it affects the outcome. Then, as the audience reflects on what went well or not so well in the initial demonstration, the "five secrets" will be identified and described.

Thereafter, the first round of roleplay practice cases for participants will commence. At this stage, the participants will be broken into groups of two or three. First, the person about to try using the five secrets will avert their attention by going to the opposite end of the room, while the participant playing the role of a patient, learner, or colleague will receive their prompt for their backstory. Then in these small pairs or trios, the five secrets will be practiced, with opportunities for peer feedback, intermittent facilitator observation and support, and a debrief afterward.

In a third portion, participants will be divided into two large groups. One volunteer participant in each group will roleplay with a facilitator in front of that group, with opportunities to "ask the audience" if they get stuck on how to use one of the secrets. To emphasize the universal nature of these skills, improvisational theater techniques will be applied in which audience members decide key words of the roleplay just before it occurs.

The final discussion will bring the whole group back together, to reflect on the strengths, weaknesses, surprises, or challenges of using the five secrets. We will ask each participant to identify one or more personal SMART goals based on what they self-identify as the "secret" they want to work on the most. Within the final debrief, our list of common pitfalls when attempting these interactions will be consolidated and provided.

Intended Outcomes: The intent of this workshop is that participants will come away with various benefits to themselves and our larger system. They will have increased wellness through enrichment of their relationships with patients, colleagues, and even friends and family. Patient adherence and satisfaction will rise among those

that embrace and implement these techniques in clinical spaces. Rapport between learners and educators will be better preserved even when challenges or tensions arise. They will also feel more empowered to teach about communication skills in a variety of settings rather than only focusing teaching on more biomedical aspects of care.

Target Audience: These skills have broad applicability, and so all are welcome, including clinical providers, educators across the UME/GME/CPD spectrum, as well as students and trainees.

References:

1. David Burns, M.D. (2010). *Feeling Good Together: The Secret to Making Troubled Relationships Work*. Harmony.

Session I: Workshops

10:20 am – 11:35 a.m.
MEB 314

The Health Professions Educator's Buffet Station: How to Improve your Bedside Teaching, your Slide Presentations, and your Virtual Presentations All in One Workshop

Kara Wong Ramsey, MD
Assistant Professor, Department of Pediatrics, JABSOM
Barry Mizuo, MD
Assistant Professor, Department of Pediatrics, JABSOM
Kyra Len, MD
Associate Professor, Department of Pediatrics and Office of Medical Education, JABSOM
Mari Ueno, MD
Pediatric Resident, Department of Pediatrics, JABSOM
Nanea Cavaco, MD
Pediatric Resident, Department of Pediatrics, JABSOM
Mari Grief, MD
Pediatric Resident, Office of Medical Education, JABSOM

Objectives:

1) Describe and demonstrate different models of bedside teaching.
2) Build effective slideshows to maximize knowledge retention.
3) Learn to use game design elements in virtual presentations to enhance academic performance.

Session description: Over the last several years, medical educators have needed to adapt their teaching methods across multiple formats, varying from direct bedside teaching to giving didactics to a virtual audience. Each of these educational methods comes with unique challenges to effectively maximize learners' retention of the knowledge shared. After a brief didactic demonstrating interactive slideshow features and gamification tools that can be incorporated into virtual presentations, participants will visit our buffet line offering of multiple world class teaching strategy delights, presented by a diverse group of master chef pediatric residents and attendings. At one station, participants will learn about bedside clinical teaching strategies that are sure to engage and intrigue the learner while maintaining a safe and supportive learning environment. At another station, participants will try their hand at designing an engaging slide presentation utilizing an Assertion Evidence framework. Participants are encouraged to bring their laptop or tablet device to engage with the interactive portions of the workshop. Participants can also bring a teaching idea/topic and mold it into a teaching presentation that can be adapted at the bedside, on a slide show for a larger audience, or even work on improving one of their current slide presentations. A tool box, consisting of a google drive with additional teaching presentation resources, will be provided to participants at the conclusion of the workshop.

Methods: This entertaining workshop will be conducted through both large group didactic and hands on stations. The participants are invited to bring a premade talk or teaching idea to develop during their small group rotations. At the end of the workshop, participants will be provided a google folder with resources to help them complete their teaching presentation in a way that can be adapted for the bedside, for a slides presentation, or a virtual presentation.

Key Phrases: *Bedside Teaching Clinical Skills* *Slide Show* *Gamification*

Topic	Format	Timing
Introductions and background -Our introduction will include a demonstration of interactive slide features including Word Cloud and Live Polling -Participants will have opportunity to explore these features on their own outside of the workshop with instructions provided in their toolbox	Large group didactic	10 minutes
Demonstration of games that can be done in virtual presentations. Participants will have an opportunity to explore game templates through friendly competition. Gamification will be defined and its benefits to academics. Game templates will be provided in the participants' toolbox for them to explore on their own time.	Large group didactic	10 minutes
Brief didactic and demonstration of Assertion Evidence framework for effective, powerful yet simple slide design that can also be incorporated into academic poster design too. We will also review the use of an equity checklist (published by University of Washington) to check your presentation for potential biases. The equity checklist will also be provided in the participants' toolbox for them to use in the future.	Large group didactic	10 minutes
Station #1 Bedside Teaching -participants will take turns modeling and role playing different approaches to meaningful bedside teaching and learning -moderators will provide feedback and demonstrate innovative strategies for bedside teaching	Interactive small group rotation	20 minutes
Station #2 Slide Presentation Design - Participants will either edit slides on a shared google drive (from a sample slides presentation provided by the facilitators) or work on their own slides following principles of effective slide design and then share their work for feedback from other participants and from facilitators. Participants may work individually or in pairs or teams as desired.	Interactive small group rotation	20 minutes
Wrap up: Group sharing of future plans to use what they learned in the workshop via Word Cloud and Live Polling	Large group didactic	10 minutes

Intended Outcomes:

At the end of the workshop, participants will achieve the following:

1. Incorporate different models of bedside clinical teaching for health professional learners.
2. Design a slide presentation that follows principles of Assertion Evidence.
3. Gain the skills to create a virtual teaching presentation that incorporates game elements.

Target audience: Health Professional Students, Residents, and Educators

References:

1. Garner, J. K., Alley, M., Sawarynski, L. E., Wolfe, K. L., & Zappe, S. E. (2011). Assertion-evidence slides appear to lead to better comprehension and recall of more complex concepts. *ASEE Annual Conference and Exposition, Conference Proceedings*.
2. Peters M, Ten Cate O. Bedside teaching in medical education: a literature review. *Perspect Med Educ*. 2014;3(2):76-88. doi:10.1007/s40037-013-0083-y
3. van Gaalen AEJ, Brouwer J, Schönrock-Adema J, Bouwkamp-Timmer T, Jaarsma ADC, Georgiadis JR. Gamification of health professions education: a systematic review. Adv Health Sci Educ Theory Pract. 2021 May;26(2):683-711. doi: 10.1007/s10459-020-10000-3. Epub 2020 Oct 31. PMID: 33128662; PMCID: PMC8041684.

Key Phrases: *Bedside Teaching Clinical Skills* *Slide Show* *Gamification*

Session II: Oral Abstracts

1:25 pm – 1:40 p.m.
MEB 301

Enhancing Pediatrician Preceptorship Satisfaction: Empowering Through Training and Recertification Incentives

Kyra Len MD[1,2], Barry Mizuo MD[1], Kara Wong Ramsey MD[1]

[1]Department of Pediatrics, John A. Burns School of Medicine; [2]Office of Medical Education, JABSOM

Context: Volunteer faculty teaching physicians play a crucial role in delivering core curriculum to medical students. However, the lack of formal training on teaching poses a barrier to developing and maintaining effective teaching skills (1-2) Additionally, the absence of incentives for teaching medical students makes it challenging to recruit and retain teaching faculty. Pediatricians are required to participate in American Board of Pediatrics (ABP) approved quality improvement projects to maintain their board certification but find it challenging to identify such opportunities that are relevant and not excessively time consuming (3).

Objectives: This study aimed to investigate whether incentivizing the medical student pediatric preceptor experience by awarding ABP Improving Professional Practice and Quality Improvement (Part 4) of Maintenance of Certification (MOC) to pediatrician preceptors who participated in a year-long medical education curriculum would improve the overall satisfaction of pediatric preceptors.

Description of Innovation: A quality improvement project was approved with the ABP for 25 MOC Part 4 credits to be credited to each preceptor who completed the requirements. From June 2018 through June 2020, 51 preceptors fulfilled project requirements, which included participating in at least three faculty development meetings (which focused on topics such as medical student documentation billing updates, strategies for giving feedback, and student mistreatment), and completing three Teaching Physician™ online CME modules and were rewarded 25 MOC Part 4 credits. 31 preceptors (61%) completed pre-and post- survey questions, matched with an anonymous participant ID, regarding their satisfaction with experiences as a clinical preceptor based on a Likert scale (1= very unsatisfied, 5=very satisfied). Data analysis was performed using paired T-test.

Evaluation of Innovation: Mean scores for satisfaction in being a preceptor increased significantly from 4.30 to 4.56 ($p=0.03$) and satisfaction with medical school teaching resources increased significantly from 3.89 to 4.33 ($p<0.01$). There was no change in satisfaction in career as a pediatrician (mean score 4.56 versus 4.70, $p=0.10$) or length of time planned to remain as a preceptor (where a score of 2 = 3-5 years and a score of 3 = >5 years, pre intervention mean score was 2.70 versus post intervention score was 2.63, $p=0.40$). The most commonly cited barriers to precepting medical students were time constraints (74%), disinterested students (33%), and lack of compensation or recognition (26%). Faculty meeting attendance increased by 87% for the MOC4 designated meetings.

Discussion/Key Message: Our study highlights a novel way to provide faculty development to help improve volunteer preceptors' teaching skills when supervising student learners. Utilization of formal teaching sessions and incentives, such as offering MOC Part 4 credit, can have a positive impact on preceptors' satisfaction with their role and with available educational resources to prepare them to be effective educators. Reducing the time burden spent on completing other MOC Part 4 projects may also help to alleviate barriers to medical student teaching that preceptors face.

Target Audience: health care professions faculty, health care professions learners.

References:

1. Beck Dallaghan GL, Alerte AM, Ryan MS, et al. Recruiting and Retaining Community-Based Preceptors: A Multicenter Qualitative Action Study of Pediatric Preceptors. Acad Med. 2017;92(8):1168-1174. doi:10.1097/ACM.0000000000001667
2. DaRosa DA, Skeff K, Friedland JA, et al. Barriers to effective teaching. Acad Med. 2011;86(4):453-459. doi:10.1097/ACM.0b013e31820defbe
3. Hendricks JJ, Theis R, Mann KJ, et al. Exploring paediatricians' experiences with performance improvement modules and quality improvement. BMJ Open Qual. 2022;11(2):e001674. doi:10.1136/bmjoq-2021-001674

Key Phrases: *Maintenance of Certification* *Faculty Development* *Faculty Preceptors*

Session II: Oral Abstracts

1:25 pm – 1:40 p.m.
MEB 314

Problem-Based Learning: Perspectives from the End of the Road

Danielle Sato MS4[1], Davis Wong MS4[1], Anna-Kaelle Ramos MS4[1], Richard Kasuya, MD MSEd[2]

[1]John A. Burns School of Medicine; [2]Office of Medical Education, JABSOM

Introduction: At the John A. Burns School of Medicine (JABSOM), problem-based learning (PBL) is a major part of the core curriculum. During the first two years of medical school, PBL is how students acquire the medical knowledge and the critical thinking skills needed to practice medicine. In the third and fourth years of medical school, students transition from classrooms to clinics and hospitals, which comes with new expectations related to patient care. For the preclinical years, surveys are sent out allowing first and second year students to evaluate the effectiveness of PBL for a variety of learning objectives. However, there is a little data evaluating fourth-year JABSOM students' perspective on how effective PBL is for third and fourth year clerkship performance. Given the assortment of clinical clerkship competencies that students are evaluated on, the effectiveness of PBL in preparing students for additional competencies should be investigated.

Objective: The purpose of the study was to identify the clinical clerkship competencies for which preclinical PBL was the most helpful in developing.

Methods: An online survey was administered to 70 fourth-year JABSOM students in May 2023. The survey included 4-point Likert scale questions evaluating the helpfulness of pre-clinical PBL experiences, defined as the sum of “strongly agree” and “agree” responses, in preparing students for a variety of clerkship competencies. Additionally, qualitative responses regarding the most beneficial aspects of PBL were analyzed for common themes.

Results: The survey was completed by 33 (47.1%) students. Notably, students rated PBL experiences to be helpful for all 15 measured competencies. PBL was rated most helpful for developing teaching ability, applying basic sciences to patient care, and understanding social and populational aspects of health care, all of which received 100% “strongly agree” or “agree” responses. Competencies with the lowest agreement rates were developing skills to organize a physical exam and preparing for the responsibilities of clinical clerkships (each with 85% strongly agree or agree). When students were asked what aspects of PBL best prepared them for clerkships, common themes were organizing clinical reasoning, generating and narrowing down a differential diagnosis, and developing a systematic approach to history taking.

Discussion: The results of this survey support the effectiveness of the PBL process as a whole in preparing students for their third- and fourth-year clinical clerkships. However, we also reveal the areas, such as physical examination and general clerkship responsibility preparation, that are less adequately addressed by the PBL curriculum. Schools should ensure these topics are covered in other portions of the curriculum. One of the limitations of our study is a small sample size, so future plans for this project include administering this same survey to the JABSOM class of 2024, to be completed by January 2024.

Target Audience: Students and educators, JABSOM Office of Medical Education.

Key Phrases: *Problem-based Learning* *Clinical Clerkships* *Medical Education*

Session II: Workshops

1:45 pm – 3:00 p.m.
MEB 301

Who are you calling DIFFICULT? Preparing Learners to Care for ALL Patients

Lynn Iwamoto, MD
Assistant Designated Institutional Official; Associate Professor, Department of Pediatrics, JABSOM
Holly Olson, MD
Deputy Designated Institutional Official; Associate Professor, Dept of Obstetrics and Gynecology, JABSOM
Susan Steinemann, MD
Designated Institutional Official; Professor, Department of Surgery, JABSOM
Crystal Costa
GME Program Specialist, Office of the Designated Institutional Official, JABSOM

Rationale: Situations in which things don't go our way are difficult. This often gets translated into labeling the other person who we are interacting with as "difficult". Non-compliance, questioning/lack of trust, cultural differences, belligerence, etc, are often at the basis of the "difficult" patient. The downstream effects can result in poor relationships, distrust, and a feeling of lack of safety, which in turn risk diagnostic errors, medical legal complications, and negative impact on well-being.

While these situations are challenging, they are also good teaching opportunities in communication, physician-patient relationship, and professional well-being.

Identifying and understanding the difficulty are the first steps in turning the relationship around into a more productive interaction. The approach to managing such situations includes mindfulness, compassion, and empathy.

Objectives: At the end of the session, participants will be able to:

1. Have a better understanding of the difficulty of "difficult" patients
2. Describe the safety impact of labeling a patient as "difficult"
3. Create a positive learning environment around "difficult" patient encounters
4. Practice some management strategies in addressing these situations.

Methods: There will be a brief introduction by the facilitators followed by small group discussions with a report back by the attendees regarding types of difficult patients and situations encountered in practice.

This will be followed by a short didactic on situational difficulty.

Second small group discussion: components of a difficult encounter. Case scenarios will be distributed. The groups will identify patient, physician and situational components that create the difficult encounter. Participants will be able to practice communication techniques with one another.

Intended Outcomes: In this workshop, different perspectives and the impact of labeling patients as "difficult" will be explored. The goal is to develop and expand on clinician mindfulness to be able to manage these situations and to be able to turn them into learning opportunities for residents and students.

Target Audience: All clinicians, learners and faculty, who have patient interactions.

References:

Goldsmith ES, Krebs EE. Roles of Physicians and Health Care Systems in "Difficult" Clinical Encounters. AMA Journal of Ethics, 19(4): 381-390, 2017.
McCarthy JG, et al. How to Approach Difficult Patient Encounters: ROAR. Gastroenterology; 155:258–261, 2018.
Hull SK, Broquet K. How to manage difficult patient encounters. Family practice management, June 2007.

Key Phrases: *Difficult Encounters* *Communication* *Empathy*

Session II: Workshops

1:45 pm – 3:00 p.m.
MEB 314
Limited to the first 30 participants – first come, first serve

Work Smarter, Not Harder!
Applications of AI in Developing Clinical Reasoning Exercises

Kyra Len, MD
Associate Professor, Department of Pediatrics and Office of Medical Education, JABSOM
Jannet Lee-Jayaram, MD
Associate Professor, Department of Pediatrics, JABSOM
Jennifer Di Rocco, DO, MEd
Associate Professor and Program Director, Department of Pediatrics, JABSOM
Marissa Fakaosita, MD
Assistant Professor, Department of Pediatrics, JABSOM

Objectives:

1. Define generative AI and demonstrate its potential uses in clinical reasoning activities
2. Describe limitations and pitfalls of generative AI clinical reasoning
3. Practice and analyze use of generative AI in developing clinical reasoning activity for learners

Description of Session: During this highly interactive session, participants will be introduced to the uses and limitations of generative artificial intelligence (AI) in health professions education. A generative AI platform will be demonstrated as a tool to administer as well as to create a clinical reasoning activity. In small groups, participants will create a clinical reasoning activity using generative AI. The groups will then share their results in the large group and we will moderate a discussion comparing their final output. A rating tool will be provided to guide the discussion and rate the output on accuracy, feasibility, and suitability.

Methods:

Section		Format	Timing (min)
I.	Introductions	Speakers introduce themselves and topic	3
II.	Ask participants to share how they may be using AI for education	Large group discussion	7
III.	Background	Large group didactic	10
IV.	Give demonstration of generative AI for student practice.	Large group-asking audience questions to ask the generative AI	7
V.	Introduce small group activity	Large group didactic	5
VI.	Using generative AI, the participants will be given an assignment to create a clinical reasoning activity for learners.	Small groups (laptop on each table)	15

VII.	Large group sharing of learning assignments. Audience compares different output using checklists.	Large group discussion	20
VIII.	How might you use what you learned?	Large group discussion	5
IX.	Wrap up and evaluations		3

Intended Outcomes: At the end of the session, participants will understand several potential uses of generative AI in health professions education and will walk away with skills to directly apply its use to their own setting. Participants will have an example product of a clinical reasoning activity developed within the workshop that they can use immediately and that will hopefully inspire their development of further AI-generated educational products.

Target Audience:

- Healthcare professions educators with little to no experience using generative AI to create learning activities
- Faculty, residents and health professions students with little to no experience using generative AI
- Participants must have a ChatGPT account created prior to participation https://chat.openai.com/auth/login

References:

1. Pereira DSM, Falcão F, Nunes A, Santos N, Costa P, Pêgo JM. Designing and building OSCEBot ® for virtual OSCE - Performance evaluation. Med Educ Online. 2023 Dec;28(1):2228550. doi: 10.1080/10872981.2023.2228550. PMID: 37347808; PMCID: PMC10288924.
2. Strong E, DiGiammarino A, Weng Y, et al. Chatbot vs Medical Student Performance on Free-Response Clinical Reasoning Examinations. *Archives of internal medicine (1960)*. 2023;183(9):1028-1030. doi:10.1001/jamainternmed.2023.2909
3. Kung TH, Cheatham M, Medenilla A, Sillos C, De Leon L, Elepaño C, Madriaga M, Aggabao R, Diaz-Candido G, Maningo J, Tseng V. Performance of ChatGPT on USMLE: Potential for AI-assisted medical education using large language models. PLOS Digit Health. 2023 Feb 9;2(2):e0000198. doi: 10.1371/journal.pdig.0000198. PMID: 36812645; PMCID: PMC9931230.
4. Ayers JW, Poliak A, Dredze M, et al. Comparing Physician and Artificial Intelligence Chatbot Responses to Patient Questions Posted to a Public Social Media Forum. *JAMA Intern Med.* 2023;183(6):589–596. doi:10.1001/jamainternmed.2023.1838
5. Kern, DE, Thomas, PA, Hughes, MT. Curriculum Development for Medical Education: A Six-Step Approach, Second Edition. Baltimore, Maryland: The Johns Hopkins University Press, 2009.

Session III: Oral Abstracts

3:10 pm – 3:25 p.m.
MEB 301

Learning Communities: Building Resiliency in Medical Education

Jaymie Masuda MS2[1]*, Maya Ushijima MS2[1]*, Selena Vanupruks MS2[1]*,
Kyra A. Len MD[2,3], Vanessa S. Wong MD[2,4]

[1]John A. Burns School of Medicine; [2]Office of Medical Education, JABSOM;
[3]Department of Pediatrics, JABSOM; [4]Department of Native Hawaiian Health, JABSOM
*Contributed equally to this study

Introduction: In Fall 2020, the John A Burns School of Medicine (JABSOM) implemented Learning Communities (LC) for medical students. LC are longitudinal groups of faculty and students that aim to enhance students' medical school experience by promoting a safe and supportive environment focused on collaboration and wellness. Activities within the LC wellness framework include the Lōkahi Wheel which facilitates balance and goal setting, the Moku Games, designed to encourage friendly physical and mental competition, and Pilinahā, emphasizing the importance of self-care including relaxation and mindfulness.

Objectives: The central aim of this study was to evaluate the impact of Learning Communities on the overall wellness of medical students. The objectives were to determine if specific LC activities, the LC program as a whole and the mentorship of the learning community faculty enhanced the overall wellbeing of the students.

Methods: The methods of this study involved distribution of anonymous surveys to first and second year medical students following the completion of each preclinical unit. The surveys consisted of 5-point Likert scale questions to measure the perceived impact of specific learning community activities, overall contribution of the LC program and the role their LC mentor played in fostering their wellbeing. The survey also collected qualitative comments from the students. Data were analyzed in aggregate and over time.

Results: Between 2020-2023, 313 students (81.3%) completed the post-learning community activity surveys. Fifty-nine percent (59%) of students agreed that the Lōkahi Wheel helped their personal wellness, seventy-one percent (71%) agreed that the Moku games supported their wellbeing. Seventy-five (75%) agree that dedicated Pilinahā time helped their wellness. Seventy-nine (79.1%) agree that the LC program helped them understand the importance of wellness in their personal and professional life. Eighty-nine percent (88.6%) agree that the LC program positively contributed to their wellbeing. Ninety-seven percent (96.5%) agree that the LC faculty are valuable to their wellbeing. Selected qualitative comments from the surveys indicated a positive impact of the LC program on their wellbeing: "With MD6 being such a busy and stressful unit, I appreciate that the learning community activities were focused on our wellbeing."

Discussion: The findings of this study suggest that the LC program overall has had a significant impact on student wellbeing. The Pilinahā framework, with emphasis placed on connecting to your better self, appears to be contributing positively to students' overall wellbeing. However, specific activities such as the Lōkahi Wheel and Moku Games, garnered mixed reviews with some students reporting a lesser influence on their wellbeing. This was likely due to the timing of these activities in relation to exams and other curricular requirements. Also, the messaging to the students may not have emphasized the importance and impact of wellbeing.

Recognizing diverse student needs, offering choice in activity selection, and improved scheduling may further enhance the program's effectiveness. Additionally, the program as a whole and the contributions of the LC faculty received an overwhelming positive response with 88.6% and 96.5% of students, respectively, recognizing their positive influence on student wellbeing. These aspects of the program have been critical in fostering a supportive and collaborative environment to support student wellbeing in medical school.

Target Audience: Health professions faculty and students

Key Phrases: Longitudinal Mentorship *Student Wellness* *Learning Community*

Session III: Oral Abstract

3:10pm – 3:25 p.m.
MEB 314

Interprofessional Education in Social Determinants of Health: The Houseless Simulation Exercise

Kimm Teruya MEd[1], Kamal Masaki MD[2], Alexander Munro PhD, MFA[1], Sheri Tokumaru, PharmD, BCCCP[3], Michele Bray DNP, RN, PHNA-BC[1], Gary Glauberman PhD, RN, PHNA-BC, NHDP-BC[1], Joanne Loos PhD[1], Robin Arndt MSW, LSW[4], Chad Kawakami PharmD[3], Lisa Kehl MSW, MPH, LSW, TTS[5], Siobhan Coad PhD[4], Lorrie Wong PhD, RN, CHSE-A, FAAN[1]

[1]Nancy Atmospera-Walch School of Nursing; [2]John A. Burns School of Medicine; [3]Daniel K. Inouye College of Pharmacy; [4]Department of Social Work, Thompson School of Social Work and Public Health; [5]Office of Public Health Studies, Thompson School of Social Work and Public Health

Context: The houseless simulation exercise is an interprofessional online learning experience for students from the schools of nursing, medicine, pharmacy, social work and public health. Students simulate caring for a houseless family while developing an improved understanding of how to collaborate with various health professionals.

Objectives: Uncover assumptions and implicit biases regarding houselessness
- Discuss impacts of social determinants of health (SDOH) on people experiencing houselessness
- Improve decision-making in difficult situations
- Work with an interprofessional collaborative team to support people experiencing houselessness

Description of Innovation: Interprofessional faculty conducted the houseless simulation exercise (HSE) over two years.

Subject matter experts on the topic of houselessness in Hawaii informed the HSE development. It was piloted in year 1 with a small group of IPE faculty and students. In the unfolding scenario, students took on the role of Loke, a young mother facing multiple challenges associated with houselessness. During each phase of the scenario, students decided where Loke would spend the night. Google Jamboard was used to track decisions. A facilitator narrated Loke's experience during each phase and led reflections on the outcomes of student decisions.

In year 2, the HSE included an immersive online experience using Zoom and actor-recorded audio files. It was conducted in November 2022 with 211 students. The HSE started in the main Zoom room, dubbed the "Neighborhood Park," and each breakout room represented a different location where Loke could stay the night. When prompted, students chose which breakout room to join. In each room, a technician displayed the visual location and played an audio file describing the outcome of their decision. Students then returned to "Neighborhood Park" to repeat this process for a total of three times. Debriefing occurred in two parts: first, facilitators focused on uncovering assumptions and implicit biases regarding houselessness as well as the impacts of SDOH on health. Then, facilitators focused on interprofessional teamwork and potential interventions. Discussion also involved proposing policy initiatives to address houselessness.

Evaluation of Innovation: Using a retrospective pre-post format, students' self-assessment on the Interprofessional Collaboration Competency Attainment Survey showed improvements in all 20 questions and all 6 domains (all $p<0.0001$). Students rated the exercise well (mean scores 3.8-4.4 on a 5-point Likert scale). They also rated the design and delivery of the simulation highly, with scores of 4.1-4.5. Student scores improved in awareness of challenges faced by houseless people related to SDOH, including financial pressures to meet basic needs, challenges in escaping houselessness, emotional stress and frustration, and health outcomes (all $p<0.0001$).

Discussion/Key Message: The HSE was an effective strategy to help students uncover personal biases, identify the impact of SDOH on people experiencing houselessness, and gain skills in working as a member of an interprofessional team. Experiences that build awareness and empathy for persons experiencing houselessness are important for creating a health care workforce capable of caring for this vulnerable population.

Target Audience: Health care educators, professionals and students, and those interested in social determinants of health

Key Phrases: *Simulation* *Interprofessional* *Houselessness*

Session III: Workshops

3:30 pm – 4:45 p.m.
MEB 301

Burnout – "Heal Thyself":
Tips on Overcoming Burnout and Creating an Action Plan Towards Wellness

Manon Kwon, MD
Assistant Clinical Professor, Department of Surgery, JABSOM
Emergency Medicine Physician, HPH-Wilcox Medical Center

Objectives: At the end of the workshop, participants will be able to:

1. Identify individual risk factors and personal signs of burnout
2. Identify the components and consequence of burnout and to explain the drivers for burnout and wellbeing
3. Gain knowledge and tools to improve personal wellbeing in efforts to build resilience and decrease burnout
4. Identify potential strategies and design a personal wellness action plan to promote wellbeing with goals to implement and complete in the upcoming months

Description of Session: Are you "feeling the BURN?" What is burnout and how can one prevent the downward spiral? This interactive workshop will help you discover your POWER(S) to reframe and build resiliency. This session will introduce various potential strategies and tools to combat burnout and enhance personal wellness. By discussing what has worked for others, the attendee will discover and create a "personalized wellness action plan" that they can begin implementing immediately. We will close with some easy universal tools to help reframe our minds and our bodies.

Methods: (75 minute workshop)

(15 minutes) The Stats:
Review current definition and statistics of burnout in healthcare
Discuss the why burnout in healthcare is important to address
Identify work environment and personal driving factors for burnout

(15 minutes) Self-Analysis
To identify individual signs and symptoms of burnout
Take the quiz

(30 minutes) Discuss approaches to wellness, building resiliency: Personal (vs System Wide)
Open discussion, brainstorming, Kwon's tips
Interactive Task: How to create your own wellness action plan

(10 minutes) Take home Tools:
5 minute stretch. (5minutes)
Social Skills (listening, not hearing) & stressful moment exercise (10 minutes)

Intended Outcomes:

- Gain a better understanding of the symptoms and definitions of burnout and identifiers for individual burnout.
- Identify resilience building activities and techniques for healthcare workers and designing and implementing a personal wellness program to address and reduce stressful moments.

Target audience: Faculty, providers in healthcare, health profession students

Key Phrases: *Burnout* *Personal Agenda* *Interactive*

Session III: Workshops

3:30 pm – 4:45 p.m.
MEB 314

Disability in Medicine Curriculum at the John A. Burns School of Medicine

Lauren M. Sternberg, MS3
Third Year Medical Student, JABSOM
Jeffrey K. Okamoto, MD
Department of Developmental-Behavioral Pediatrics, Hawaii Pacific Health
Assistant Professor, Department of Pediatrics, JABSOM
Violet E. Horvath, PhD
Director, Pacific Disabilities Center, JABSOM
Sarah E. Bellatti, MS2
Second Year Medical Student, JABSOM

Rationale/Context: Disability training is lacking in most medical education curriculums (1). This is cause for concern as disabled patients represent a significant portion of the population seeking healthcare. According to the Centers for Disease Control and Prevention, 61 million adults (26%) in the United States are disabled (2). In Hawaii, 21% of the adult population is disabled. Patients with disabilities may require differences in care that physicians are uncomfortable with or untrained to provide. This perpetuates a substandard quality of care in a population that already faces barriers to medical services.

The "Disability in Medicine" curriculum at the John A. Burns School of Medicine was developed by students and faculty in response to the absence of formal disability training during the preclinical years. Opportunities for involvement include an interest group, elective course, and certificate of distinction. This panel will inform participants how disability education is creating more informed future physicians and improving advocacy skills.

Objectives: At the end of the panel discussion, participants will:

1. Recognize common problems people with disabilities face in the healthcare setting.
2. Describe the Disability in Medicine curriculum at the John A. Burns School of Medicine.
3. Examine which aspects of the curriculum were deemed more or less successful by students and how to improve the latter.
4. Discuss how to train on simple strategies to make healthcare personnel more inclusive and potential curriculum adaptations to other health professions e.g., nursing education.
5. Join the Disability in Medicine efforts and spread awareness about the program.

Description of Session: A short introductory case presentation will provide attendees with background information on the problem of ableism in medicine. This will be followed by an overview of the Disability in Medicine curriculum including its connection to national initiatives for training medical students in disability (20 min).

Special attention will be paid to detailing the elective course activities which welcomed its first cohort in Fall 2023. Elective leadership was composed of an M.D., Ph.D., two third-year medical students, and two second-year medical students. Ten medical students enrolled in the elective which met for nine sessions. The elective was divided into three different session types: discussion, student presentation, and patient interaction.

Discussion: The authors identified broad topics to address including (1) disability models, (2) history, social movements, and the law, (3) health insurance, (4) universal design, and (5) mental illness and more as disability. Elective leadership selected educational materials of various formats based on said topic and developed discussion questions.

Student presentation: Each participant selected and researched a disease process that causes disability. Students then created a 25-minute presentation using at least two scholarly sources. Emphasis was placed on incorporating the patient's perspective and multidisciplinary therapeutic interventions.

Patient interaction: After hearing from community volunteers with disabilities about their healthcare experiences, students practiced taking a history and performing a modified physical exam.

Anonymous feedback was collected after the patient interaction and at the conclusion of the course.

Panelists will include faculty and medical student curriculum leadership and a medical student participant. Program leadership is composed of both self-advocates with disabilities and allies. Topics for this panel presentation are (1) ways to address ableism at both the provider and system levels, (2) the pearls and pitfalls of curriculum development and course execution, (3) student feedback acquisition and interpretation, and (4) future directions for the program including but not limited to elective improvements, interprofessional activities, expansion of select elements into the standard medical education curriculum, and opportunities for community partnerships on Oahu and neighbor islands (10-15 min per topic).

Target Audience: This session is geared towards medical professionals, educators, students, disabled persons, non-disabled allies as well as those interested in social justice topics.

References:

1. Lee D, Pollack SW, Mroz T, Frogner BK, Skillman SM. Disability competency training in medical education. Med Educ Online. 2023;28(1):2207773. https://doi.org/10.1080/10872981.2023.2207773
2. Learn About Disability and Health. Centers for Disease Control and Prevention. Published November 20, 2019. https://www.cdc.gov/ncbddd/disabilityandhealth/index.html

Key Phrases: *Disability* *Health Disparities* *Curriculum Development*

Poster Session Summary

Poster Session: 11:45am – 1:15pm
MEB Lobby

Posters may be placed from 7:30am, and must be posted by 11:45am

Presenters at posters 12:00noon-1:00pm

Please remove your posters at the end of the poster session

Poster Abstract #1

Faculty Development: JABSOM Partnering with HPMG Clinical Sites

Dee-Ann Carpenter MD[1,2], Martina Kamaka PMD, FAAFP[1], Bradley Chun MD[3,4]
Maile Tauali'i PhD, MPH[4], Marcus Iwane MD[3,5], Jeani Jow, PharmD[4]

[1]Department of Native Hawaiian Health, JABSOM; [2]Office of Medical Education, JABSOM;
[3]Department of Medicine, JABSOM; [4]Hawaii Permanente Medical Group; [5]Kaiser Permanente West Oahu

Context: As a multi-disciplinary team, funded by Clinical Scholars, a leadership program of the Robert Wood Faculty Development for clinical faculty is needed whenever medical school curricular changes are made that impact clinical faculty. The John A. Burns School of Medicine (JABSOM) recently initiated a Longitudinal Clinical Preceptor (LCP) program for first and second year medical students, to supplement JABSOM's core Problem-Based Learning (PBL) curriculum. Students meet with their LCP monthly. This curricular change requires more LCPs, who may need a basic understanding of medical school curricula, i.e. education and exposure students have had and what gaps may still exist in their education and training.

HPMG (Hawai'i Permanente Medical Group) is composed of physicians at Kaiser Permanente, some of whom have become LCPs. Recently, HPMG Undergraduate Medical Education leadership reached out to JABSOM faculty about designing a half day faculty workshop to address some gaps in LCP knowledge about JABSOM's medical student curriculum, anticipating that this workshop would be able to provide basic information so that the LCP could work more effectively with their medical student learner. JABSOM faculty were asked to partner in the planning for this faculty development and subsequent discussions have solidified an agenda.

Objectives:

1. Discuss an innovative collaborative faculty development workshop designed by JABSOM medical educators and HPMG to address knowledge and skills gaps for longitudinal clinical preceptors.
2. Describe how knowledge and skills gaps around understanding PBL, addressing feedback, and incorporating indigenous health were addressed in the faculty development workshop.

Description of Innovation: Faculty workshop agenda addressed certain gaps identified by HPMG in discussions with their longitudinal clinical preceptors. The workshop will take place on Nov. 11, 2023 with an anticipated fifteen clinicians. Many clinicians will be longitudinal clinical preceptors in the inpatient or outpatient setting. In addition, team leads (in charge of HPMG physicians who work clinically with students), and physicians who teach third year medical students during longitudinal integrated clerkships will be in attendance.

The agenda begins with cultural grounding in Native Hawaiian health, as it is incorporated into the JABSOM curriculum as well as with HPMG physicians. The rest of the agenda covers topics including: "tips for understanding today's student learners," giving feedback (including tools and resources for working with the "difficult" student), familiarization with the basics of Problem Based Learning, overview of clinical skills teaching, and finally, advice and perspectives from PBL tutors and Longitudinal Clinical Preceptors. These are all lecture style presentations, using case scenarios to involve audience participation.

Evaluation of Innovation: A post-curricular assessment will be given to all attendees immediately following and a few months after the workshop. The workshop is taking place after the submission date for the abstract. Therefore, results will be available and shared at the time of the HPEC conference. We hope to see a change in behavior of the preceptors so that the students are able to see a difference in their teaching, more efficient, effective teaching encounters with cultural grounding, as well as more personalized student feedback.

Key Phrases: *Faculty Development* *Medical Education* *Collaboration*

Discussion/Key Messages: The following are the key messages from the workshop:

- Cultural grounding is important for not only medical learners but also teachers. In an Indigenous space, that includes knowing the basics about Indigenous health statistics, history, values and cultural strengths.
- Clinical teachers of medical students (those teaching "at the bedside" or in clinical settings) need to have a basic understanding of medical student educational curricula and content in order to prepare for effective teaching encounters.
- Teachers or preceptors should have an idea of the content that medical students should already have mastered as well as an understanding of where gaps may exist.
- Giving effective feedback is an important skill for clinical instructors and medical schools should ensure that faculty are trained in this teaching responsibility.

It is our hope that this type of workshop can be easily incorporated into the clinical teaching setting.

Target Audience: Medical Educators

Poster Abstract #2

Embarking on the RIDGETrail: A Novel Educator Certificate Pathway for the Busy Clinical Teacher

Zia Khan MD, MPH[1], Fiona Kennedy BSN[2], Bryan Brown MD, MHS[1,2,3]

[1]Division of Cardiology, John A. Burns School of Medicine; [2]Queen's Health Systems;
[3]Office of Medical Education and HMSA Center for Learning Innovation, John A. Burns School of Medicine

Context: Many professional development programs have been described for clinician-educators.[1] However, these programs often disproportionately benefit subsets of self-selected professionals with dedicated time, while participation may not be practical for most clinical teachers who maintain heavier clinical workloads. The two major health systems that provide the primary faculty for a wide range of UME and GME programs at UH JABSOM are mainly comprised of clinical teachers for whom training and support as educators is either absent or, at best, unstandardized. The result is a risk of perpetuating a chasm, such that those spending the greatest time in our educational clinical environments cannot access opportunities to develop, legitimize, or explore their role as educators.

Objectives: RIDGETrail participants will be able to:

1) Seek regular observation and feedback of teaching in a variety of contexts (Behavior).
2) Describe best practices for appraising one's own teaching and that of peers. (Knowledge and Skill)
3) Practice foundational skills of effective clinical teachers.(Skill)
4) Value—and feel valued for—the teaching aspect of clinical jobs. (Attitude)

Description of Innovation: The Queen's University Medical Group (QUMG) and JABSOM's HMSA Center for Learning Innovation developed a medical education certificate pathway for faculty, called RIDGETrail (Recognizing, Inspiring, and Developing Great Educators), to target the busy clinical teacher's needs. RIDGETrail's key feature is a flexible credit system, which allows participants to meet the requirements in ways that best align with their contexts and schedules. These credits fall into four broad categories as follows:

1. R*eceives teaching about medical education*. (20 Hours)
2. O*bserves someone else* teaching, and completes a structured observation form (10 Times)
3. *Teaches* and observer completes evaluation form and provides feedback. (6 Times)
4. *Teaches (unobserved)* beyond standard clinical duties but completes a brief self-reflection form. (6 Hours)

The curriculum is being piloted with seven attendings of QUMG Cardiology Inpatient Teaching Service. Participants are expected to complete their credit requirements within one year, giving the pilot group a target of July 1, 2024.

Description of Innovation:

Needs Assessment: A focus group of five QUMG Cardiology Inpatient Teaching Service attendings was performed; two others were excluded from the focus group given leadership roles that risked hindering open discussion. The non-cardiologist collaborator (BB) performed and transcribed the focus group, relaying key themes to the team in summarized, anonymized form. Themes included:

- Large proportion of teaching is clinical context, *in situ*, and on-the-fly
- High clinical volume limits educational volunteerism, especially UME opportunities
- Desire for more feedback on their teaching from peers and leaders

Key Phrases: *Faculty Development* *Community of Practice* *Distinction Pathway*

Observation tools: Teaching observation tools were developed for a variety of contexts (large group, small group, procedural, bedside, and inpatient work rounds) by combining elements of previously published frameworks.[2,3] All credit forms were incorporated into a single, branching-logic survey tool, easily accessed via link or QR code from any device by participant or observer.

Program Evaluation: Surveys to participants about their experience with the pathway are planned for midway (January 2024) and at completion (July 2024). *Therefore, we expect additional survey data to be ready for presentation at the time of the HPEC conference*.

Credit submissions to date: In the first three months of the pathway, credit activities logged by the seven participants have included 7 teaching observations *of* RIDGETrailers, 13.25 faculty-hours of didactics received, and 10 hours of unobserved volunteer teaching with self-reflection.

Discussion: RIDGETrail models professional development that narrows the chasm between established academic clinician-educators and passionate, early-career clinical teachers through an emphasis on flexibility, convenience, and *in situ* observation and training. Following the pilot, we plan to establish RIDGETrail in other departments and divisions. We view this as an early step toward a robust community of practice for educators that aligns educational outcomes with clinical, operational, and financial goals of our health systems.

Target Audience:

- Early-career and/or busy aspiring clinician-educators!
- Faculty developers
- Leaders of clinical departments, divisions or faculty groups

References:

1. Steinert Y, Mann K, Anderson B, et al. A systematic review of faculty development initiatives designed to enhance teaching effectiveness: A 10-year update: BEME Guide No. 40. *Medical Teacher*. 2016;38(8):769-786. doi:10.1080/0142159X.2016.1181851
2. Maria A. Blanco, Carol F. Capello, Maryellen E. Gusic, Wayne T. McCormack, Janet Palmer Hafler. Peer Feedback Tool for Lectures & Small Group Teaching. *MedEdPORTAL*. Published online 2011. doi:10.15766/mep_2374-8265.8416
3. Roberts NK, Williams RG, Kim MJ, Dunnington GL. The Briefing, Intraoperative Teaching, Debriefing Model for Teaching in the Operating Room. *Journal of the American College of Surgeons*. 2009;208(2):299-303. doi:10.1016/j.jamcollsurg.2008.10.024

Poster Abstract #3

Building on Project ECHO® Methods to Build Capacity for Hepatitis C Elimination

Daniel Saltman MD, FACP

Department of Medicine, John A. Burns School of Medicine and Project ECHO: Hawai‘i Learning Groups

Context: Hawaii has one of the highest rates of liver cancer incidence and mortality in the US, primarily caused by viral hepatitis. Safe and effective treatments exist to cure hepatitis C infection (HCV). Hawaii has a statewide goal aligned with a national initiative to eliminate HCV by 2030. Hawaii's island geography makes access to quality care difficult for isolated populations, including those in rural areas, incarcerated, or among people who use drugs.

Both local and national experience has identified treatment of hard to reach populations as a bottleneck in HCV elimination efforts. Hepatitis C is transmitted through blood-blood contact. Risk factors include infections overseas, blood transfusions prior to 1992, low hygiene tattoos, and injection drug use. Early screening efforts targeted those born between 1945 and 1965 as at risk with many unaware of their chronic infection. Current recommendations are for one-time screening everyone over age 18 and anyone with ongoing risk factors. New infections are increasing among young people who use injection drugs.

The ECHO model was identified as a best practice to develop a localized network of treating providers using case-based, interdisciplinary, collaborative learning with hepatitis experts.

The ECHO model leverages video-conferencing to develop a sustainable hub-and-spoke program of mentorship and guided practice. The hub is composed of specialists and content experts, and the spokes are primary care providers and their teams.

We recently completed a third series centered on hepatitis evaluation and treatment. In 2021, we produced a 16-week series focused on HCV; in 2022, 16-weeks focused on hepatitis B (HBV) and in 2023, 12-weeks focused on HCV.

Objectives: Our goal is to build capacity for the evaluation and treatment of chronic HCV.

Description of Innovation: From January 2021 through October 2023, we produced 44 clinics. Forty-six de-identified patients were presented and discussed.

We emphasize the primacy of case-based learning by typically starting each session with the patient case. Recent sessions had 45 minutes for the case presentation and discussion and 40 minutes for a didactic with Q&A. The program leads model inclusivity and a team-based approach to promote interdisciplinary learning.

A Case Presentation Form was designed to communicate clinical context and to focus discussions.

A facilitation method is used that separates the patient background, history and physical exam from the expert recommendations. This promotes participation, a patient-centered approach to care, and helps level disparate backgrounds of participants. All participants are invited to ask questions after the presentation to gain a deeper understanding of the patient's case. A facilitator summarizes this background and confirms the accuracy with the presenter. The content experts and others are then invited to provide recommendations regarding further evaluation and the treatments and the expert recommendations are summarized to the group. The expression "all teach, all learn" becomes manifest in these discussions.

We are accredited to offer continuing education awards to physicians, nursing, pharmacists and social workers. We collect evaluation surveys after each session using REDCap (Research Electronic Data Capture) and deliver a participant- and session-specific, printable CE certificate upon completion.

Presenter slides, references and resources are posted on the HLG webpages after each session to provide greater depth of learning for interested participants.

Through REDCap, we distributed pre-and post-series questionnaires. Twenty-six questions were grouped by Self-efficacy, Access, Clinical Benchmarks, Series Evaluation, and Comfort with practical practice goals like vaccination, screening, lab interpretation, and use of standing orders.

Key Phrases: *Case-based Learning* *"All teach, All learn"* *ECHO Model*

Evaluation of Innovation: We had 1455 hours of attendance by 197 individuals. Fifty-nine physicians, 30 pharmacists, and 56 nurses participated from zip codes across all the Hawaiian Islands.

Average attendance increased over 3 years (45 to 95 to 115) to include providers from the Hawaii Dept of Public Safety prison system, Community Health Centers, pharmacies, drug treatment programs and insurance carriers.

For the years 2021, 2022, 2023, respectively, of those non-faculty who completed the questionnaires:

8/11 (73%), 30/37 (81%), and 25/28 (89%) *Agreed or Strongly Agreed their participation reduced the need for travel for their patients.*

8/11 (73%), 24/37 (65%), and 14/28 (50%) *Agreed or Strongly Agreed their prescribing practice will change as a result of what they learned.*

7/11 (64%), 27/37 (73%), and 19/28 (68%) *Agreed or Strongly Agreed their referral pattern will change as a result of what they learned.*

After participating in the 2023 HCV ECHO series, 68% of respondents agreed or strongly agreed with the statement: "*Compared to other providers, I can manage primary care liver problems very well"* compared to 36% before participating in the training(s) – a 32% increase.

Discussion/Key Message: This year, the Medicaid Quest plans eliminated prior authorization requirements for prescribing direct-acting antiviral treatments for HCV and explicitly recognized the value of this HCV ECHO program therein.

A program of mentorship and intentional education for primary care participants was shown to increase the capacity for the management and treatment of HCV. Ongoing efforts like these are essential to hepatitis C elimination plans in Hawai'i. Centering patients and provider experience by emphasizing case-sharing as the primary learning method has resulted in strong engagement. Participants reported changes in prescribing and referral practices, expressed improved confidence in managing liver conditions, and strong program satisfaction.

We hope for further recognition that evaluation and treatment of hepatitis C with a shared practical goal of elimination is an ideal model for how to leverage technology in the primary care setting to further broad public health goals. Hepatitis C is a teaching case for developing population-based care using screening protocols and standing orders, decision support and reporting standards.

Target Audience: Educators, primary care providers, pharmacists, health care systems, public health workforce

References:

National Elimination Plan: JAMA. 2023;329(15):1251-1252. doi:10.1001/jama.2023.3692
Hawai`i Elimination Plan: https://www.hepfreehawaii.org/hep-free-2030
HCV ECHO 2023 Resources: https://www.hawaiilearning.org/hcv-2023-resources/

Poster Abstract #4

Assessing Interest and Awareness Among Japanese Medical Students in International Standardized Testing: The Introduction of the National Board of Medical Examiners (NBME) Comprehensive Basic Science Examination (CBSE) in Japan

Emi Saegusa-Beecroft MD, PhD[1,2,4], Kentaroh Takagaki MD, PhD, BAgr[3], Junji Machi MD, PhD, FACS[1,2,4]

[1]Office of Global Health and International Medicine, JABSOM; [2]Department of Surgery, JABSOM;
[3]Department of Anatomy and Systems Biology, Faculty of Medicine, University of Yamanashi, Japan;
[4]JrSr Corporation, Japan (non-profit educational organization)

Introduction: Since 2016, the University of Hawaii John A. Burns School of Medicine, in partnership with the JrSr Corporation and 14 out of 82 medical schools in Japan, has been offering the Hawaii Medical Education Program (HMEP). This program offers clinical clerkships, workshops, on-demand course materials, and live online classes, all focused on global health and international medical standards. This study's primary goal was to examine the feasibility of rolling out the National Board of Medical Examiners (NBME) Comprehensive Basic Science (CBSE) and Clinical Science Examinations (CCSE) in Tokyo, potentially impacting the U.S. healthcare workforce, highlighted by Non-U.S. International Medical Graduates comprising 27.2 percent of all primary care positions in the 2023 U.S. match [1], with a particular focus on Hawai'i due to its significant Japanese heritage community (16.5%) [2].

Objectives:

1. To assess the level of interest among Japanese medical students in internationally standardized medical testing, specifically the USMLE Step 1 and NBME shelf examinations.
2. To present the implementation of the NBME CBSE and CCSE in Japan, affirming our HMEP program's direct role in this educational advancement.

Methods: Using Google Forms, an online anonymous survey was conducted across 14 medical schools, with 1900 students on the HMEP mailing list (20% of medical students). Of those, 279 students (15%) were active participants, defined by direct participation in any of the HMEP curriculum. Participation was voluntary, and data were collected and analyzed by two independent researchers.

Results: Out of 115 survey responses, 101 responses from medical students were retained (36% of active students), and the other responses from residents and faculty were excluded. Among the valid responses (n=99; 79 pre-clinical and 22 clerkship students), 98% expressed interest in participating in a testing-center-based NBME CBSE (n=97), with 23% strongly determined to take the exam (n=23). Only 1 student was not interested in the USMLE Step 1. While 55% (n=54) planned to take the Step 1 exam during medical school, 8% (n=8) intended to do so during post-graduate residency, and one third remained undecided (35%, n=35). Respondents cited various reasons for pursuing clinical training in the U.S., including experiencing advanced medical practice (64%, n=63), a desire to live in the U.S. (35%, n=35), perceived higher physician compensation (26%, n=26), a desire to see the world (83%, n=82), a passion for global healthcare and international medicine (60%, n=59), and the belief in potential career advantages within Japan (22%, n=22). Regarding the USMLE Step 1, 47.5% (n=47) faced challenges in balancing exam preparation with extracurricular activities and their busy Japanese medical curriculum, while 62% (n=61) found gathering information for effective preparation challenging.

Discussion: Survey results show strong interest for the NBME CBSE and CCSE at testing centers among Japan's medical students. A majority wish to train in the U.S., aiming for the USMLE. Although this study was limited by its voluntary nature, the survey offers insights into the ambitions and barriers of the responders who are highly-motivated students pursuing international medical careers, who may stand to benefit from new center-based exams, particularly for U.S. residencies.

Key Phrases: Standardized Testing Medical Student Education in Japan NBME Shelf Examinations

Conclusion: The introduction of NBME Shelf Examinations in Japan by the HMEP marks a significant milestone in aligning Japanese medical education with international standards. This initiative is a substantial contribution to the modernization of medical education in Japan. It addresses the strong demand from students aiming for international medical careers and enhances proficiency in professional English communication. The successful implementation of these examinations is anticipated to profoundly impact the global healthcare workforce, including in the U.S., by producing a generation of medical professionals equipped with global competencies and perspectives.

Target Audience: International Medical Students, Medical School Faculty, Medical School Administrators, Medical Education Researchers

References:

[1] https://www.nrmp.org/wp-content/uploads/2023/05/2023-Main-Match-Results-and-Data-Book-FINAL.pdf
[2] 2020 United States Census

Key Phrases: Standardized Testing Medical Student Education in Japan NBME Shelf Examinations

Poster Abstract #5

Evidence-Based Instruction Strategies to Improve Drug Calculation Skills

Samia Valeria Ozorio Dutra PhD, RN[1], Kruna Kumar PhD[2,3], John Clochesy[4]

[1]Nancy Atmospera-Walch School of Nursing; [2]School of Computing, Clemson University, South Carolina; [3]Medical University of South Carolina at Charleston; [4]Pan American Research, Numeric Generics, Florida

Introduction: Medication errors and insecure practices harm healthcare systems worldwide. Each year, around 7,000 to 9,000 people in the United States die due to medication errors. (Tariq et al., 2023). There is no standardized method of educating healthcare providers on medication calculations.

Objectives: Identify evidence-based instruction strategies for drug calculation skills development and describe the strategies based on the research-based principles for smart teaching.

Methods: Through an evidence-based systematic review, we followed Whittemore and Knalf (2005) steps to assess the level and quality of evidence. The research process involved five steps: (1) defining the research question, (2) conducting a literature review, (3) gathering data from primary sources, (4) analyzing data, and (5) presenting findings. An electronic search of CINAHL, PubMed, and PsycINFO was conducted using the search terms “students,” “nursing,” “education,” “drug dosage calculations,” and “mathematics.” To qualify for inclusion in the review, the studies had to include nursing students or nurses, be written in English, and not restricted in regards of the country. Articles were not restricted to any one country because medication calculation errors related to patient safety remain a significant global issue. From 2014 to 2020, a total of 1793 articles were retrieved.

Results: For this review, we found 51 studies that met the eligibility criteria. Most of these studies reported results based on evidence levels III (23.5%) and V (41.2%). The majority of the information quality was from Level B (82.4%). The tables summarize the level of evidence, quality of evidence, role of evidence in learning and teaching, and the research-based principles addressed in the studies reviewed. The major teaching strategies were early diagnostic assessments of students' knowledge, anxiety, and self-confidence; stimulate self-directed learning, and working on knowledge organization by scaffolding complex tasks, and being explicit about objectives and expectations. The use of e-learning has become increasingly popular since 2018.

Discussion: Utilizing technology can greatly benefit education by complementing in-class practice and providing students with opportunities for creative, autonomous, collaborative, and interactive learning. In recent years, there has been an increase in publications utilizing e-learning, smartphone apps, and web pages to improve drug calculation skills (for example: https://www.safemedicate.net/ and https://testandcalc.com/index.html). However, due to the low levels and quality of evidence, we recommend that future studies use research designs that produce higher levels of evidence. For instance, randomizing teaching methods per semester allows for a standardized approach to data gathering in nursing programs, which enhances consistency in monitoring student progress and evaluating teaching effectiveness. Implementing web-based software can also support effective research-based approaches. We recommend that teaching approaches address cognitive, motivational, and developmental goals to ensure student success. Future trends are adaptive web-based technology aiming at improving the learning of medication calculation skills (Ravik & Andresen, 2023).

Target audience:
Healthcare professionals, professors, administrators, and community members interested in patient safety

References

Ravik, M., & Andresen, K. R. (2023). Adaptive Web-Based Technology Aiming at Improving Learning of Medication Calculation Skills for Nursing Students.

Tariq RA, Vashisht R, Sinha A, et al. Medication Dispensing Errors and Prevention. [Updated 2023 May 2]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK519065/

Key Phrases: *Medication Calculation* *Patient Safety* *Effective Teaching*

Poster Abstract #6

Implementing Phenobarbital Protocol in Alcohol Withdrawal Syndrome

Maxwell Shen MD[1], Francisco Mercado, Jr MD[1,2,3]

[1]Tripler Army Medical Center; [2]Harvard Medical School; [3]John A. Burns School of Medicine

Context: In a 2013 study of VA patients, Alcohol Withdrawal Syndrome (AWS) had a prevalence of 5.8%, representing 26,381 hospitalizations.[1] Tripler Army Medical Center (TAMC) does not have a formal program to train residents on Phenobarbital protocol for AWS. Recent studies suggest that Phenobarbital is a safe and effective alternative to Benzodiazepines. [2,3] When Phenobarbital was used without protocol, Patient Safety Review (PSR) filing increased.

TAMC serves active-duty and veteran personnel, with higher AWS admission, due to prevalent alcohol use disorder among these populations. Safe and effective management results in shorter ICU stays, shorter hospital stays, lower intubation rates. [2]

For needs assessment, a Google Form survey conducted among Internal Medicine Residents reflected a need for more knowledge, understanding and confidence in prescribing Phenobarbital for AWS. There was no formal education program on Phenobarbital use before the protocol implementation in TAMC.

Objectives: The objectives of this innovation are to:
1. Utilize newer techniques of learning, Flipped Classroom and Think-Pair-Share and Storytelling in implementing Phenobarbital Protocol
2. Produce highly competent residents to utilize Phenobarbital for AWS
3. Prevent Patient Safety Reports (PSR) related to improper use of Phenobarbital
4. Minimize: hospital length of stay (LOS), transfers to ICU, intubation rates, PSR filing

Description of Innovation: The educational program has two parts: the first part utilizes the **Flipped classroom (FC)**, and the second part utilizes the **Think-Pair-Share and Storytelling (TPS-S)**. FC and TPS-S have proven to promote knowledge retention, critical thinking, and collaborative learning. TPS, when combined with Storytelling, was "perceived favorably" by the learners and teachers as an effective learning strategy [4,5].

FC consisted of a pre-recorded PowerPoint presentation about Phenobarbital and will be provided to the learners (Internal Medicine Residents PGY 1 to 3) 48 hours prior. It will introduce the new Phenobarbital protocol and address the safety, efficacy, and advantages of Phenobarbital over Benzodiazepines.

The second part of the project utilizes **TPS-S**. The face-to-face session will tackle four clinical cases representing the 4 degrees of AWS with wildcard questions. The **Storytelling** part is the portion where the faculty will share his opinion on each case, based on his clinical expertise and experience. After the **TPS-S**, a course assessment survey using Google Doc will be given to the Residents.

Evaluation of Innovation: The Residents will be assessed using a 10-point MCQ before and after the educational program. The success of the program will also be assessed yearly based on the following outcome reductions in: hospital LOS (decrease by one day), transfers to ICU decrease by 1 case/year, intubation rates decrease by 1 case/year, PSR < 3/year, and increase resident participation of more than 60%.

Key Phrases: Flipped Classroom Think-Pair-Share and Storytelling Phenobarbital

Discussion – Challenges and Solutions:

- Time/Workload: 39 TAMC IM Residents rotate in different locations at different times. This project will become a mandatory part of the curriculum and be held during dedicated academic sessions
- Support from Nursing Staff. The Head of Nursing verbally supported the new protocol during the stakeholder's meeting. The CMO suggested incorporating an educational training module in Genesis EMR for nurses before implementing the new Protocol
- Strong support from leadership and approval from educational committee: Granted approval from CMO
- Expansion to other departments (Family Medicine): If successfully integrated to IM program, Family Medicine Program may adopt this protocol for their Residents

References:

1. Steel, T.L., et al., *Prevalence and Variation of Clinically Recognized Inpatient Alcohol Withdrawal Syndrome in the Veterans Health Administration.* J Addict Med, 2020. **14**(4): p. 300-304.
2. Tidwell, W.P., et al., *Treatment of Alcohol Withdrawal Syndrome: Phenobarbital vs. CIWA-Ar Protocol.* Am J Crit Care, 2018. **27**(6): p. 454-460.
3. Hjermø, I., et al., *Phenobarbital versus diazepam for delirium tremens--a retrospective study.* Dan Med Bull, 2010. **57**(8): p. A4169.
4. Graham, K.L., et al., *Effect of a Flipped Classroom on Knowledge Acquisition and Retention in an Internal Medicine Residency Program.* J Grad Med Educ, 2019. **11**(1): p. 92-97.
5. Ganatra, S., et al., *Perceived Effectiveness and Applicability of Think-Pair-Share Including Storytelling (TPS-S) to Enhance Clinical Learning.* Teach Learn Med, 2021. **33**(2): p. 184-195.

Poster Abstract #7

Partnering with *AlohaCare* to Deliver a Health Systems Science Curriculum for JABSOM Medical Students: A Pilot Curriculum

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Introduction: In the US, health plans are the gatekeepers for health care funding and provision. However, there are limited undergraduate medical education (UME) curricula which demonstrate how health plans impact physicians' ability to provide patient care.[1-3] Many medical school graduates enter residency without an understanding of how health care is structured, funded, and delivered in the US. [1-3] The University of Hawai'i Manoa, John A. Burns School of Medicine (JABSOM) partnered with the not-for-profit *AlohaCare* health plan to pilot an immersive, Health Systems Science (HSS) curriculum for rising second year medical students. This curriculum provided a platform for students to participate in authentic HSS learning experiences from the health plan perspective. *AlohaCare* health professionals engaged students in their daily operations to critically analyze systems thinking, social determinants of health, health care funding, and the synergies between the health plans and physicians' abilities to provide equitable and inclusive health care.

Objectives:
1. Identify core HSS domains within the context of managed care.
2. Apply the tenets of population health, health economics, and health policy and management to equitable patient care within a Medicaid Health Plan.

Methods: Two 4-week,16-hour electives were conducted during July and August 2022. Each elective enrolled two rising second year medical students for a total of 4. Learning activities involved in-person sessions conducted at the *Alohacare* offices and hands on sessions at community health centers. Students also completed virtual, asynchronous HSS modules followed by focused discussions. Coursework was co-developed with JABSOM faculty and taught by *AlohaCare* leadership and staff, all of whom volunteered their time and efforts. Students learned about the core domains of HSS through the lens of managed care by participating in authentic health plan experiences. These experiences included interdisciplinary coordination of care for high-risk patients, policy development, inpatient behavioral rounds, and utilization management.

Students completed anonymized pre and post electronic surveys assessing their HSS knowledge, confidence, and skills. An evaluation specialist conducted debriefing sessions with each student cohort and with *Alohacare* leadership upon the conclusion of each elective. Data from the official JABSOM elective evaluation were collected and triangulated with the other evaluation data points.

Results: 100% of the medical students (n=4) participated in pre-post, electronic surveys administered on the first and last days of the elective. 100% of the students also participated in a final debriefing session on the last day of the elective. The Chief Medical Officer and Senior Medical Director for *AlohaCare* participated in debriefing sessions at the end of each elective block. Although limited by the small sample size, 100% of the student survey results as well as the qualitative debriefing data demonstrated increased levels of confidence working with health plans. Student debriefing data also indicated an increased understanding of how health plans directly affect physicians' provision of patient care. Data from *AlohaCare* leadership debriefings revealed student readiness to participate in authentic health plan experiences early in medical school training. Data from JABSOM course evaluations indicated strong student satisfaction with the elective.

Discussion: This type of health-plan driven curriculum can be integrated into early medical student education to allow learners to experience health care delivery through the lens of a health plan's mission and goals. Early exposure to HSS principles embedded within health plans allows for learners to critically think about the role health plans play in the provision of equitable health care. Further, understanding the complexities of funding and delivering health care can empower medical students to develop strategies early in their training to promote health equity and foster inclusive practices. Finally, this model can be applied to other health professions' education programs.

Target Audience: Medical Students

References

1. Gonzalo JD, Lucey C, Wolpaw T, Chang A. Value-Added clinical systems learning roles for medical students that transform education and health: A guide for building partnerships between medical schools and health systems. Acad. Med. 2017;92(5):602–607. https://doi.org/10.1097/ACM.0000000000001346
2. Gonzalo JD, Wolpaw D, Graaf D, Thompson BM. Educating patient-centered, systems-aware physicians: a qualitative analysis of medical student perceptions of value-added clinical systems learning roles. BMC Medical Education, 2018;18(1):248–248. https://doi.org/10.1186/s12909-018-1345-5
3. Gonzalo JD, Chang A, Dekhtyar M, Starr SR, Holmboe E, Wolpaw DR. Health systems science in medical education: Unifying the components to catalyze transformation. Acad. Med. 2020;95(9):1362-1372. https://doi.org/10.1097/ACM.0000j000000003400

Key Phrases: Health Systems Science UME Experiential Learning Health Plan Perspective

Poster Abstract #8

A Qualitative Study to Understand the Opportunities and Challenges of Integrating ʻŌlelo Hawaiʻi (Hawaiian Language) into Medical Education in Hawaiʻi

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Introduction: In 1978, ʻŌlelo Hawaiʻi (OH) became one of the official languages of the State of Hawaiʻi, the ancestral home of Native Hawaiians (NHs). Since 1986, Hawaiian language immersion and fluency have grown and OH is now frequently spoken among NHs and non-NHs throughout the State. With the growing demand for OH fluency, medical education and health care services are experiencing an expressed need for "language-concordant care". Language-concordant care (LCC) occurs when patients and providers communicate in a shared language, and it has been shown to improve trust and health outcomes and reduce medical errors and adverse events. LCC studies investigating the incorporation of Spanish, Arabic, and te reo Māori into medical education have shown increased comfort and rapport with patients. They also demonstrate that physicians who have undergone LCC training are more likely to take care of a patient who prefers to speak that language in the future. This emphasizes the need to prioritize the integration of language into medical education rather than relying on interpretation services. These are among a limited number of studies evaluating the potential impact of teaching indigenous language fluency (i.e. OH) to medical students as a means to improve patient-provider relationships, health outcomes, behaviors, and/or health literacy. Yet, Indigenous peoples, such as NHs, are known to experience persistent health disparities that could be improved with stronger communication skills, patient-provider interactions, and the building of trust.

Objective: To better understand the opportunities and challenges of teaching conversational ʻŌlelo Hawaiʻi (OH) in medical school curricula in Hawaiʻi.

Methods: IRB approval was obtained. Participants (n=19) engaged in semi-structured focus groups (n=4) or a key informant interview (n=1). These included 11 medical students (median age=27 years), 3 OH language instructors (median age=51 years), and 6 medical education faculty (median age=60 years). Thirteen participants (68.4%) were women and 13 (68.4%) identified as Native Hawaiian. All 19 participants reported that their first language was English. The most selected language spoken at home was English (64.3%), followed by Hawaiian (17.9%), Pidgin (7.1%), French (3.6%), Tahitian (3.6%), and Japanese (3.6%). Two researchers employed thematic content analytic methods and used both inductive and deductive coding to independently code all 5 transcripts.

Results: Five major themes emerged: (1) Language and the Native Hawaiian cultural context; (2) Use of ʻŌlelo Hawaiʻi in the community; (3) Clinical benefits of speaking ʻŌlelo Hawaiʻi; (4) Structure of integrating ʻŌlelo Hawaiʻi - logistics, barriers, and opportunities; and (5) Medical education curricula enhanced by ʻŌlelo Hawaiʻi - teachers, content, and design. Overall, themes 1-3 suggested that ʻŌlelo Hawaiʻi would provide NH cultural context, meet community support, and provide clinical benefits. Themes 4 and 5 addressed practical issues such as time constraints and development of curricula. **DISCUSSION:** Initial perspectives from teachers (medical education and ʻŌlelo Hawaiʻi) and learners of medical education were overwhelmingly positive on incorporating ʻŌlelo Hawaiʻi into medical education and eventually into health care services. Future studies are needed to further refine the process of development and implementation and to investigate expected outcomes such as quality of care, trust, and reducing health inequities.

Target Audience: Medical students and medical education faculty.

Key Phrases: Language Concordant Care Hawaiian Language Clinical Communication Skills

Poster Abstract #9

Screening for Adverse Childhood Exposures

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Context: Adverse Childhood Exposures (ACEs) were first identified by Felitti et al. through surveys sent to 9,508 respondents. There were seven different original ACEs, so each survey received a total score from 0 to 7. More than half of the respondents had exposure to at least one ACE. Furthermore, there was a graded relationship between the number of ACEs experienced and the odds ratio for experiencing adverse health outcomes such as severe obesity, ischemic heart disease, any cancer, stroke, COPD, diabetes, smoking, risky sexual behavior, depression, drug abuse, and suicidal ideation. A more recent meta-analysis from 2019 also found a graded relationship between the number of ACEs experienced and the odds ratio for experiencing adverse health outcomes. Furthermore, females were more likely than males to report higher ACE scores. Petrucceli et al. also suggested that the pediatric primary care office is the ideal place to detect ACEs early. Zhang et al. found that African American and Hispanic youth are more likely to experience adversity and have worse subjective physical health than their white counterparts.

Objectives:

1. Increase community awareness about the significance of ACEs
2. Increase provider engagement in administering ACE screening questionnaires and providing appropriate interventions
3. Increase patient engagement in completing ACE screening questionnaires

Description of Innovation: In June 2023, providers at the Kaiser Permanente West Oahu Medical Office at Kapolei began screening for ACEs. The Pediatric ACEs and Related Life Events Screener (PEARLS) was given to the parents or guardians of all children attending one-year-old well-child checks. PEARLS has a total of 17 items, and a "yes" to each item is equivalent to one point. Thus, the total questionnaire is scored from 0 to 17 points. For the first week, however, all the screening questionnaires given to patients were either not filled out or had a total score of zero. The PEARLS questionnaires were being given at the front desk attached to the routine one-year questionnaire without any explanation or cover letter.

After consulting social workers, psychiatrists, and other physicians, we hypothesized that the inclusion of a cover letter and re-ordering the items on the PEARLS would improve patient engagement and comfort in responding.

Evaluation of Innovation: De-identified responses to ACEs screening questionnaires were recorded from the beginning of administration throughout implementation of both the cover sheet and the re-ordered PEARLS. The total score (out of 17 items) for the original PEARLS, the cover sheet with the original PEARLS, and the cover sheet with the revised PEARLS was recorded from June through July. The average total score for each of the three categories was recorded and compared to provide a quantifiable proxy for patient engagement with the questionnaires.

Of the 15 PEARLS given without a cover sheet, the average total score was 0.07 out of 17. Of the 16 PEARLS given with a cover sheet, the average total score was 1.4 out of 17. Of the 32 re-ordered PEARLS given with a cover sheet, the average total score was 1.75 out of 17.

Discussion/Key Message: The implementation of a cover sheet and re-ordering the items on the PEARLS seemed to improve patient engagement with the questionnaires. The difference in patient responses from the addition of a cover sheet and re-ordering items suggest that these alterations may increase patient comfort in disclosing ACEs. For patients who responded to the questionnaires, appropriate referrals and resources were provided.

Target Audience: The intended audience of this presentation includes health professionals, and medical school faculty, educators and students.

References:

1. Vincent J Felitti, Robert F Anda, Dale Nordenberg, David F Williamson, Alison M Spitz, Valerie Edwards, Mary P Koss, James S Marks, Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study, American Journal of Preventive Medicine, Volume 14, Issue 4, 1998, Pages 245-258, ISSN 0749-3797. https://doi.org/10.1016/S0749-3797(98)00017-8.
2. Petruccelli K, Davis J, Berman T. Adverse childhood experiences and associated health outcomes: A systematic review and meta-analysis. Child Abuse Negl. 2019;97:104127. doi:10.1016/j.chiabu.2019.104127
3. Zhang X, Monnat SM. Racial/ethnic differences in clusters of adverse childhood experiences and associations with adolescent mental health. SSM - population health. 2022;17:100997-100997. doi:10.1016/j.ssmph.2021.100997

Key Phrases: Adverse Childhood Experiences Pediatric Screening Questionnaire West Oahu

Poster Abstract #10

Improving Depression Screening and Follow Up for Adolescents and Adults in the West and Central Oahu Communities of Hawaii: A Root Cause Analysis

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Context: Depression is a common mental disorder in the U.S, affecting an estimated 21 million adults and 5 million adolescents in 2021. In Hawaii, 12.7% of adults are diagnosed with depression at some point throughout their life. Depression is a complex illness with major debilitating implications in all aspects of adolescent and adult life. Along with being the leading cause of disability and suicide, depression may increase the risk of developing various comorbidities such as cardiovascular disease and inflammatory conditions, and worsening the prognosis of certain existing conditions such as cancer. Adopting proactive methods for preventing the development and progression of depression are essential. A method which has been shown to be beneficial for identifying and managing depression in patients over the age of 12 is routine depression screening in the primary care setting. At baseline, the depression screening rate amongst three primary care clinics in West Oahu was relatively low at 52.5% (target goal varies between 60-96% depending on specific insurance plan).

Objectives: Our goal is to highlight the primary barriers to depression screening in local primary care clinics serving the West Oahu communities, and raise awareness amongst physicians and other members of local health systems so that future interventions aimed at improving depression screening may be more informed and targeted.

Description of Innovation: First, three primary care teams from Queen's Clinically Integrated Physician Network (QCIPN) were interviewed and asked about their current workflows and perspectives on existing care gaps in depression screening. Second, a chart review was conducted to identify root causes of care gaps in depression screening. This chart review consisted of 100 randomly selected patients from each of the three participating clinics (total of 300 patients reviewed), who had not met depression screening criteria since the start of the current measurement period. During the chart review process, various criteria were analyzed, such as the date of the most recent PCP visit, date and score of last PHQ administration, presence of an appropriate follow-up response to positive screenings, and whether or not documentation was appropriately captured, as defined by the Merit-based Incentive Payment System (MIPS) Clinical Quality Measures (CQM). A history of depression or bipolar disorder was also assessed in each patient's chart as this qualified as exclusion criteria from current depression screening requirements. Using both qualitative and quantitative data collected from the interviews and chart review, primary causes for lack of depression screening within the three participating primary care clinics were identified.

Evaluation of Innovation: A root cause analysis confirmed that the two most significant reasons for lack of depression screening shared across all three QCIPN sites were: 1) Patient was seen within the measurement period but depression screening was missed (11-50%), and 2) Patient was not seen within the past year (12-43%).

Discussion/Key Message: The aim of this quality improvement project was to perform a root cause analysis and understand the "gemba" to highlight the primary root causes for lack of depression screening in three West Oahu primary care clinics. Upon completion of this quality improvement project, primary care teams will be able to identify common care gaps in depression screening and understand how to design and implement a similar framework for improving depression screening within their own practices.

Target Audience: Physicians, residents, medical students, health systems.

References:

1. US Preventive Services Task Force. Screening for Depression and Suicide Risk in Children and Adolescents: US Preventive Services Task Force Recommendation Statement. *JAMA*. 2022;328(15):1534-1542. doi:10.1001/jama.2022.16946
2. Blackstone SR, Sebring AN, Allen C, Tan JS, Compton R. Improving Depression Screening in Primary Care: A Quality Improvement Initiative. *J Community Health*. 2022;47(3):400-407. doi:10.1007/s10900-022-01068-
3. Bhattacharjee S, Goldstone L, Vadiei N, Lee JK, Burke WJ. Depression Screening Patterns, Predictors, and Trends Among Adults Without a Depression Diagnosis in Ambulatory Settings in the United States. *Psychiatr Serv*. 2018;69(10):1098-1100. doi:10.1176/appi.ps.201700439

Key Phrases: Depression Screening Quality Improvement Population Health

Poster Abstract #11

Improving Chronic Kidney Disease Screening in Adults Living with Diabetes in the West Oahu Community of Hawaii

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Background: Nearly 1 in 3 diabetic patients have chronic kidney disease (CKD). However, many of these patients are asymptomatic and undiagnosed until advanced stages of disease. Thus, routine screening, early detection, and treatment are crucial for reducing the morbidity and mortality of CKD. Kidney health evaluation fulfillment is defined as having both estimated glomerular filtration rate (eGFR) and urinary albumin-creatinine ratio (uACR) testing done within the measurement year. Currently, the national CKD screening rate is approximately 40% and even lower for marginalized groups. Similarly, we found the screening rate in the diabetic population at a primary care practice in West Oahu, which serves a large percentage of Native Hawaiians and Pacific Islanders, to be relatively low. The goal of this quality improvement (QI) project was to identify reasons for care gaps and implement patient outreach interventions to improve the screening rate in this population.

Methods: Chart review of the electronic medical records of 315 diabetic patients at this primary care office was conducted. Dates and results of the most recent eGFR and uACR lab tests were recorded. Patients were then determined to be screened or unscreened. According to screening criteria, patients older than 75, receiving hospice/palliative care, or diagnosed with end-stage renal disease (ESRD) or stage 5 CKD were excluded. Based on the most common reasons for care gaps, three patient-centered outreach interventions were implemented over 6 months. Two text message reminders about overdue lab tests were sent to unscreened patients, followed by two phone call reminders, and finally, two text message reminders to alternative phone numbers, if available. Chart reviews were conducted between each intervention to identify newly-screened patients.

Results: The baseline screening rate was found to be 52.4%. However, 57 patients did not meet inclusion criteria. Of the remaining patients, 58.1% fulfilled the criteria for CKD screening. The most common reason for care gaps among unscreened patients was due to incompleted uACR testing within the last 12 months (79.8%). Incomplete eGFR was the second most common (49%). Text message reminders, phone call reminders, and texts to alternative numbers increased screening rates by 10.8%, 5.5%, and 2.3%, respectively. At the end of 6 months, the screening rate increased by 29.4%, totaling 81.8% of patients screened for CKD.

Conclusion: Increased screening allows for earlier detection and treatment of CKD, thereby reducing its mortality and morbidity. Our findings suggest that suboptimal baseline CKD screening rates for diabetic patients can be increased through patient-centered interventions, with text messages being the most effective and efficient.

Secondary analyses may be conducted to determine long-term outcomes, or if screening status is associated with other care measures or features of this population. While these initial results and interventions are limited to this setting, the results can be applied to other areas of primary care and expanded to include a wider scope of patients. Provider-centered interventions, either alone or in combination with patient-centered approaches, may also be a potential area of future research in increasing CKD screening rates.

Target Audience*:* Physicians, Residents, Medical Students

References:

Ferrè S, Storfer-Isser A, Kinderknecht K, Montgomery E, Godwin M, Andrews A, Dunning S, Barton M, Roman D, Cuddeback J, Stempniewicz N, Chu CD, Tuot DS, Vassalotti JA. Fulfillment and Validity of the Kidney Health Evaluation Measure for People with Diabetes. Mayo Clin Proc Innov Qual Outcomes. 2023 Aug 29;7(5):382-391. doi: 10.1016/j.mayocpiqo.2023.07.002. PMID: 37680649; PMCID: PMC10480072.https://www.mcpiqojournal.org/article/S2542-4548(23)00041-3/fulltext

United States Renal Data System. 2022 USRDS Annual Data Report: Epidemiology of Kidney Disease in the United States. National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health, US Department of Health and Human Services; 2022. Accessed September 1, 2023.https://usrds-adr.niddk.nih.gov/2022

Chu CD, Xia F, Du Y, et al. Estimated Prevalence and Testing for Albuminuria in US Adults at Risk for Chronic Kidney Disease. JAMA Netw Open. 2023;6(7):e2326230. doi:10.1001/jamanetworkopen.2023.26230 https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2807656

Key Phrases: Screening & Prevention Chronic Kidney Disease Healthcare Disparities

Poster Abstract #12

Effectiveness of Peer Led Anatomy Review Sessions in Reducing Stress Among First Year Medical Students

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Introduction*:* Learning gross anatomy is an integral part of medical education, and having a solid foundation of anatomical knowledge is essential for clinical practice. However, anatomy continues to be a source of stress for many medical students, especially first years (MS1s). An initial survey was sent out to an MS1 class to gather interest for peer-led anatomy review sessions, and the results showed sizeable interest. Peer teaching was chosen because it benefits both the learner and the student tutors. It has been shown to create a safe and comfortable environment for students to learn and discuss, and also improves knowledge retention, leadership, and confidence in student tutors.[1,2,3] This project explores how peer teaching can be utilized in the anatomy curriculum.

Objectives: The main objectives of this project were as follows:

1. Analyze the effectiveness of peer-led anatomy review sessions in reducing stress levels in students.
2. Assess the effectiveness of peer-led anatomy review sessions in helping to better prepare students for their anatomy exams.
3. Determine the need for peer-led anatomy review sessions.
4. Evaluate the effectiveness of teaching anatomy in helping to better prepare students for USMLE Step 1 or USMLE Step 2 exams.
5. Estimate stress level of student tutors when preparing for review sessions.

Innovation: Peer-led review sessions were held on a weekly basis in the gross anatomy lab. Each session was led by either a second, third or fourth-year medical student. Group sizes were kept small to facilitate better learning, and approximately 8-10 MS1s attended each session. Tutors were provided relevant lecture material and a list of structures to cover ("fair game topics list") prior to their sessions. The format of the sessions varied and ranged from a guided review to a question-and-answer format. An online sign-up sheet was sent out to the MS1 class weekly, and spots were filled on a first-come first-serve basis. At the end of each unit, a survey was sent out to the entire MS1 class to evaluate the effects of the anatomy review sessions in reducing stress levels and helping to prepare for exams. A survey was also sent out to 18 student tutors to evaluate how teaching review sessions affected them.

Evaluation of Innovation: A total of 66 responses were collected among the students who attended an anatomy review session over three different units. Of these responses, 93% (n=61) agreed they felt less stressed at the beginning of each unit, 89% (n=59) agreed they felt less stressed after attending a review session, and 94% (n=62) agreed they felt the review session helped better prepare them for the final practical exam. All responders (n=66) agreed that the peer-led review sessions are valuable and should be continued. A total of 13 responses were collected from the student tutors. Of these responses, 11 students believed that teaching helped better prepare them for USMLE 1/USMLE 2 exam, and 2 students felt stressed while preparing for the review session. All student tutors agreed they would be an anatomy tutor again.

Discussion: Overall, the peer-led anatomy review sessions were met with favorable feedback. The sessions effectively reduced the students' stress levels about anatomy, and helped them better prepare for their final practical exam. Student tutors also benefited from these sessions, and many agreed it helped better prepare them for their respective licensing exams. All students who attended a review session agreed that peer-led anatomy review sessions should be continued, which highlights a potential opportunity within the medical education curriculum.

Target Audience: Medical educators, medical schools, medical students

References:

1. Tanveer MA, Mildestvedt T, Skjærseth IG, et al. Peer Teaching in Undergraduate Medical Education: What are the Learning Outputs for the Student-Teachers? A Systematic Review. Adv Med Educ Pract. 2023;14:723-739. Published 2023 Jul 11. doi:10.2147/AMEP.S401766
2. Ten Cate O, Durning S. Peer teaching in medical education: Twelve reasons to move from theory to practice. Medical Teacher. 2007;29(6):591-599. doi:10.1080/01421590701606799
3. Tullis JG, Goldstone RL. Why does peer instruction benefit student learning?. Cogn Res Princ Implic. 2020;5(1):15. Published 2020 Apr 9. doi:10.1186/s41235-020-00218-5

Key Phrases: Anatomy Medical Education Peer-Led Teaching

Poster Abstract #13

Physical Activity and Wellness Among Medical Students at the University of Hawai‘i John A. Burns School of Medicine (JABSOM)

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Introduction: Previous studies indicate the benefits of physical activity on academic performance, cognitive function, and attention span. Regular exercise is also linked with fewer depressive and anxiety symptoms. Medical students have limited time to engage in regular physical activity, which may affect their learning ability and wellness. There is limited research combining the effect of physical activity on both academic performance and wellness in medical students. We defined metrics of wellness as stress and anxiety levels, energy levels, and sleep quality.

Objectives: To obtain a better understanding of how physical activity impacts perception of academic performance and wellbeing of medical students at JABSOM.

Methods: 231 first-, second-, and third-year medical students enrolled at JABSOM during the 2023-2024 school year were considered for enrollment in this study. An anonymous survey was administered to all participants.

Results: 215 students (93% of the student body) completed the survey. 73% of respondents agreed that physical exercise is directly correlated with their academic performance and motivation to study. 83% found that exercise improves their ability to focus and concentrate while studying or in class. 83% believed exercise is directly correlated with sleep quality and energy levels at school. 88% agreed that exercising regularly lowers stress and anxiety levels.

Discussion: Previous studies demonstrated a direct correlation between physical activity and academic performance in both medical and non-medical students. Our data supports this correlation in medical students. 90% of participants engage in physical activity. The most common types of exercises reported were walking (56%), weight lifting (54%), and jogging (29%). 73% of respondents believe that physical activity is directly correlated with their academic performance, motivation to study, and ability to focus.

Regular exercise has also been proven to have beneficial effects on mental health. The data elucidates a direct correlation between physical activity and perceived quality of sleep, lower stress and anxiety levels, and concentration and energy levels in medical school. Across all classes, more students seem to agree with the statements about wellness (85%) compared to the statements about academic performance (73%), suggesting that students may exercise for reasons related to wellbeing rather than the effects it has on academic performance.

92% of survey respondents' reason for not engaging in more physical activity was lack of time. Other reasons reported by respondents include cost (29%), lack of access (15%), caregiving duties (7%), and lack of confidence or knowledge (7%).

Next steps include broader sampling of future years of medical students and other medical schools. There were quantitative differences between classes, which could be analyzed in a future study. A longitudinal study would allow comparison of changes in physical activity, academic performance, and wellness metrics throughout medical school. Future studies could include statistics on student academic performance in addition to their perception of their performance, as well as a validated well-being assessment. IRB approval is pending.

Data from this project can provide a framework to create novel programs in medical schools to encourage and support physical activity within the student body to engender positive outcomes in academic performance and wellness.

Target Audience: Health professionals or students interested in curriculum development

Key Phrases: *Medical Education* *Physical Exercise* *Medical Student Well-Being*

Poster Abstract #14

A Schwartz Rounds Curriculum By Medical Students, For Medical Students

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Context: Schwartz Rounds (SR) is a live forum for healthcare providers to participate in honest and vulnerable discussions about their experiences providing patient care. Each SR session is focused on a central theme and involves one or more panelists sharing personal experiences, followed by a facilitated group discussion in which attendees are encouraged, but not required, to reflect on what was said and share their own experiences. A comprehensive review of SR found that SR significantly improved the psychological wellbeing of healthcare workers. While SR for medical students is a relatively new concept, several pilot studies have shown positive feedback from students when comparing SR to traditional methods of reflection. Additionally, implementing SR for medical students may help to increase empathy and compassion for colleagues and patients.

Objectives: Our objective is to implement a Schwartz Rounds curriculum planned and facilitated by trained medical students with mentorship from experienced members of a Schwartz Center affiliate site. We intend to provide students with an opportunity for productive self-reflection during their transition from preclinical years to clerkships that is targeted to their specific needs.

Description of Innovation: Three SR sessions were conducted at JABSOM. The planning committee for these sessions consisted of 5 medical students and 3 SR faculty from the Queen's Medical Center. Each session was facilitated by 2 students from the planning committee, and 2 other students were invited prior to the sessions to share experiences. Student facilitators completed online training modules provided by the Schwartz Center. All 3 sessions were conducted within the same medical school class, in the transition from 2nd into the 3rd year. Feedback was obtained via an adaptation of an evaluation form from the Point of Care Foundation. Attendance and completion of the feedback form were voluntary. The feedback form was anonymous. Themes for the sessions were "STEP Together" in preparation for the STEP 1 exam, "Onward to Wards" which was about anxiety during the transition to clerkship, and "The Things We Carry" in the mid-semester colloquia week which explored the emotions of clinical care.

Evaluation of Innovation: The 3 sessions had 12, 13 and 22 attendees respectively, with 13 feedback responses. Overall, sessions received 6 ratings of "Exceptional," 6 "Excellent" and 1 "Good." Twelve of 13 respondents completely agreed with 4 statements: "The group discussion was well facilitated," "This discussion helped with my personal insight and self-reflection," "I would attend Schwartz Rounds again," and "I would recommend Schwartz Rounds to classmates." One "neither agreed nor disagreed" to all 4 statements. For two prospective outlook statements: "I have new insights into the perspectives and experiences of my classmates" and "I have gained insight that will help me to take care of patients," 11 of 13 completely agreed; 1 neither agreed nor disagreed and 1 agreed somewhat with each statement. Responses to "I feel more open to expressing thoughts, questions and feelings with my classmates" were mixed, with 9 of 13 completely agreeing, 2 agreeing somewhat and 3 neither agreeing nor disagreeing.

Discussion/Key Message: To our knowledge, our pilot study is the first to implement SR in a "by medical students, for medical students" format, whereby trained medical students developed the SR content with faculty mentorship and independently led the SR sessions. One of the key aspects of SR is that it provides a space where individuals can be emotionally vulnerable, and we believe that removing the hierarchical distinction between facilitators and participants helps to achieve the desired environment.

Target Audience: All medical students in preclinical or clinical years.

Key Phrases: *Wellness* *Compassion* *Student-Run*

Poster Abstract #15

Implementing a Post-code Moment of Silence

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Introduction: A post-code moment of silence is a designated set of time (a few seconds to a minute) of silence at the end of a code-event when a patient dies to reflect. It is a mindful moment of silence, without action or medicine, to honor a life that has just ended; and time to reflect on the gravity of the role that health care providers play in caring for patients and their families. It may also provide a way to build capacity and resiliency in one of the most difficult clinical situations.

Objectives:

- To increase the frequency in which this moment of silence occurs at Kapi'olani Medical Center for Women and Children (KMCWC) .
- To understand attitudes and barriers to having this moment of silence.
- To identify and implement ways to lower the barriers for staff to be able to process and move forward after difficult outcomes.

Methods: Data was collected using a pre-implementation survey, followed by educational sessions for the emergency department (ED) and pediatric intensive care unit (PICU) staff at KMCWC. Surveys contained directed questions on previous participation in such events, assessed willingness to participate/lead; as well as open ended questions on overall attitudes and thoughts on participation. Surveys had voluntary participation, using a QR code link on flyers posted in each unit and in staff emails. Educational sessions consisted of reviewing the potential benefits for a moment of silence with ED and PICU physicians, and reviewing sample scripts for initiating. Similar sessions occurred at daily nursing huddles. Development of a script on code-carts in on-going, and a post-implementation survey tool will be distributed in early 2024 to better assess frequency and reassess staff viewpoints of such events.

Results: Of 63 completed surveys, 23% participated in a moment of silence at KMCWC, 31% indicating prior participation in their careers. The majority of respondents, 57.2% indicated feeling comfortable to very comfortable participating in a moment of silence with 9.6% indicating feeling uncomfortable. 21% of those surveyed were comfortable with initiating a post-code moment of silence. Qualitative data collected indicates that healthcare workers are open to moments of silence and find it beneficial. Responses included: "helps to check in with yourself and also take a moment before returning to 'usual' duties'" and "extremely beneficial to recognize the patient as a person and human aspect of what we are doing." Barriers identified were time for a moment of silence, "can be tough depending on what else is going on in the unit" and leadership of the moment; "involvement of the code leader is crucial." KMCWC is exploring moments of silence into a system-wide effort for improving debriefing.

Discussion: Implementing and educating staff about post-code moment of silence is possible. Staff responses are overall positive. Champions are a must for implementation, guidelines, and pediatric specific scripts would likely aid in occurrence and frequency. Further exploration of utility and benefit is on-going.

Target Audience: Health care professionals; physicians, nurses, medical residents, medical students.

References:

- Cunningham, T., Ducar, D. M., & Keim-Malpass, J. (2019). "The Pause": A Delphi methodology examining an end-of-life practice. Western Journal of Nursing Research, 41(10), 1481-1498.
- Kapoor S, Morgan CK, Siddique MA, Guntupalli KK. "Sacred Pause" in the ICU: Evaluation of a Ritual and Intervention to Lower Distress and Burnout. American Journal of Hospice and Palliative Medicine®. 2018;35(10):1337-1341. doi:10.1177/1049909118768247

Key Phrases: *Moment of Silence* *Education* *Resiliency*

Poster Abstract #16

Engaging Medical Students in a Social Media Platform That Highlights Patient Narratives

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Context: Since it was first introduced in medical education literature in the late 1990s, Narrative Medicine (NM) has become increasingly researched as a form of pedagogy for medical learners of all levels. NM is an approach that employs the skills needed to recognize, absorb, interpret, and be moved by stories of illness (Charon 2007). It is concerned with making meaning of the experiential knowledge within patients stories and integrating this with medico-pathological knowledge and modern, data driven medical narratives.

The goals of NM align with other concepts in medical education, such as the biopsychosocial model, patient centered education, and humanism.

A wide variety of NM-related pedagogic interventions have been described in the literature. A common goal among these is proficiency in clinic-based patient-centered interviewing in order to create a rich patient narrative. Opportunities to practice mental schemas like FIFE (Feelings, Ideas, Function and Expectations) can be especially helpful for new learners (Weston et al.1989).

Evidence also suggests that the online audience is more willing to accept narrative-based rather than more scientific and logic-based messaging (Li et al. 2018). This is important as a greater number of people seek health-related information from social media.

Objective: Participation provides an opportunity to hone skills relating to NM, such as active listening, self-reflection, the process of empathy building, comfort with synthesizing a patient-centered interview and narrative writing. This opportunity may be particularly useful for students in pre-clinical years, who traditionally have limited patient contact.

Description of Innovation*:* Our innovation is an Instagram account (@somebodystories) that aims to increase public understanding of the lived experiences of someone with a chronic illness. It covers diseases of various organ systems.

Each illness covered includes three posts of background information to help users better contextualize the interview and six posts of interview summaries. The participant conducts a semi-structured interview with a volunteer who has that given illness.

Participants are involved in 1) Identifying a patient, 2) Interviewing, 3) Gathering background information, 4) Summarizing background information and interview content into posts using layman's terms.

Each set of background information posts contains one Hawai'i-specific slide. Local and kānaka maoli voices are also sought out and prioritized when identifying volunteers to interview

To maintain consistency, we utilize the same background research template and interview guide. Volunteers are informed verbally and through writing that any identifying information is omitted from the posts and that interview-based content is posted only after their approval.

Evaluation of Innovation: We will utilize a pre and post survey. Both include components of the Kirkpatrick model, which is widely used to evaluate the utility of an educational intervention.

All participants complete a pre survey. Participants who lead at least one interview or help to craft a narrative from the raw interview are given a post survey, to be completed within 1 week of their work. The volunteer interviewees are also sent an optional feedback form.

Key Phrases: Patient-Centered Interview Social Media Narrative Medicine

Discussion/Key Message: This innovation is a novel approach to Narrative Medicine that utilizes patient-centered interviewing and social media. It also aims to amplify local stories from Hawai'i.

Target Audience: The participant who is involved in creating an interview-based Instagram post.

Reference:

1. Charon R. What to do with stories: the sciences of narrative medicine. Can Fam Physician. 2007;53(8):1265-1267.
2. Weston WW, Brown JB, Stewart MA. Patient-centered interviewing part I: understanding patients' experiences. Can Fam Physician. 1989;35:147-151.
3. Li J, Tang J, Liu X, Ma L. How do users adopt health information from social media? The narrative paradigm perspective. Health Information Management Journal. 2019;48(3):116-126. doi:10.1177/1833358318798742

Key Phrases: Patient-Centered Interview Social Media Narrative Medicine

Poster Abstract #17

Narrative Medicine as an Engaging Approach to Diversity, Equity, and Inclusion (DEI) Curriculum in Medical Schools

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Context: The medical school's DEI curriculum aims to equip students with skills and approaches to confront structural and historical inequities.

Narrative Medicine (NM) utilizes studies in narrativity to promote skills of close listening and interpersonal contact by attending to narrative (1). Empirical studies found that students using NM have higher patient-provider communication, perceived trust from patients, and empathy displayed through body language and humility (3).

This project explores the integration of NM workshops as a unique intervention in medical school DEI curricula.

Objectives: This approach aims to promote deep reflection, empathy as a tool, and active witnessing of marginalized voices through narrative exploration, open dialogues about underrepresented lived experiences in healthcare, and fostering a space for self-reflection and dismantling of biases in the context of holistic patient-centered care.

Description of Innovation: A pre-clerkship six-session NM workshop curriculum was designed using NM pedagogical methods. NM workshops incorporate textual storytelling, facilitated group discussions, close reading, and reflective writing. Participants engage with diverse narratives, from paintings to poems, exploring the subject's story and contextualizing social and historical topics from courses preceding lectures in which the corresponding workshop resides.

Building upon team-based learning taught in PBL, these workshops allow for collaborative observation to simulate learning about patients beyond their physical illnesses. By engaging in the group workshops with close reading, participants put into practice, and over time acquire, the tools of human subjectivity and the skills of narrative analysis that they can translate into their future clinical practice

Evaluation of Innovation: Beyond this pilot semester, we intend to evaluate students' perceptions of cultural awareness, empathy, and sense of self, as well as facilitators' perceived readiness to increase impact on themselves and students. Namely, students will be administered surveys before and after the workshop series assessing their progress in each area reported through the Reflective Thinking Scale for Healthcare Students and Providers (RTS-HSP), Patient–Healthcare Provider Communication Scale.

(P-HCS), Empathy Scale in Patient Care (ES-PC), and Analytic Narrative Medicine Writing Scoring Rubric (ANMWSR) (3). Longitudinal assessments for facilitators will consist of self-reported progress as well as student feedback (2). A focus group may additionally be conducted amongst faculty and students at the conclusion of the program to discuss impressions, challenges, and perceived impact. Enhanced communication in clinical settings, including HOME project volunteering, community preceptorships, and standardized patients will serve as additional indicators of translated clinical applications.

Discussion: Beyond problem-based learning, NM workshops encourage active listening, a skill that can cultivate a deeper understanding of the human experience in medicine, especially in diverse populations like Hawaii. NM not only distills a practice for students to exercise when learning about illness through patients but also challenges them to reflect on their own values, lives, and relationships.

Key Phrases: Narrative Medicine Diversity, Equity, and Inclusion Pedagogical Innovation

Narrative offers an opportunity to illuminate realities not always considered in clinical modes of thinking, though they are often as important as the diagnostic tests and medical history obtained. NM supplements the PBL curriculum, teaching students to think not only within the body but also consider how narratives make each patient unique and individualize our approach to care. This progresses patient-centered medical education toward even more empathetic, engaged, and effective care. Future developments will incorporate more local artists and extend NM workshops to clinical years.

Target Audience: This project is directed at medical education, curriculum developers, and advocates for health justice seeking innovative strategies to enhance DEI within UME and GME.

References:

(1) Charon, Rita. (2001). Narrative Medicine: A Model for Empathy, Reflection, Profession, and Trust. *JAMA.* 286(15):1897–1902.

(2) Holdren, S., Iwai, Y., Lenze, N. R., Weil, A. B., & Randolph, A. M. (2023). A Novel Narrative Medicine Approach to DEI Training for Medical School Faculty. *Teaching and learning in medicine*, *35*(4), 457–466.

(3) Liao, H. C., & Wang, Y. H. (2020). Storytelling in Medical Education: Narrative Medicine as a Resource for Interdisciplinary Collaboration. *International journal of environmental research and public health*, *17*(4), 1135.

Poster Abstract #18

Student Nurses' Attitudes Regarding Generative Artificial Intelligence: NAWSON Student Survey 2023

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Introduction: Generative artificial intelligence (gen AI) is rapidly advancing and holds promise for transforming nursing care and education. With the increasing prevalence of gen AI use in the classroom and healthcare systems, it is important to develop strategies to guide nursing students on how to use gen AI tools responsibly and prepare them for future gen AI-enhanced workplaces. While research efforts to examine gen AI in education are occurring on a global scale, little is known about nursing students' current perceptions and practices regarding gen AI tools.

Objectives: This presentation will share findings from a study that examines nursing student use and perceptions of gen AI. The findings will guide administrators in making informed decisions on how gen AI is integrated into department policies and provide insight into how faculty can incorporate gen AI into their courses.

Methods: An anonymous online survey was administered to UH Mānoa undergraduate and graduate nursing students in October 2023. The 43-question survey instrument was informed by the Theory of Planned Behavior and reviewed by faculty stakeholders. The survey measured students' perceptions, attitudes towards, and likeliness of using gen AI tools for learning activities. The survey also queried concerns students have about gen AI in nursing education. Planned data analysis includes descriptive analysis of Likert-type items and thematic analysis of open-ended responses.

Results: Data analysis is ongoing. Full findings will be reported at the time of the presentation. Of the 58 students that participated, 41 students completed the survey. Among those who completed the survey (N=41), most (n=30, 73%) were graduate students, 10 (24%) were undergraduate students. Preliminary findings indicate previously unreported attitudes regarding AI and its use in nursing education learning activities. Over half of participants agreed or strongly agreed that gen AI is a valuable tool to assist with coursework (n=22, 54%), nearly half (n=19, 46%) responded "neutral" when asked to consider whether gen AI is acceptable to use to assist with coursework. Attitudes regarding how gen AI tools should be used also varied. For example, when prompted to consider which learning activities students would complete with gen AI assistance, nearly half of the participants responded they were either likely or very likely to use gen AI for idea generation (n=20, 49%) and as a tutor to explain challenging course concepts (n=19, 46%). Most participants responded they were unlikely or very unlikely to use gen AI for generating a first draft of an essay (n=29, 71%), creating a first draft of a multimodal project (n=28, 68%), revising a final draft of an essay (n=26, 63%), and revising a final draft of a multimodal project (n=26, 63%).

Discussion: Preliminary findings reflect broad attitudes and behaviors regarding how gen AI should be used for learning in nursing school. While most students view gen AI as a valuable tool to assist with coursework, many are still undecided whether using gen AI to assist with coursework is acceptable. These preliminary findings suggest that students may benefit from clearer guidance from faculty on how to use gen AI responsibly in their coursework. Insights gained from this study may be helpful to identify concerns students have about the role of gen AI in their nursing education, and inform proactive efforts faculty may take to shape student attitudes and behaviors regarding the use of gen AI tools, including responsible use of AI tools, as well as building skills to apply gen AI tools in nursing education.

Key Phrases: Artificial Intelligence Nursing Education Curriculum Design

Conclusions: NAWSON is utilizing findings from the survey to inform practices and policies on the responsible use of gen AI in coursework. Actions currently being undertaken include developing a school-wide generalized syllabus statement and guidance document for nursing faculty/students. Faculty training on how to integrate gen AI into coursework is also planned, which will prioritize specific activities identified by students in this study. Gen AI brings many opportunities but also challenges for nursing education. Nurse educators have an important role to carefully guide students to use gen AI tools in ways that best prepare them for professional nursing roles.

Target Audience: The target audience includes nursing/health professions educators, administrators, and students. The findings are relevant for developing nursing/health professions program policies on AI and teaching responsible use of AI tools.

Key Phrases: *Artificial Intelligence* *Nursing Education* *Curriculum Design*

Poster Abstract #19

Generative AI versus Faculty-Facilitated Scenario-Based Simulation Designs by Medical Students

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Introduction: Interest in generative AI and its application to various disciplines, including medical education, has been exponentially growing. ChatGPT was released in 2022 and has garnered much attention due to its free public access. However, research exploring its use to design scenario-based simulation (SBSs) is limited. Rodgers' Simulation in Healthcare article (2023) describes ChatGPT's potential as a useful tool for simulationists to streamline instructional design. Yet, they underscore the crucial role of human intervention in addressing shortcomings related to errors, complexity, and formatting. A background in simulation educational design may be a prerequisite. Often when SBS design is undertaken by novice simulationists, the process can be overwhelming and the instructional design may be incomplete, especially without the guidance of experienced simulationists. The applicability of ChatGPT in aiding non-simulationists with SBS design in healthcare education has not been explored.

Objectives: To describe the instructional design process and outcomes of SBS created by medical students using ChatGPT and compare them to SBS created by medical students with simulation-expert faculty guidance.

Methods: Five existing SBSs designed by medical students interest groups (SIG) with simulation faculty guidance were collected from simulation center archives, and scenario goals and patient synopsis were extracted. Medical students unfamiliar with the complete scenario details used the extracted goals and synopsis to created new scenarios using ChatGPT. A blank scenario design template outlining essential elements was used for reference. The ChatGPT conversation tool facilitated iterative refinement of missing elements, errors, or desired modifications. Five scenarios were produced in one session, with elapsed time recorded. The number of design elements and objectives were quantified and compared to the scenarios crafted by SIGs; analysis employed a two-tailed T-test.

Results: On average (n=5), the ChatGPT scenarios design time was 37±11.8 minutes and 5.8±1.3 prompts were needed to produce the final scenario. In contrast, SBSs designed by SIGs with faculty input were created over months, and required multiple faculty-student meetings. ChatGPT produced an average of 4.0±0.7 learning objectives, compared to 3.2±1.6 when developed with faculty. ChatGPT's objectives were often repetitions of the initial input goals. ChatGPT fulfilled an average of 11.8±0.8 out of 18 template elements, compared to 12.8±3.8 in faculty-guided scenarios.

Discussion: The most notable difference between ChatGPT and faculty guided scenarios is substantial reduction in creation time. AI-assisted scenarios were created in mere minutes, while faculty-guided scenarios took months to complete. Time efficiency could allow students to jumpstart the design process and time saved could support further simulation refinement under faculty guidance. There were no statistical differences between groups in the number of fulfilled elements ($p=0.53$) of objectives ($p=0.35$). However, the quality and accuracy of the ChatGPT scenarios have yet to be examined by simulation experts. Challenges experienced while using ChatGPT included the omission of requested scenario components, inadvertent removal of desired elements during the iterative process, and inconsistencies in formatting between scenarios

Target Audience: Novice and expert simulationists, medical students, faculty.

Key Phrases: *Simulation* *Generative AI* *Instructional Design*

Poster Abstract #20

Exploring Debriefing Quality and Debriefing Outcomes During Simulation-Based Healthcare Education at JABSOM

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Background: Simulation-based training in healthcare education uses patient care scenarios to enhance competence in clinical knowledge, skills, and behaviors. Debriefing is the intentional reflection following the simulation experience and is a crucial component of simulation-based training. It allows participants to gain insight and understanding into their actions and thought processes to promote learning outcomes and improve future clinical performance. The Debriefing Assessment for Simulation in Healthcare (DASH) is a validated tool that evaluates the strategies and techniques used during the debriefing process by examining observable debriefer behaviors. It is a 6-element, unweighted, criterion-referenced behaviorally anchored rating scale with a 7-point effectiveness scale for each element to measure debriefing process quality. The Identifying Semantic Elements and Noise in Debriefing (iSEND) score was created by simulation faculty at JABSOM to measure debriefing outcomes. iSEND measures correlation of learner perceived primary debriefing objectives with debriefer reported debriefing objectives by applying principles of the Shanon-Weaver mathematical communication theory. In a previous abstract we described 23 debriefing factors (semantic elements) that could influence iSEND debriefing outcomes. The debriefing process has been extensively studied, yet research on debriefing outcomes and their connection to the debriefing process are lacking. Our aim in this abstract was to explore the quality of the debriefing process and debriefing outcomes in simulation-based healthcare education using DASH and iSEND scores.

Methods: Data were collected via survey of debriefers and learners immediately following a convenience sample of 51 simulation scenario debriefings by faculty at JABSOM to calculate iSEND scores. Learners and debriefers reported by electronic survey the top three objectives of the debriefing. Debriefings included a range of learner levels, number of participants, and disciplines. Blinded randomized video recordings of debriefings were reviewed and DASH was scored by two debriefing experts in random order. Two-way random-effects model was used to determine intraclass correlation coefficients (ICC) for agreement and consistency between raters. To test correlation between iSEND and DASH scores, Kendall's rank correlation was used. To evaluate the relationship between DASH scores and debriefing factors, Kruskal-Wallis rank sum tests were used for continuous variables and Fisher's exact tests were used for categorical data. All calculations were performed in R version 4.3.1 and the significance level was set to 0.05.

Results: DASH scores demonstrated high intra- and inter-rater ICC agreement and consistency of > 0.7. DASH scores had a normal distribution versus a uniform distribution of iSEND scores. There was no overall correlation between DASH and iSEND scores. Several debriefing factors were associated with higher DASH scores. Debriefing factors explicitly measured by the DASH instrument as concrete behaviors (e.g. debriefing structure use, debriefer knowledge sharing, debriefer statement about learner performance) were associated with higher DASH scores. Debriefing factors not explicitly referenced in DASH that were associated with higher DASH scores were identified as consensus-based best practices for the debriefing process (e.g. clear transitions into debriefing, learners being seated, assessment tool use during debriefing) and could be a focus for future debriefer training.

Discussion: Internal validation of DASH and implementation to assess quality of the debriefing process during simulation-based medical education at JABSOM highlighted factors to target for future debriefer training. The process of debriefing as measured by DASH does not appear linked to the debriefing outcome measured by iSEND. Future studies should further explore debriefing outcomes and their connection to the debriefing process, with the goal of enhancing simulation-based medical education.

Key Phrases: *Simulation-Based Training* *Debriefing* *Medical Education*

Poster Abstract #21

Analysis of One Night On-Call Simulation Participants' Responses Between 2022-2023 and Reflections

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Introduction: One Night On-Call (NOC) is a simulation course presenting common problems that a new intern is likely to encounter. Three to four learners work as a group to complete 6 scenarios in a 2.5-hour period. The course is a long-standing and mature program of the SimTiki Simulation Center offered to 4th-year medical students and new interns in a variety of graduate medical education (GME) programs in Hawaii, since 2008 (1,2). Course objectives focus on a standardized approach to responding to initial calls for support from bedside nursing staff, including immediate assessment, teamwork communication, and decision-making using scenarios of anaphylaxis, Atrial fibrillation, COPD exacerbation, head trauma, myocardial infarction, and transfusion reaction.

Objectives: NOC has collected post-course student evaluations for 17 NOC courses. This study seeks to systematically analyze student course evaluations and feedback to identify opportunities to improve the NOC curriculum.

Methods: NOC post-course survey v2021 is an updated participant survey that has been used since 2022. All student NOC post-course survey responses from June 2022 to July 2023 were analyzed for this report. One hundred ninety-nine graduating medical students or new interns participated in NOC during this period. Among 193 responses (response rate 97.0%), a total number of 176 responses were included for final analysis after excluding 17 due to empty survey entries, accidental responses to other survey forms, dental program participants, unknown residency type, and duplicate survey responses. Survey items evaluated for this report include overall course global evaluation and specific items with open comments including orientation, training relevance, activity engagement, debriefing impact, safe learning environment, and equipment (13 questions). All items were scored on a 5-point rating scale except for a question about equipment which was scored on a 2-point scale. We grouped the participants according to whether they were entering a specialty focused on acute care and then compared their responses. Groups were determined whether they would care for the patients in the intensive care unit. Content analysis of the comments for improvement was conducted by one author (KHP) and confirmed by another author (BWB).

Results: A total of 176 responses were included and analyzed. The average score ranged from 4.73~4.94 for each item. We found no difference in survey responses from participants in acute care-focused GME programs compared to participants in GME specialty programs with less focus on acute care. Some participants wanted to improve the following in orientation; (1) clarifying roles, (2) more information about expected actions during simulation, and (3) shorter and simpler orientation. A few participants thought that the use of resources of medical knowledge would be helpful during debriefing.

Key Words: *Simulation* *Residency* *Feedback*

Discussion: Our findings confirm that the NOC curriculum applies to a broad range of early-level trainees from different GME specialty programs. NOC was designed to apply to learners from a variety of specialty training programs. Simulation-based NOC cases are all inpatient cases, so we explored if the content might be less relevant for students entering specialties focused on outpatient or non-acute care. In this report, the educational design appears matched to the level of the learner, validating the course content. Kirkpatrick level 1 overall satisfaction levels were high confirming the relevance and format of the course. Feedback comments focused predominantly on orientation, providing a focus for course modifications for the next iteration of NOC. Orientation/pre-briefing is a critical element of course simulation scenario design (3) and one that frequently requires modification.

Target Audience: Graduate 4th-year medical students and new interns

References:

1. Vincent D, Berg B, One Night On-Call: A Simulation Exercise for New Interns. MedEdPORTAL; Available from: www.mededportal.org ID 1760.
2. Oikawa S, Berg B, Turban J, Vincent DS, Mandai Y, Birkmire-Peters D. Self-Debriefing vs. Instructor Debriefing in a Pre-Internship Simulation Curriculum: Night on Call. Hawaii J Med Public Health. 2016;75:127-132.
3. INACSL Standards Committee, Watts PI, McDermott DS, Alinier G, Charnetski M, Nawathe PA. Healthcare Simulation Standards of Best Practice TM Simulation Design. Clinical Simulation in Nursing. 2021;58:14-21.

Key Words: *Simulation* *Residency* *Feedback*

Poster Abstract #22

Streamlining the Development of Computer Animations to More Rapidly Simulate Normal and Abnormal Neurological Exam Findings

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Context: Since 2016, JABSOM has been using computer-generated animations of the neurological exam in problem-based learning (PBL) cases. This helps students learn to perform and interpret the neurological exam, and feedback from student surveys has been positive to date. The software used, however, is limited in that individual animated patient characters must each be animated separately, and the process is time-consuming.

Objectives: The objective of this project is to develop ways to streamline the creation of computer-generated animations of the neurological exam, with a variety of normal and abnormal findings, in animated characters with any arbitrary appearance, age, or gender.

Description of Innovation: To date, two different software packages have been tried. One allows for a wide variety of character appearances that can rapidly be changed. Simulated neurological examinations of cranial nerves III, IV, and VI have been generated, with both normal and abnormal findings.

Evaluation of Innovation: Videos in a female character were created with movements of the eyes corresponding to testing of cranial nerves III, IV, and VI. The movements were then copied and pasted onto a male character of different size and appearance. Videos generated with the copied movements were successfully rendered, and produced movements which were appropriate for that character.

Discussion/Key Message: Work to date confirms that elements of the neurological exam can be animated, and the movement data from those animations can then be copied and used in any arbitrary animated character, without the need for time-consuming modification of the animation. This should permit creation of a library of movement data corresponding to normal and abnormal neurological exam findings. In turn, this should allow the rapid generation of any arbitrary neurological exam in any arbitrary animated character. As this project continues, additional parts of the neurological exam are being added, and the inclusion of other portions of the physical exam will be explored. It remains to be determined if all aspects of the exam will be as easily replicated.

Target Audience: Instructors interested in physical exam findings or simulations

Key Phrases: *Simulation* *Neurological Exam* *Physical Exam*

Poster Abstract #23

Animations of Neurological Exam Findings Can Be Used in Multiple-Choice Questions in Student Assessments

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Context: Medical students receive instruction in how to perform a physical exam, including the neurological exam. Common methods to assess students' understanding of exam findings include attending observation during examination of actual or standardized patients, or questions based on images or textual descriptions of the exam findings.

Objectives: At the University of Hawai‘i John A. Burns School of Medicine, computer-generated image (CGI) animations of neurological exam findings have been used in teaching interpretation of the neurological exam. This project is a proof of concept that animated videos can be incorporated into the stems of multiple-choice questions in student assessments.

Description of Innovation: Rather than provide a textual description of an exam finding (e.g., "the patient is unable to look down and out with the right eye"), an animated video of a neurological examination finding is instead generated (e.g., a video of a patient with an inability to depress and abduct the right eye, undergoing an eye movement examination). The video is then converted to a GIF image, which is then uploaded into the stem of an ExamSoft multiple-choice question.

Evaluation of Innovation: ExamSoft does not have the capacity to include video files, but with the appropriate settings, animated GIF images can be included. GIF images of videos showing different eye movement abnormalities were incorporated into ExamSoft multiple-choice questions. These questions were successfully incorporated into an exam on ExamSoft, and the animations displayed as intended.

Discussion/Key Message: This is a proof-of-concept that computer-generated animations of arbitrary neurological physical exam findings can be used in the stem of a multiple-choice question in a student assessment. As this method allows the instructor to show any desired finding, and includes movement, it provides advantages over the use of still photos or videos of specific patients. The scores from these questions will be compared to scores from future courses, as a metric of the efficacy of teaching methods.

Target Audience: Instructors interested in assessing students’ understanding of physical exam findings

Key Phrases: *Simulations* *Assessment* *Neurologic Exam*

Poster Abstract #24

Evaluating Musculoskletal Anatomy Knowledge Among First-Year Medical Students: Comparison of Anatomy Examination Scores Between Cohorts Receiving a Pre-Examination Review Session Versus Focused Clinical Skills Teaching Session

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Introduction: Musculoskeletal (MSK) complaints are among the most common reasons patients seek medical care in the US. Appropriate management of MSK problems requires foundational knowledge of MSK anatomy. However, several studies in the US and Canada have highlighted insufficient anatomy knowledge among medical students and residents.

Objective: This study evaluated MSK anatomy final examination scores between two successive cohorts of first-year medical students to compare two interventions: (1) a teaching-assistant-led pre-examination review session in the first cohort; (2) a clinical skills teaching session of the knee and shoulder joints, which was reinforced during anatomy dissection sessions within the same semester of the second cohort.

Methods: The Class of 2025 received traditional anatomy education during their first year of medical school, as well as a pre-examination review session led by teaching assistants. The Class of 2026 received the traditional anatomy curriculum without the benefits of a pre-examination review session led by teaching assistants. Instead, the Class of 2026 received a newly added clinical skills teaching involving the knee and shoulder joints. We analyzed scores from a 30-question multiple-choice anatomy final examination completed during March of each class's first year of medical school. Of these 30 questions, six were directly related to the muscles, ligaments, and bones of the knee and shoulder. Unpaired two-tailed t-tests were used to determine statistical significance of both comparisons.

Results: Scores from all 77 students in each class were analyzed. For the entire test of 30 questions, the Class of 2025 (who received the pre-examination review session) did not perform significantly better than the Class of 2026 (average scores 84.7% versus 82.3%, $p=0.142$). For the 6 knee/shoulder-specific questions, the Class of 2026 (who received focused clinical skills teaching of the knee and shoulder joints) also did not perform significantly better than the Class of 2025 (average scores 92.0% versus 91.6 %, $p=0.845$). Interestingly, within the same cohort, students in the Class of 2026 scored 12.1% higher on the 6 knee and shoulder questions than on the remaining 24 questions. On the other hand, students in the Class of 2025 scored only 8.6% higher on those 6 questions than on the remaining 24 questions. The difference (12.1% versus 8.6%) approached significance ($p=0.06$) but did not achieve statistical significance at $p<0.05$.

Discussion: Despite not having a pre-exam review session, the Class of 2026 did not score significantly worse than the Class of 2025 on either the 30 general MSK questions or the 6 knee/shoulder-specific questions. It is interesting that the difference between the 6-question and 24-question averages among the two classes approached significance ($p=0.06$) but did not achieve statistical significance at $p<0.05$. Longitudinal assessments may further elucidate the differential effects of pre-examination review sessions and clinical skills teaching on medical students' anatomy knowledge of the musculoskeletal system.

Target Audience: US and Canada medical school education directors; preclinical medical students

Key Phrases: *Anatomy Education* *Musculoskeletal Exam* *Clinical Skills*

Poster Abstract #25

Evaluating Medical Students Confidence in Musculoskeletal Examination: Implications for Improving Musculoskeletal Medicine Education

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Introduction: Musculoskeletal (MSK) conditions are common in clinical settings, with approximately 20% of primary care and emergency department visits related to MSK issues. However, medical students in the United States and Canada often show a relative lack of confidence in conducting MSK examinations, especially when compared to their perceived examination skills of other organ systems.

Objective: This study surveyed medical students at a local institution regarding their confidence with MSK examination skills, MSK examination education experience, and collected their suggestions about improving the curriculum.

Methods: An anonymous, online survey was conducted among preclinical medical students at a state-funded allopathic medical school (John A Burns School of Medicine, University of Hawaii at Manoa). The survey, adapted from previous studies, included Likert scale and open-ended questions. Students reported their confidence in various physical exams, perceived preparedness for clerkships, usefulness of existing MSK clinical activities, and suggestions for improvement.

Results: 64 out of 77 students from the Class of 2025 (third years) completed the survey prior to starting clinical rotations. When compared with their perceived examination skills of other organ systems, students expressed less confidence in their ability to perform the musculoskeletal physical exam. Existing MSK teaching activities (Orthopedics, Rheumatology, and Transition to Clerkship Training), were deemed valuable by over 90% of students. It should be noted that 98.4% of students agreed that adding clinical MSK skills to their MD3 anatomy unit would be beneficial. Students also provided constructive comments and suggestions on how to integrate MSK exam curriculum with relevant anatomy units and increase small-group learning sessions for MSK exam practice.

Discussion: The survey results indicated that third-year medical students lacked confidence in performing MSK examinations compared to other organ systems, aligning with findings in the existing literature. Traditionally, the Office of Medical Education (OME) incorporates MSK cases into pre-clerkship problem-based learning (PBL) sessions in the second year. The students expressed a desire for early exposure to MSK clinical skills. In response, the OME is implementing changes such as introducing MSK clinical exam skills in the first year with the collaboration of a physiatrist and the anatomy department. The same survey will be administered to future cohorts to assess the impact of these modifications, and objective outcomes such as anatomy examination results and standardized patient examination results will be collected. This initiative reflects a commitment to enhancing MSK education in medical school, with plans for further research and objective assessment.

Target Audience: Medical education directors in medical schools across the US and Canada; preclinical medical students

References:

1. Jaime C. Yu, Marghalara Rashid, Andrea Davila-Cervantes & Carol S. Hodgson (2022) Difficulties with Learning Musculoskeletal Physical Examination Skills: Student Perspectives and General Lessons Learned for Curricular Design, Teaching and Learning in Medicine, 34:2, 123-134, DOI: 10.1080/10401334.2021.1954930

2. Yu JC, Guo Q, Hodgson CS. Deconstructing the joint examination: a novel approach to teaching introductory musculoskeletal physical examination skills for medical students. MedEdPORTAL. 2020;16:10945. https://doi.org/10.15766/mep_2374-8265.10945

Key Phrases: Medical Education Clinical Skills Musculoskeletal Exam

Poster Abstract #26

Learning Community Curriculum: Outcomes of Point of Care Ultrasound Curriculum

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Introduction: In Fall 2020, the John A. Burns School of Medicine (JABSOM) implemented Learning Communities (LC) for medical students. LC consists of small groups of faculty and students who work together throughout all 4 years of medical school. LC's main aim is to foster a supportive learning environment and provide an opportunity for students to practice their clinical skills. During these hands-on practice sessions, students receive valuable feedback from their faculty mentors and collaborate with their peers to build their repertoire of clinical knowledge.
Recognizing the importance of point-of-care ultrasound (POCUS) in clinical practice, JABSOM leveraged the potential of small group learning environments within the LC framework to introduce a comprehensive POCUS curriculum. Ultrasound in clinical application has expanded over the past decades[1-3]. Ultrasound is a critical skill that will be important for practicing physicians as it is listed as a training guideline in a number of residency specialties. POCUS training in medical school will allow JABSOM graduates to be prepared for many residency specialties.

The launch of the LC POCUS curriculum started with the fourth-year medical students in 2020 and gradually incorporated different components of the curriculum starting from the MS1 year. Currently, the POCUS curriculum includes organ-specific ultrasounds that correlate with its respective course (i.e. cardiac ultrasound during the student's MD2 cardiac unit) and ultimately culminates in "Sono-Games" as a POCUS challenge. This challenge utilizes an interactive game-like framework, promoting a fun learning experience where students apply their POCUS skills they learned through both LC and their clerkship years.

Objectives: The objective study was to assess the usefulness and effectiveness of the LC POCUS curriculum, and further, whether it enhanced the students' confidence in their understanding and usage of POCUS including organ specific and eFAST (Extended Focused Assessment with Sonography in Trauma) skills.

Methods: The methods of this study involved distribution of anonymous surveys to medical students following the completion of each preclinical unit. The surveys consisted of 5 point likert scale questions to measure the perceived impact of the organ specific, eFAST and sonogames workshops in helping them to understand POCUS.

Results: Data was analyzed from 2 academic years of 2021-2022 and 2022-2023. Notably 96.4% of students in MD1 felt that the LC session was a useful introduction to POCUS (n=112), 93.1% MD2 students felt the cardiac US session was useful (n=135), 90.4% MD3 students felt the renal US session was useful (n=115), 84.3% of MS3s felt the session improved their confidence in performing an eFAST exam (n=64) and 88.0% of MS4s reported Sono Games was useful to help them review POCUS (n=50).

Discussion: The implementation of a POCUS curriculum in JABSOM's learning community small group framework has yielded positive outcomes for medical students. The results indicate overall positive response regarding LC POCUS sessions, with students finding them useful for learning organ-specific ultrasounds. Notably, 84.3% of MS3s reported increased confidence in performing an eFAST exam, showing the broader applicability of POCUS training.

Positive feedback from the MS4s on Sono Games highlight the continued impact of the LC POCUS curriculum, reinforcing POCUS skills through engaging game-based activities.

Key Phrases: *Ultrasound* *Technology and Teaching* *Learning Communities*

In the future, it would be interesting to expand this study and ask JABSOM graduates whether they found this new addition to the curriculum helpful while in residency, especially since they would have used POCUS more extensively in the real-world setting on patients. Increasing POCUS use throughout clinical rotations would also be another valuable addition to the current POCUS curriculum. For example, medical students could use POCUS to help triage patients as well as collect additional information on the patient's they are seeing, particularly in their OBGYN and emergency medicine rotations where POCUS is used more heavily. In addition, incorporating POCUS assessments within each unit would be valuable in determining strengths and weaknesses of the curriculum. For instance, POCUS could be incorporated in standardized patient scenarios and end-of-unit clinical skills exams. These methods would allow us to evaluate the competency of the students' POCUS skills and could further assess the efficacy of this new curriculum addition.

In conclusion, integrating the POCUS curriculum within Learning Communities at JABSOM has proven valuable for medical education, with consistent positive feedback across academic years supporting its success.

Target Audience: Health professions faculty and students

References:

1. DeCara, J.M., Lang, R.M., Koch, R., Bala, R., Penzotti, J., & Spencer, K.T. (2003). The use of small personal ultrasound devices by internists without formal training in echocardiography. *European journal of echocardiography : the journal of the Working Group on Echocardiography of the European Society of Cardiology, 4 2,* 141-7 .
2. Sasmaz, M.I., Gungor, F., Given, R., Akyol, K.C., Kozaci, N., Kesapli, M. Effect of Focused Bedside Ultrasonography in Hypotensive Patients on the Clinical Decision of Emergency Physicians, *Emergency Medicine International*, vol. 2017, Article ID 6248687, 8 pages, 2017. https://doi.org/10.1155/2017/6248687
3. Brass P, Hellmich M, Kolodziej L, Schick G, Smith AF. Ultrasound guidance versus anatomical landmarks for internal jugular vein catheterization. Cochrane Database of Systematic Reviews 2015, Issue 1. Art. No.: CD006962. DOI: 10.1002/14651858.CD006962.pub2. Accessed 11 February 2022.

Poster Abstract #27

Innovation in Patient Safety Education for Learning Communities: A Scavenger Hunt Approach

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Context: In Fall 2020, the John A. Burns School of Medicine implemented a Learning Community (LC) program to enhance the existing curriculum. One of the primary objectives of LC is to help learners understand health systems science, with a focus on identifying barriers to high-quality care and patient safety.

Objectives: The primary objective of this scavenger hunt is to increase students' confidence in identifying patient safety hazards in a hospital setting through a small group activity and discussion. A secondary objective is to determine the efficacy of this type of simulated learning environment for fourth year medical students.

Description of Innovation: In 2022 and 2023, fourth year medical students participated in a patient safety scavenger hunt with their LC groups. Students were tasked with identifying as many patient safety hazards as possible in both an adult and pediatric hospital room setting, within a set time interval, 7 minutes in 2022 and 5 minutes in 2023. Potential safety hazards to be identified included IV infusions of antibiotics that the patient is allergic to, foley catheters inserted for extensive periods of time unnecessarily, poor adherence to bed turning schedules, incorrect code sheets for patient's age and weight. Then, led by their faculty mentor, students debriefed and, using a QR code, accessed brief teaching points that further described specific safety hazards. At the completion of the activity, students completed a post-survey.

Evaluation of Innovation: A post-program survey determined that 93.8% of 65 students in the 2022 cohort and 87.5% of 40 students in the 2023 cohort agreed that the program helped them identify patient safety errors in a hospital setting. Students agreed that the activity was relevant to their medical training and future careers as physicians in accordance with Kirkpatrick level 1 of evaluation. In accordance with Kirkpatrick level 2, students also showed statistically significant increases in confidence in their abilities to identify various patient safety hazards, strategies to improve patient safety, and indications for infection precautions, as well as to recognize risk factors for catheter-associated urinary tract infections (CAUTI), falls, restraints, decubitus ulcers, medication errors, skin breakdown, and errors during a code.

Discussion/Key Message: The patient safety scavenger hunt successfully helped 4th year students increase their confidence in identifying patient safety hazards as well as strategies to improve patient safety. Utilizing a simulation activity with faculty-led discussion allowed them to share ideas and discuss how to improve the performance of our healthcare system at a larger level. An early emphasis on recognizing these hazards promotes student awareness before entering residency. For future sessions, we recommend extended discussions on necessary steps after recognition of these safety hazards while placing increased emphasis on how interdisciplinary teams can approach patient safety.

Target Audience: Target audience includes medical students who are in the clinical phase of their education and other learning community mentors. Developing confidence in identifying, discussing, and even remediating patient safety hazards is important for students about to enter residency programs where they will be expected to manage patient care and safety. Learning community mentors at JABSOM and other institutions can also use an activity like this to incorporate patient safety into their curriculum as well.

Key Phrases: *Learning Communities* *Simulations* *Clinical Skills*

Poster Abstract #28

Pathology Video Series: An Educational Series Provided to First Year Medical Students to Increase Interest in Pathology as a Medical Specialty

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Context: The most recent National Resident Matching Program data indicated that of the 613 positions offered in the specialty of pathology across the U.S., only 271 U.S. allopathic seniors applied and only 242 accepted positions (39.5% filled).

Objectives: Encouraging first year medical students to engage in the field of pathology is one way to increase the number of interested applicants and increase the percentage of pathology residency programs being filled by graduates of U.S. allopathic schools.

Description of Innovation: Our study included 29 first year students who completed a pre- and post-video series survey, assessing their knowledge of the specialty. Only one respondent had indicated in the pre-survey that they were interested in pursing pathology as a specialty. The video series introduced students to the different subspecialties within pathology and described what roles the pathologist plays in both diagnostics and treatment guidance. There was a supplementary video that took a single specimen all the way through processing from biopsy to analysis to help engage students in what happens in a pathology lab.

Evaluation of Innovation: Post-video series participants indicated an average 1.4-point increase (5-point Likert Scale) in their ability to define pathology as a specialty. The ability to describe how a specimen is processed for analysis by a pathologist increased from an average of 1.8 to 3.6 following the video series. Interest in learning more about pathology was an average of 3.7 at baseline and increased to an average of 3.9 after completing the videos.

Discussion/Key Message: This short series that could be completed on one's own time could be utilized by educators at institutions to both expose and spark interest in the field of pathology by expanding on the knowledge provided in the first two years of didactic teaching.

Key Phrases: *Medical Education* *Educational Videos* *Pathology*

Poster Abstract #29

Project Lexicon – A Medical Terminology Mnemonic Video Curriculum

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Context: In the first year of medical school alone, a medical student will learn a plethora of new vocabulary words. Although this may seem like an overwhelming ordeal, a significant portion of these terms are permutations of recurring prefixes, suffixes, and roots. Understanding how to identify terms by their word parts is greatly helpful in learning a high volume of medical terminology. However, medical terminology is not currently a part of JABSOM curriculum, nor is it a mandatory class for pre-medical students.

Objective: The purpose of this innovation was to improve medical students' knowledge of practical medical terminology as well as to increase medical students' motivation to identify recurring word parts.

Description of Innovation: First, we surveyed medical terminology textbooks and the JABSOM first-year curriculum to identify a list of medical terms that would be relevant for first-year medical students. Using the terms, we created humorous cartoon drawing mnemonics for various prefixes, suffixes, and roots. This was incorporated into a video series, dubbed "Project Lexicon," which was distributed to first-year medical students. At the end of the videos, students were given practice questions in which they had to guess the meanings of words they had presumably never seen before based on the word parts they learned from the video. Students were also given a flashcard deck that they could use to continue memorizing the word parts after the video series.

Evaluation of Innovation: An online survey was administered to 77 first-year JABSOM students in July 2023. The survey was completed by 43 (55.8%) students. 100% of students responded that the visual mnemonics in Project Lexicon were helpful for them. 100% of students answered "strongly agree" or "agree" when asked if Project Lexicon made them more aware of the importance of medical terminology and 88.4% of students answered "strongly agree" or "agree" when asked if Project Lexicon made them more likely to look up medical terminology words on their own. 32.6% of students completed the flashcard deck that was given. When comparing students' confidence in medical terminology before and after Project Lexicon, the average score rose from 3.19 out of 5 to 4.44 out of 5. At the end of the survey, there was an optional section to submit comments. All of the comments reported that students enjoyed the visual mnemonics of Project Lexicon. One student mentioned an example of how they had applied what they had learned in Project Lexicon to better understand new terminology in a clinical case.

Discussion/Key Message: The evaluation of our innovation suggests that Project Lexicon was effective in improving students' knowledge and appreciation of medical terminology. Student ratings were high despite the relatively low usage of the supplemental flashcards. This is an example of how a student-driven, student-created project can benefit the learning experience of near peers. Medical schools should continue to support student-initiated curriculum quality improvement projects so that the learning experience can continue to be optimized and tailored to students' needs. Project Lexicon will continue to be a part of JABSOM curriculum and additional feedback will be collected in future years to further improve the program. Future evaluation efforts will include exploring the utility of the flashcard component of the project.

Target Audience: Medical students

Key Phrases: *Project Lexicon Video Series* *Medical Terminology* *Mnemonic*