

ABSTRACTS



ACGME

Accreditation Council for
Graduate Medical Education

Meaning in Medicine

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2024 ACGME Annual Educational Conference Poster Hall

Posters displayed in the 2024 ACGME Annual Educational Conference Poster Hall were selected from the 2024 Call for Abstracts. The abstracts represent research and innovations within graduate medical education (GME).

Research Abstracts include completed studies or investigations, with measurable results, that offer new conclusions that contribute to GME research and practice.

Innovation Abstracts include completed programs, projects, or strategies, with measurable results, that share best practices and practical insights with the GME community.

**Content displayed in this document is as presented in the authors' submission to the 2024 Annual Educational Conference Call for Abstracts and has been reviewed by ACGME Editorial Services. Poster content of the abstract in this document may vary from the posters displayed on site in the Poster Hall.*

2024 ACGME Annual Educational Conference

Marvin R. Dunn Poster Hall



Marvin R. Dunn, MD

The ACGME lost a beloved colleague and friend with the death of Dr. Marvin R. Dunn on July 30, 2003. Dr. Dunn, 71, was the ACGME's Director of Review Committee Activities, as well as a nationally renowned figure in the medical community.

In 1998, the ACGME was fortunate to have Dr. Dunn join its staff. He brought vast experience, deep wisdom, an unfailing sense of humor, and the capacity to see goodness in each of us. His concern for residents was unfailing. He is greatly missed.

As the ACGME developed clinical work and education hour standards and moved to a competency-based method of evaluating residents and fellows, Dr. Dunn always kept the impact on the learner at the forefront. He had a deep respect for the role of the Review Committees in strengthening the formation of physician learners, and kept the Review Committees and the ACGME on task to improve the quality of life for residents and fellows.

Colleagues and friends across the country contacted the ACGME with memories of Dr. Dunn when he passed. In their letters of condolence, he was remembered over and over again with phrases such as, "a true advocate for excellence in medical education," "the most wonderful combination of wisdom and humor," "wise counsel and gentle style," and "truly one of the good people."

During his distinguished career, Dr. Dunn, a native of Lubbock, Texas, and a board-certified pathologist, held a series of prominent positions. Before joining the ACGME, he served as the AMA's Director of Graduate Medical Education. Earlier in his career he served as Vice President for Health Sciences and Dean of the University of South Florida College of Medicine, Dean of the University of Texas Medical School at San Antonio, Acting Dean and Associate Dean for Academic Affairs at the University of California at San Diego School of Medicine; and Deputy Director of the National Institutes of Health Bureau of Health Manpower.

Dr. Dunn was intimately involved in the institution of poster sessions at the Annual Educational Conference from their inception, as both a judge and councilor. He took great delight in the innovative presentations that encompassed all areas of graduate medical education, and enthusiastically watched the development of best practices related to the Core Competencies and work hours requirements. The ACGME is honored to name its poster reception and Keynote Address in his memory.

Poster #1: Win-Win-Win: X+Y Block Schedule in a Community Hospital Internal Medicine Residency: Continuity, Resident Satisfaction, and Strong Inpatient Training

Author(s): Anusha Sabanayagam, MD; Lynn Fitzgibbons, MD; Maya Antony, MD

Institution(s): Santa Barbara Cottage Hospital

Abstract Type: Innovation-focused

Background

The ACGME requires that internal medicine residency include at least 10 months of clinical experiences in the outpatient setting and minimize conflicting inpatient and outpatient responsibilities. Residents have had low satisfaction with their outpatient training, frequently citing conflicting responsibilities as well as difficulty establishing rapport with their patient panels due to poor continuity. For this reason, there has been an overhaul in medical education structure with many programs adopting an X+Y block schedule. Since this schedule was introduced in 2011, it has had success in improving resident satisfaction with their outpatient training. However, evidence has been inconsistent or lacking regarding patient continuity, satisfaction, and health outcomes with this schedule in community hospital settings.

Objectives

This quality improvement study investigates the implications of a new X+Y block schedule on a community hospital training program, including its impact on resident satisfaction, patient satisfaction, and patient continuity, as well as perceived changes in the quality of resident inpatient training.

Methods

The study was conducted at a program comprised of 35 internal medicine residents. The study period was the academic year immediately preceding the transition to a block schedule (6/2021-6/2022) and the post-implementation year (6/2022-6/2023). Data was obtained from every scheduled visit at the internal medicine resident clinic in this timeframe. Analyses were conducted on anonymous resident satisfaction surveys in pre- and post-implementation years (response rates 100%, 97%) and on biannual surveys of patient satisfaction with their primary care provider (sample size n=73 vs n=140).

Results/Outcomes/Improvements

When comparing pre- and post-intervention periods, the total number of annual completed visits in the clinic was similar, however the proportion of patient visits with their assigned primary care physician (PCP) significantly increased (62% vs. 65%, $p < 0.05$). Resident satisfaction with their primary care training was much improved (2.1/5 to 3.4/5, $p < 0.01$). They perceived improvement in dedicated time to manage inpatient vs. outpatient workflow without conflicting responsibilities (2.2/5 to 4.3/5, $p < 0.01$). Residents also report improved longitudinal patient-provider relationships (2.5/5 to 4.1/5, $p < 0.01$) and feeling more connected with their patient panel (1.9/5 to 3.3/5, $p < 0.01$). Patient satisfaction improved, though patients rated their providers highly in both years (4.56/5 vs 4.64/5, $p < 0.05$). Interestingly, there was an upward trend in resident perception of the quality of their inpatient training after block schedule implementation, though not statistically significant (4.5/5 to 4.7/5, $p = 0.16$).

Significance/Implications/Relevance

In prior literature, the block schedule benefits resident satisfaction and improves ambulatory training but has detrimental results on patient continuity. In our program, implementation of an X+Y block schedule was a winning endeavor in the immediate post-implementation period with regards

to patient continuity, patient satisfaction, and resident satisfaction with outpatient training without detriment to inpatient training. Extrapolating the above continuity data to patient chronic health data such as diabetes or hypertension control is a future project.

References

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Poster #2: Professional Development for Coordinators: Creating a Community of Practice

Author(s): Aurea Baez-Martinez, MS, C-TAGME; Kimberly Warfield, C-TAGME

Institution(s): Texas College of Osteopathic Medicine

Abstract Type: Innovation-focused

Background

Graduate medical education (GME) teaching physicians, designated institutional officials, program directors, and coordinators from GME programs affiliated with Texas College of Osteopathic Medicine have participated in a medical school sponsored Academy of Graduate Medical Educators since 2011. Academy programming focuses on professional and faculty development in support of a community of practice. While all in the GME community are invited to participate, the programming is heavily influenced by the needs of the physicians. In 2021, program coordinators in the Academy sought to expand professional development opportunities more specific to their role and to nurture their own evolving community of practice. As of 2023, the community of program coordinators that benefit from this opportunity has grown exponentially.

Objectives

The objectives were to expand professional development opportunities specific to GME coordinators and to support this evolving community of practice.

Methods

An initial needs assessment was conducted via electronic survey with coordinators in the affiliated GME programs to determine logistical preferences and desired content of development topics.

Results/Outcomes/Improvements

Based on outcomes of the needs assessment, 60-minute sessions were held on the second Thursday of the month, from August 2021 through April 2022. Sessions were recorded and made available via digital bulletin board for future reference by attendees and asynchronous viewing by members unable to attend the live presentation. Topics selected by the members included TAGME, Coordinator Best Practices, Teaching and Practicing Diversity Among Residents, Leadership in a Time of Change, Conversations About Gratitude, Recruitment, and a Question and Answer session. A subsequent needs assessment was conducted after the last session to provide guidance for professional development content in the next academic year. During the 2022-2023 academic year we included a standardized needs assessment for each individual session. This data is used to provide feedback to individual presenters and to iterate future improvements in academy content.

Significance/Implications/Relevance

Longitudinal, program coordinator-centered and -specific professional development supports development and nurturing of a community of practice and professional success for members. Members beyond the local area continuously express enthusiasm and the effort has been expanded to the larger community of coordinators.

Poster #3: Prioritizing Competencies in Clinician Educator Training at the Graduate Medical Education Level

Author(s): Bani Ratan, MD; Nital Appelbaum, PhD; Teri Turner, MD, MPH, MEd

Institution(s): Baylor College of Medicine

Abstract Type: Research-focused

Background

Housestaff are expected to gain competence to be fully independent practicing physicians during graduate medical education (GME), while also developing their professional identities. One identity that has increased in importance among faculty is that of a Clinician Educator, a physician who is not only competent clinically, but understands tenets of adult learning theory, regulations from governing bodies, and skills needed for educational leadership. Although Clinician Educator Tracks (CETs) have been developed at the GME level, a lack of clarity remains on which competencies are the most relevant to the development of resident and fellow physicians seeking to become Clinician Educators.

Objectives

The purpose of this study was to perform a targeted needs assessment of educational leaders at a large academic institution to establish which competencies should be prioritized for a one- year Graduate Medical Education Clinician Educator Track (GME CET). This study used the Clinician Educator Milestones, an established framework for competencies at the faculty level, to explore core competencies at the graduate level.

Methods

A survey based on the Clinician Educator Milestones was electronically administered to all faculty members at a large academic institution in undergraduate medical education (UME), GME, and senior medical education (SME) leadership roles. Demographic data was collected on educational leadership positions, years in educational leadership roles, advanced training in education, and surgical nature of specialty. Respondents prioritized milestones as: Definitely include/Do not include/Undecided, with instructions to rate 10 competencies as Definitely Include. Descriptive statistics and Chi-square analysis were used for prioritization and comparison of competencies. One open-ended question was analyzed for themes.

Results/Outcomes/Improvements

A total of 118/285 (41%) faculty members participated in the survey. Average length in educational leadership was 6.9 years +/- 5.6 years, with 33% (39/118) of participants having advanced training in education and 24% (28/118) representing a surgical specialty. The teaching competencies of learner assessment and feedback were ranked the highest of the milestones (101/118, 86%), while the administrative competency of change management, was ranked the lowest (27/118, 23%). Respondents in SME prioritized professionalism significantly higher than those in other educational roles (16/20, 80% vs 47/98, 48%, $p<0.01$), while those who had educational leadership positions for less than 5 years and those in SME prioritized well-being significantly higher (36/62, 58% vs 21/54, 39%, $p=0.04$ and 14/20, 70% vs 44/98, 45%, $p=0.04$) than others. Open-ended comments revealed a positive sentiment regarding creation of a GME CET and suggestions for a flexible schedule.

Significance/Implications/Relevance

The Clinician Educator Milestones can serve as a useful guide to establish competencies for a CET aimed at GME learners. Teaching-oriented competencies such as learner assessment and

feedback were prioritized the highest for GME learners, with differences in prioritization of professionalism and well-being noted based on level and years in educational leadership. Using the information garnered from this survey, we intend to develop a Clinician Educator track for all GME specialties focusing on prioritized competencies. We will utilize suggestions to create a curriculum that will be flexible for busy trainees.

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Poster #4: Ad“just”ing Culture through Trainee Professionalism and Bias Event Reporting

Author(s): Brett Robbins, MD; Amy Blatt, MD; Marie Laryea, MD; Alec O'Connor, MD; Jennifer Pascoe, MD; Jennifer Readlynn, MD; Laura Stamm, PhD

Institution(s): University of Rochester

Abstract Type: Innovation-focused

Background

Like many medical centers, our institution offers numerous options for reporting professionalism and bias-related concerns. One shortcoming of many institutional reporting systems is their lack of a mechanism allowing closed-loop communication to the reporter to know if, when, and how the concern has been addressed. Additionally, concerns originating in the clinical environment reported through these venues rarely reaches educational programs, limiting the opportunity for educational leaders to understand the volume and scope of professionalism and bias-related events experienced by their learners. This limits educators' abilities to help evaluate the concerns, support individual trainees making submissions, and to advocate for action and accountability from individuals, departments, and the institution.

Objectives

We hypothesized that a reporting process specifically focused on trainee concerns that was housed and managed within our department would 1) encourage trainees to submit concerns to allow greater capture of concerns, 2) allow us to better support trainees who experience mistreatment, 3) promote greater understanding by educational, department, and institutional leadership of the incidents our learners experience in the clinical learning environment, and 4) enable us to address concerns with more definitive action and transparency.

Methods

We developed a six-item reporting form using REDCap. A QR code and link has been and continues to be regularly distributed to all departmental residents and fellows; medical students on their internal medicine clerkship and acting internship rotations are also encouraged to report concerns that arise during these rotations. A small group of departmental leaders convene monthly to review reports and develop an action plan for addressing each concern and communicating the outcome to the reporter. All submissions are shared in a reporter de-identified aggregate document with our Department Chair, Office of Equity and Inclusion, and Senior Associate Deans for Graduate and Undergraduate Medical Education on a quarterly basis to improve their understanding of the clinical learning environment and to compare with submissions from other institutional reporting mechanisms to assess for patterns of behavior.

Results/Outcomes/Improvements

Since its launch in March 2022, there have been over 40 professionalism and bias reports submitted by or on behalf of students, residents, and fellows within our department. Incidents reported have involved faculty, fellows, residents, advanced practice providers, nurses, clinical administrative staff, and patients. Categories of reported events have included exclusion from learning opportunities; disregard/disrespect for team members; disregard for patient privacy; aggressive and demeaning language and behaviors towards patient and health team members; biased comments and behaviors towards patients, including perpetuation of stereotypes towards patients with specific diagnoses; unprofessional consult interactions; unwelcomed sexual conduct towards trainees by patients; and microaggressions by patients towards physicians. Additionally, a positive experience of effective allyship was submitted.

Significance/Implications/Relevance

All reports were addressed, including reports to direct supervisors for inclusion in employee annual reviews, with request for confirmation of when and how it was addressed; joint feedback meetings with faculty members and supervisors; meetings with nursing leadership and Human Resources; changes in employment status; mandatory communication coaching; formal investigation by the Office of Inclusion and Equity, and targeted and institution-wide education. Incidents involving patients as the sources of concern were addressed with the appropriate nurse manager and Director of Patient Experience. Feedback about the nature of interventions was provided to all trainees who shared their identities in their submissions, though specific disciplinary action remained confidential. Aggregate and de-identified reports were shared with our residents, fellowship directors, and at a department town hall six months after implementation, with plans for biannual presentations to share events and progress.

Poster #5: Advancing Scholarly Engagement: A Structured Program for Residents and Fellows

Author(s): Catherine Wagner, EdD, MS, BSW; Lin Zhao, MD, MPH

Institution(s): HonorHealth

Abstract Type: Innovation-focused

Background

Research suggests that residents are more likely to view scholarship positively and engage when institutional and departmental leadership, program directors, and other faculty show explicit support. Quality improvement initiatives are more likely to gain access to these resources if they fall in line with the hospital's strategic priorities. ResQIPS, short for Research, Quality Improvement, and Patient Safety, is a network-wide initiative to promote and enhance research, QI/PS across the HonorHealth healthcare system. ResQIPS started in 2016 and went through a few versions of updates. It provides curriculums for residents, fellows, and clinical faculty, live educational programs, and materials for on-demand learning. In October 2022, a liaison-dedicated model began with assigning coordinators to each graduate medical education program.

Objectives

The main objective of this innovation project is to evaluate the effectiveness of the ResQIPS Program in promoting and enhancing scholarship among HonorHealth residents and fellows. The program offers institutional resources such as project management and statistical and data analytics support and aims to reduce the administrative burden of navigating Institutional Review Board (IRB) processes. It also helps protect patient data and information on projects considered QI/QA. ResQIPS has established a process and governance structure that streamlines the entire process from project conception to dissemination, ultimately leading to an increase in the number and quality of scholarly works that include peer-reviewed publications and presentations at national, regional, and international conferences for faculty and residents. ResQIPS employs various strategies, such as collaborating with internal stakeholders to identify and sustain scholarly projects and developing innovative educational pathways.

Methods

Through an Access database created for the ResQIPS program, the assigned coordinator captures information to track and monitor workflows, services provided, and outcome status. There is a set of instructions with definitions for key terms and concepts to facilitate consistency in reporting activities. When a resident contacts ResQIPS, this triggers the creation of a record in Access. Additional contact dates are recorded to tell the project's story in phases. Staff documents all services provided by checking off the items and describes what was done in the comment field.

Program Process Measures

- a. Track types of scholarship activities
- b. Monitor workflow by project
- c. Track and monitor data needs, including analytics
- d. Track and monitor types of support services provided by staff

The dedicated liaison model is still in its infancy, but we can draw conclusions based on the data collected to date.

Results/Outcomes/Improvements

Over the 11 months, ResQIPS supported 41 projects (21 QI, 10 HSR, 5 EBM and 5 Case

Reports). Ten projects were completed and disseminated, including eight poster presentations. Overall, 101 service activities were provided by the dedicated liaison staff. The Project Management category was selected 28 times and was the highest service provided, followed by consultation (n=24) and editing/writing (n=21). To date, 10 projects (37%) have been completed, and the results disseminated. Those disseminating the findings relied on the same three top service categories. Project management covered a range of supportive activities. The most helpful services reported by residents include how helpful services reported by residents include holding them accountable and providing support. Narrative materials were edited for consistency, English proficiency, and formatting. According to the IRB Office, the number of unnecessary IRB submissions was reduced, and the quality of proposals improved.

Significance/Implications/Relevance

Looking beyond its local scope, ResQIPS prioritized enhancing and strengthening the ResQIPS Review Committee. This effort was guided by a well-defined Charter that clearly outlined the roles and responsibilities of committee members. The committee now serves as the primary review and approval body for resident projects, determining the necessity for IRB assessment and acting as a peer review entity. The program recruited dedicated staff responsible for project management and coordinating support for scholarly activities to facilitate these functions, following its specialized liaison model. The liaison model is a vital part of the ResQIPS program's framework and structure, aimed at supporting research and scholarship among residents and fellows. The emphasis on committee expansion, program staffing, and institutional resources sets a framework for enhancing scholarship and dissemination, making its replication feasible and relevant in residency programs worldwide.

References

Family medicine residents' barriers to conducting scholarly work - PMC (nih.gov).

Josette A. Rivera, MD,¹ Rachel B. Levine, MD, MPH,¹ Scott M. Wright, MD¹ ¹ Division of General Internal Medicine, Johns Hopkins Bayview Medical Center, Johns Hopkins School of Medicine, Baltimore, MD, USA. BRIEF REPORT: Completing a Scholarly Project During Residency Training Perspectives of Residents Who Have Been Successful.

Poster #6: Integrating LGBTQ+ Patient Care into Graduate Medical Education**Author(s):** Chadley Froes, MD; Jillian Sansbury, MD**Institution(s):** Johns Hopkins University; Grand Strand Medical Center**Abstract Type:** Innovation-focused**Background**

The LGBTQ+ community represents a sexual minority group within the general population that is known to experience greater barriers for receiving high quality medical care. In fact, numerous studies have demonstrated that patients who identifying as LGBTQ+ (including patients living with HIV) frequently face challenges when seeking routine health care, largely as a product of longstanding prejudice, discrimination, and cultural insensitivity by the medical community. Thankfully, recent efforts in undergraduate medical education (UME) show a clear interest from medical students in learning more about this demographic. This has facilitated successful efforts to improve education of cultural minorities in medical school curriculums, alongside recent ACGME revisions to include LGBTQ+ patient care competencies in the requirements for residency training. Unfortunately, implementation of LGBTQ+ training continues to lag behind at the level of graduate medical education (GME).

Objectives

The primary objective of this project was to improve exposure of graduate medical trainees to aspects of LGBTQ+ patient care, specifically for internal medicine residents in a community-based ACGME-accredited residency program in coastal South Carolina. We aimed to achieve this by hosting a community health event that was designed to establish rapport between volunteer resident trainees and members of the local LGBTQ+ community. This dialogue would facilitate the acquisition of feedback regarding common barriers experienced by local LGBTQ+ patients, while providing insight that would guide the implementation of a new didactic curriculum for our residency program to improve cultural sensitivity towards this demographic. Secondary goals were to identify aspects of our existing medical practice that could be easily improved through resident quality improvement initiatives, or in collaboration with the hospital's diversity and inclusion committee.

Methods

With the assistance of a local LGBTQ+-focused nonprofit organization, we arranged a community health event that was voluntarily attended by internal medicine residents and attending physicians in our program. We delivered a resident-generated informational session providing an overview of LGBTQ-specific aspects of primary care, followed by a structured question and answer session to establish a direct dialogue between providers and the LGBTQ+ community in attendance. Physician attendees completed surveys before and after the event to quantify the general impact of the event in terms of their confidence managing aspects of LGBTQ+ patient care. Initial feedback from residents indicated a uniform desire for additional didactic training, leading to implementation of a problem-based learning initiative that was incorporated into our pre-existing ambulatory curriculum. Post-instructional surveys provided feedback and evaluated perceived resident competency in aspects of LGBTQ patient care.

Results/Outcomes/Improvements

Pre-event resident surveys of attendees suggested a uniformly low degree of confidence in managing LGBTQ+ patients, with most residents reporting minimal direct exposure to LGBTQ+ patients in their practice. Post-event surveys showed uniform appreciation for the opportunity to have direct dialogue with the LGBTQ+ community, in addition to requests for additional instruction regarding LGBTQ+ patient care. A total of 40 internal medicine residents received LGBTQ-related problem-based learning instruction over a five-week period. Post-instruction surveys showed a universally positive response from trainees in terms of perceived relevance of the material and improved confidence in navigating aspects of LGBTQ+ patient care. Resident feedback also identified the need for additional instruction regarding HIV management and aspects of gender affirming therapy, which will likely be further developed in subsequent iterations of the training curriculum.

Significance/Implications/Relevance

This project represents the successful implementation of a resident-driven initiative to improve communication between graduate medical trainees and the local community LGBTQ+ community. Insights gained from the dialogue between trainees and our community led to the development and implementation of new didactic instruction specifically to improve cultural sensitivity and trainee competency in aspects of LGBTQ+ patient care. We observed a universally positive response from trainees regarding the relevance of the instruction, with all residents reporting improved confidence and competency in navigating aspects of LGBTQ+ patient care. While this was achieved in a relatively small community-based internal medicine program, the success of such a project in the historically conservative state of South Carolina suggests that analogous efforts could feasibly be implemented throughout GME programs nationwide relatively inexpensively, and likely with the support of graduate medical trainees.

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Poster #7: Monthly Faculty Development Sessions across States and Sponsoring Institutions

Author(s): Deborah Simpson, PhD; Jacob Bidwell, MD; Thomas Hansen, MD, MDiv, MBA, MS; Mary Joyce Turner, MJ, RHIA, C-TAGME; Lindsay Pascarella, MBA; Maggie Petre, BA; Tricia La Fratta, MBA; Theresa Frederick, BA; Jennifer Hartlaub, DNP, APNP, FNP-BC; Kristen Ouwennell, MBA

Institution(s): Aurora Health Care - Advocate Health

Abstract Type: Innovation-focused

Background

Throughout the ACGME's commissioned report on the *Sponsoring Institution 2025 (SI2025)* initiative, the role of the Graduate Medical Education (GME) Office in supporting centralized educational activities across programs is highlighted, including faculty development (FacDev). Annually GME faculty members must pursue FacDev (CPE II.B.2.f). Yet many GME programs continue to provide FacDev within their programs – often resulting in inefficient use of SI speakers, program resources, and faculty time. Program specific FacDev offerings were further exacerbated during the COVID-19 pandemic, resulting in a loss of community and connectedness across teachers within and between our GME programs. A review of FacDev-related items on annual program evaluations, ACGME Faculty and Resident/Fellow Surveys, and clinical teaching evaluations revealed an opportunity to convene a monthly GME wide virtual FacDev session with cross-cutting topics applicable to all faculty members.

Objectives

A monthly “FacDev Series” (SNC) for all GME faculty members (and if successful, incorporate UME faculty members since often there is overlap) can be effectively offered by the central GME Office.

Methods

A small planning committee composed of GME Office leaders, including a PhD educator, was formed. Cross-cutting FacDev topics were initially identified through document review for one Sponsoring Institution: annual program evaluations, clinical teaching evaluations, ACGME Resident/Fellow and Faculty Surveys. Additional topics were derived from recent Clinical Learning Environment Review (CLER) Program reports. Planning group identified FacDev session topics, established dates and time frames (fourth Thursday/month at 5:00 p.m.), recruited presenters, and collaborated with the CME office to obtain credit. This FacDev plan was presented to a standing sub-committee of the Graduate Medical Education Committee (GMEC), who supported its implementation. Calendar invites were sent to all GME faculty members, with the designated institutional official (DIO) serving as moderator. Over time, planning and participation expanded to include a second Sponsoring Institution in our health care system with moderating roles alternating between DIOs.

Results/Outcomes/Improvements

Thirty-four sessions have been offered since January 2021 avoiding months with major holiday/summer month(s). Topics have ranged from core education (e.g., actionable feedback, coaching, clinical teaching pearls from outstanding teachers, assessment bias) to diversity, equity, and inclusion (DEI) (e.g., microaggressions and psychological safety, the Association of American Medical College's DEI competencies with selected programs examples, social media) and quality/safety. Initially, sessions were 30 minutes, now 45 minutes based on feedback. Presenters are drawn from within our Sponsoring Institutions to invited guests (e.g., Amazon Human Resources Executive, the ACGME). Since our two-state/two Sponsoring Institutions collaboration, attendance has ranged from 35-88/session. Typical closing chat comments include “fantastic,”

informative,” “practical,” and “wonderful presenters.” 2022 CME credit data reveals 253 participants; 2023 to date = 202. Over 90 percent would likely or definitely recommend this activity to their peers with > 78 percent reporting that session learning(s) would change their practice behavior.

Significance/Implications/Relevance

Monthly GME-wide FacDev sessions can be effectively offered and sustained by the central GME leadership team. It is easy to design and implement with CME credit and can be adopted by other Sponsoring Institutions, allowing programs to build on/expand their existing FacDev offerings. Utilizing speakers drawn from an array of programs enriches the sessions with new perspectives and allows connection/dialogue between programs.

Poster #8: Well-Being through Coaching: Strategies for Empowerment and Professional Development

Author(s): Cory Gerwe, PhD; Agatha Parks-Savage, EdD; LaConda Fanning, PsyD; Heather Newton, EdD

Institution(s): Eastern Virginia Medical School

Abstract Type: Innovation-focused

Background

This project explores the intersection of coaching and well-being in the context of graduate medical education (GME). As part of the ACGME requirements for teaching and supervision, we have developed a coaching skills curriculum for clinical faculty members. These coaching skills are easy to invoke and reflect coaching principles related to communication, collaboration, and empathy. Studies on physician coaching illustrate how coaching can reduce stress, prevent burnout, and ultimately enhance physician wellness, potentially leading to decreased medical errors (Gerwe et al., 2017; Palamara et al., 2015; Rashid, 2022). Similarly, Dyrbye et al. (2019) conducted a study on the effectiveness of physician coaching and found a reduction in overall burnout symptoms as well as quality of life improvements. Building from these studies as a foundation, this project aims to offer new strategies for empowering physicians in their personal and professional lives through coaching interventions.

Objectives

By the end of this poster session, participants will be able to:

- Discuss a comprehensive coaching toolkit of resources, well-being concepts, and practical strategies that can be implemented within their training programs to promote resident well-being.
- Develop communication strategies to effectively address and support residents facing difficulties or experiencing emotional distress.
- Identify key components and best practices for creating and implementing a resident well-being program.
- Evaluate the effectiveness of the implemented resident well-being program.

Methods

The project began with an extensive literature review to understand the existing research on coaching in health care and its impact on physician well-being. Based on ACGME requirements and the insights from the literature review, a coaching skills curriculum was designed as part of our GME's annual faculty development workshop. Similar to the coaching professional development illuminated in Rashid et al. (2022), this curriculum focused on teaching faculty members effective coaching techniques related to communication, collaboration, and empathy.

Additionally, this curriculum incorporated innovative instructional strategies to ensure participants could effectively apply these skills in their faculty roles. The recruitment process involved inviting all GME faculty to attend the workshop. Participants attended the workshop, which included role-play, discussion, and other experiential activities. Post-training survey data focused on the quality and impact of the coaching skills training.

Results/Outcomes/Improvements

The integration of coaching strategies in our faculty development workshop led to significant positive changes and notable improvements in our GME programs. The faculty members' transformation was marked by a substantial enhancement in their coaching acumen, as evidenced by their mastery of advanced coaching techniques and heightened proficiency in fostering

collaborative and empathetic interactions. Specifically, faculty members reported that they felt better equipped to problem solve, utilize motivational communication skills, and navigate complex resident challenges. Post-training surveys revealed that 19 out of 20 participants found the training highly effective in increasing their communication and coaching skills. This was underscored by the residents' self-reported increase in wellness, which they attribute to the coaching provided by our faculty members.

Significance/Implications/Relevance

The significance of this project extends well beyond the local setting, offering broader implications for health care education and physician well-being. By conducting an extensive literature review and designing a coaching skills curriculum rooted in the ACGME, this project provides a valuable framework for enhancing faculty development in GME programs nationwide. The emphasis on coaching techniques related to communication, collaboration, and empathy aligns with the evolving demands of health care and the emphasis on resident wellness. Moreover, the incorporation of innovative instructional strategies sets a precedent for more engaging and impactful faculty development initiatives. As a result, this project has the potential to improve the quality of GME and contribute significantly to the well-being of physicians.

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Poster #9: Impact of Implementing the ACGME Leave Policy Changes on Resident and Fellow Leave Practices

Author(s): Gregory Guldner, MD, MS; Robbie Gadams, BA; Lisa Reyes, BA; Jessica Wells, PhD

Institution(s): HCA Healthcare GME; HCA Healthcare

Abstract Type: Research-focused

Background

Residents face the challenge of significant work hours coupled with educational demands that occur during a time frame that often includes other family milestones, such as childbirth. Evidence suggests that providing time for parental, medical, and caregiver leave can promote well-being. Historically, residents and fellows often minimized leaves of absence for multiple reasons, including a desire not to extend training, to avoid impacting the workload of others, and the financial cost of a leave. Many trainees have substantial debt and could not forego their income by taking a leave under the Family and Medical Leave Act (FMLA). This resulted in increased distress and the loss of a chance to bond with a new child. Recently, the ACGME changed the Institutional Requirements to mandate that institutions provide a minimum of six weeks of paid medical, parental, and caregiver leave(s) of absence. The practical impact of this change on resident and fellow leave behavior is unclear.

Objectives

Our research was designed to determine if residents and fellows changed their behavior with regard to leaves of absence after the implementation of a paid six-week leave policy. Given other perceived barriers to taking leave, residents and fellows may remain resistant to taking leave despite the important benefits of that leave on well-being and family bonding. Our objective was to compare the frequency of resident and fellow leave before and after the implementation of the paid six-week leave policy at a large national GME system with over 4,000 trainees.

Methods

Using internal leave records, we identified the frequency and type of leave taken in the 2021-2022 academic year to the leave taken in the 2022-2023 academic year. HCA Healthcare GME instituted the paid six-week leave policy on 7/1/2022. Results between the years were compared using a Chi-square test of significance.

Results/Outcomes/Improvements

In AY 2021-2022 there were 4,345 residents and fellows who took the following leaves: 85 Medical (2.0%); 25 Parental Bonding (0.6%); and 0 Care of Family (0%). In AY 2022-2023 there were 4,785 residents and fellows who took the following leaves: 130 Medical (3.0%); 114 Parental Bonding (2.4%); and 22 Care of Family (0.5%). Comparing rates of leave between the two academic years medical leaves were greater after the new leave policy by 20% ($X^2(1, N = 9130) = 5.4, p = 0.02$), and parental bonding leaves were greater by 400% ($X^2(1, N = 9130) = 49.6, p < 0.001$). Trainees began using care of family leave in AY 2022-2023 when previously they had not.

Significance/Implications/Relevance

With the change in leave policy providing for six weeks of paid leave we demonstrated that residents and fellows do increase their use of leave. In particular, the use of leave for parental bonding and for the care of family increased substantially. Although other barriers to taking leave exist, implementing a paid six-week leave policy does result in beneficial change for family well-being. Further research should look to reduce additional barriers that inhibit appropriate use of leave among residents and fellows.

Poster #10: The Perception of the Work and Learning Environment and its Impact on Motivation and Well-Being

Author(s): Gregory Guldner, MD, MS; Jessica Wells, PhD; Scott Rigby, PhD; Richard Ryan, PhD; Cody DeHaan, PhD

Institution(s): HCA Healthcare GME; HCA Healthcare; Immersyve Health; University of Rochester

Abstract Type: Research-focused

Background

Resident well-being continues to deteriorate despite years of interventions primarily focused on developing individual psychological skills. Interventions that optimize the environment show greater impact on well-being than those directed at individuals. Yet, studies grounded in well-researched theories, that elucidate which aspects of the environment predict workplace well-being, are absent in the literature. The most researched model that predicts well-being is Self-Determination Theory (SDT). In SDT team members who perceive that their environment supports their basic psychological needs of autonomy, belonging, and competence, and whose motivation is more intrinsic than extrinsic, show greater well-being. These findings provide targets for interventions in the environment. Efforts to improve the perception of autonomy, belonging, and competence likely will result in greater effects on team members than common current wellness initiatives.

Objectives

Multiple studies examining SDT principles on team member wellness and distress show substantial relationships between the perception of autonomy, belonging, competence, and the quality of motivation (intrinsic versus extrinsic) with important outcomes. Our study hopes to expand those findings to the graduate medical education (GME) team to build the underlying theoretical constructs needed to move forward with meaningful system interventions. If the underlying constructs defined in SDT are associated with resident, fellow, and faculty member well-being in ways similar to other workforce teams, practical interventions already described in the literature could be implemented in GME. Our hypothesis is that GME team members who perceive that their environment supports their three basic psychological needs of autonomy, belonging, and competence, and whose motivation is therefore more intrinsic than extrinsic, will report greater well-being and less distress.

Methods

We conducted an anonymous online survey, distributed between April 3, 2022 and May 13, 2022, that included 793 residents and fellows and 888 faculty members in 39 GME programs in 15 teaching hospitals. We used prior psychometrically validated instruments to measure important predictor variables in SDT, including the quality of motivation, and perceived autonomy, belonging, and competence. Target outcomes measured included professional fulfillment, well-being, stress, work exhaustion, interpersonal disengagement, and pride in the hospital. Our hypothesized relationships between these variables were explored with correlation coefficients between predictor variables and target outcomes.

Results/Outcomes/Improvements

Three hundred-four trainees and 210 faculty members responded. Support for autonomy was correlated with well-being (.53), professional fulfillment (.39), and pride in the hospital (.41), and negatively correlated with stress (-.32), exhaustion (-.43), and disengagement (-.44). Support for belonging showed a similar pattern: well-being (.56); fulfillment (.42); pride in the hospital (.44); stress (-.39); exhaustion (-.47); and disengagement (-.47). Support for competence was similar: well-being (.56); fulfillment (.42); pride in the hospital (.50); stress (-.42); exhaustion (-.53); and disengagement (-.56). High-quality motivation (Intrinsic and personal value) was correlated with professional fulfillment (.79, .74), pride in hospital (.51, .43), and well-being (.76, .62), while low-quality motivation (internal pressure, external pressure, and amotivation) were negatively correlated with professional fulfillment (-.52, -.39, -.69), pride in hospital (-.35, -.35, -.54), and well-being (-.55, -.44, -.73).

Significance/Implications/Relevance

Our study demonstrates substantial correlations between SDT concepts and well-being among GME team members in the anticipated directions. The quality of motivation predicts well-being and distress among residents, fellows, and faculty members. These relationships are consistent with thousands of prior studies on SDT done on other workplace teams. Given the level of evidence supporting SDTs' impact on workplace well-being, and these results demonstrating their applicability to GME, efforts to focus wellness initiatives on improving perceived autonomy, belonging, and competence are warranted. Existing literature on ways to impact these variables can be applied, studied, and adapted to our GME team to make meaningful changes in the environment to improve well-being.

Poster #11: The Feasibility of Implementing a Centralized Resident Research Program at a Large Independent Academic Medical Center

Author(s): Denise Taylor, MS, RD; Lianteng Zhi, PhD; Brian Levine, MD; Tabassum Salam, MD, MBA, FACP

Institution(s): ChristianaCare

Abstract Type: Innovation-focused

Background

Scholarly activity during residency is stipulated by the ACGME, yet requirements and research support vary greatly across different residency programs and institutions. When dedicated resident research support services are provided, they are most often at university-based academic medical centers and/or housed within specific residency programs. However, such research support infrastructure is often lacking at community hospitals with residency programs.

Objectives

To describe the feasibility of implementing a system-wide, centralized resident research program, including administrative and statistical research services, at our independent academic medical center.

Methods

A centralized resident research support team, including a research associate and biostatistician, with oversight from the designated institutional official (DIO), was implemented at our health system in July 2022. To market our services to 300+ residents from 30 programs, we scheduled brief introductions with all program directors, created a resident research toolkit and newsletter, and simplified research support requests via QR codes in resident lounges. We developed a resident research series to educate and engage residents in research methodology. We tracked requests for research support and type of services provided. We reviewed annual program evaluation summaries for two years prior to program implementation and for year one of the program (2022-2023). Annual cost of the program was estimated by calculating mid-point salary ranges and benefits for the research associate and biostatistician. DIO weekly time commitment for the program was estimated.

Results/Outcomes/Improvements

From July 1, 2022-June 30, 2023, 75 residents from 17 programs were supported by the centralized resident research program. Services provided were study design, Institutional Review Board assistance, data management, statistical analyses, tables/ figures, and poster/manuscript editing. The year culminated in a Resident Research Forum displaying 60 posters from regional or national medical conferences that year. Based on annual program evaluation summaries from years prior to program implementation, 10 programs expressed need for research support for residents, especially statistical support (2020-2021), and 12 programs were anticipating the utilization of the new Resident Research Program (2021-2022). Highlights from the 2022-2023 annual program evaluation summaries included 12 programs affirming use of and gratitude for the resident research resources, including the start of the resident research series. Estimated annual cost of the program was \$236,105 and time commitment from the DIO was five hours per week.

Significance/Implications/Relevance

Our successful first year illustrates the feasibility of implementing a centralized resident research program at a large independent academic medical center. With financial and institutional support, similar programs could be developed at independent academic medical centers or community hospitals with residency programs. Further study into the increase in publications would be the next step to evaluate the success of such programs.

Poster #12: The Best Possible Self: Advancing a Dispositional Optimistic Mindset in GME

Author(s): Dotun Ogunyemi, MD; Vishal Rao, MS; Kendall Johnson, MS; Ferdinand Anokwuru, MS; Jesus Terrazas, MBS; Mathias Ojo, MS; Eddie Ogunyemi

Institution(s): Charles Drew University; California University of Science & Medicine; Downtown Business Magnet School, Los Angeles

Abstract Type: Innovation-focused

Background

Optimism is the expectation that one's outcomes will generally be positive and that a stressful present can change to become better in the future. Optimistic people exert effort, whereas pessimistic people disengage from effort. Studies show that optimistic people are more successful in professional efforts and work harder at relationships to have better social support. Optimism has been shown to be protective against coronary artery disease and mortality. Research has found that those high on dispositional optimism exhibit lower levels of anxiety, self-consciousness, alienation, and depression. Optimists exhibit greater self-esteem and a more internal locus of control.

Objectives

To determine if an interactive workshop can enable participants to assess their level of dispositional optimism or pessimism.

To assess the prevalence of the effective decision-making style of No Problem vs. the problematic decision-making styles of Doubtfulness Delegation and Procrastination.

To assess if participants in a workshop can practice the best possible self-exercise to improve dispositional optimism and decrease pessimistic or harmful thoughts.

Methods

Interactive workshops developed included a) completion of the Life Orientation Test that assesses dispositional level of optimism and a survey on decision-making styles; b) debrief and group reflections; c) presentation on optimism, decision-making styles, cognitive distortions, reframing and acceptance; d) The Best Possible Self activity; e) Group activity on using Optimistic Mindset Worksheet; e) large group discussions; f) Self-assessment survey to determine efficacy of program. From May 2022-April 2023; 151 participants included high school students (3.4%); medical students (43%), residents (28.8%) and faculty members (24.8%); of which 44% were Non-Hispanic Whites, Asians were 37%, Latinx 12% and African Americans 4%. High optimism was perceived by 20% and high stress by 8% of participants. Decision making styles reported were: No Problem = 20% Doubtfulness = 24% Delegation =21% and Procrastination style = 23%. Statistical analysis was done and $p < 0.5$ taken as significant.

Results/Outcomes/Improvements

Students with high optimism vs. high pessimism scores were significantly less likely to use the doubtfulness decision making style (10.05 vs.12.12; $p=.032$) or to be stressed (12.39 vs.19.21, $p=0.011$) or burnout (2.00 vs. 2.79; $p =0.024$). Significant negative correlations occurred between optimism scores with procrastination (ρ (r) = -.204; $p = 0.041$), doubtfulness

($r = -.201$; $p = 0.044$), stress ($r = -.468$; $p < 0.001$), and burnout scores ($r = -0.208$; $p = 0.042$). Burnout was positively correlated to stress ($r = .423$; $p = 0.001$) and doubtfulness scores ($r = .432$; $p = 0.002$) but negatively with no problem decision making style ($r = -.279$, $p = 0.047$). Faculty members compared to learners had significantly higher procrastination scores (12.12 vs. 10.33; $p = 0.030$) but lower no problem scores (10.29 vs. 11.84; $p = 0.004$), were older (42.33 vs. 25.59 $p < 0.001$) and had lower stress scores (13.67 vs. 17.89; $p = 0.025$). Participants rated the value of the workshop as 4.33.

Significance/Implications/Relevance

In this cohort, those with higher optimism scores were less likely to use problematic decision-making styles and also less likely to be stressed or burned out. There may be generational or career-level differences since faculty members who were older seemed to be more likely to use problematic decision-making styles but were less likely to be stressed. Interactive workshops on optimism can potentially enable learners and faculty members to have positive expectations of the future, regardless of current stressful conditions which can lead to improved work ethics and better outcomes. Similar workshops can be incorporated into GME well-being curricula to support bounce back and resilience and to mitigate stress and burnout.

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Poster #13: Trends in Race and Ethnicity Among Applicants in the US Urology Residency Match

Author(s): Efe Chantal Ghanney Simons, MD; Parris Diaz, MD; Serena Does, PhD; Holly Wilhalme, MS; Samuel L. Washington III, MD, MAS; Tracy Downs, MD; Christopher Saigal, MD, MPH

Institution(s): University of Michigan; Verwey-Jonker Institute; VU Amsterdam; University of California, San Francisco (UCSF); University of Virginia; University of California Los Angeles (UCLA)

Abstract Type: Research-focused

Background

Achieving workforce diversity in healthcare has increasingly become a priority. In medicine in general and in highly competitive fields, such as urology, there is a decrease in representation of underrepresented in medicine (URiM) individuals as we move along the pipeline from medical students to resident trainees. Though this loss of diversity may in part be due to the self-selection of medical students into the various fields, little is known about how the residency match process itself may serve as a barrier to diversifying our workforce. As an illustration of this point, in a study by Ghanney Simons et al., Black/African American individuals were found to make up diminishing proportions of the graduating medical student, urology residency applicant, and urology resident populations at 6.2%, 5.7%, and 3.5% respectively. URiM recruitment efforts may be more effective if there is a better understanding of how URiM individuals fare in the residency match process.

Objectives

The aims of this study were to:

- i. disaggregate urology residency applicant demographic data by race and ethnicity; and,
- ii. determine if there are differences across race/ethnicity in outcome measures related to the urology match.

Methods

Urology residency applicant data between 2018-2021 was provided by the Society of Academic Urologists (SAU). The self-reported racial/ethnic groups examined were Asian, Black/African American, Latinx/Hispanic, White, and Multiple Race.

Key dependent variables were:

- i. number of applications, interviews, and programs on the applicant's rank list;
- ii. being truly ranked to match (i.e. in the top 5 spots on a residency program's rank list) vs. practically to match (i.e. ranked higher than the last matched person); and,
- iii. match status, applicant position on the residency program's rank list, and residency program's position on the applicant's rank list.

Chi-square and Wilcoxon Rank-Sum tests were performed to assess for differences across race/ethnicity for categorical and continuous variables.

Results/Outcomes/Improvements

Findings with Implications for Match Equity:

- i. URiM applicants have fewer interviews and fewer programs on their rank list.
- ii. URiM applicants are less likely to be practically matched.
- iii. While Black/African American applicants are the most likely to be ranked in the top five

- positions of a residency program's rank list, Latinx/Hispanic applicants are the least likely.
- iv. URiM applicants have the lowest successful match rate.
 - v. Findings with Implications for URiM Recruitment:
 - vi. There is no difference across race for whether an applicant attends a medical school without an affiliated urology residency or without a urology interest group.
 - vii. URiM applicants are less likely to be DO students.
 - viii. Latinx/Hispanic applicants were least likely to be a senior when applying.

Significance/Implications/Relevance

As URiM urology applicants transition through the urology match process, they receive fewer interview offers and are less likely to be practically ranked, ultimately leading to lower successful match rates. This finding may suggest differences in the perceived competitiveness of urology applicants and/or differences in the evaluation of applicants of different race/ethnicities. An understanding of this phenomenon can inform evidence-based interventions to the urology match process to ensure equity across different race/ethnicities. This study can serve as a model for other specialties to interrogate a key gatekeeping process - the Match - that has ramifications for our ability to have a more diverse health care workforce.

Poster #14: The Flip Side of Competency-Based Education: Looking at Remediation and Adverse Board Actions

Author(s): Emily Gaudin, BS; Christine Flores, MPH; Karen Brasel, MD, MPH, FACS

Institution(s): Oregon Health & Science University

Abstract Type: Research-focused

Background

As conversations surrounding competency-based education gain traction across the country, a question was raised at our institution regarding those trainees who are on the flip side of shortened training, and may take longer than the traditional time-based training to reach competence. Even if it does take a trainee longer to reach competence, or if a trainee needs additional tools or support in training, does it predict anything negative in their future practice? We looked at these questions from a lens of remediation and adverse board actions. Trainees will sometimes extend training in a time-based system to reach competence and by definition, are on learning plans to help them get there. Does this result in issues further in the trainee's career?

Objectives

To determine if there have been adverse actions against trainees who have participated in the remediation process during their training at our institution, regardless of the outcome of the remediation.

Methods

This is a single institution study. Our institution's graduate medical education reviewed the records of residents and fellows in ACGME-accredited programs engaged in remediation at the institutional level dating back to 2013, including those on probation. Data points recorded include length of plan, number of plans per trainee, plan outcome, competencies addressed in each plan, and educational activities associated with the plan. After gathering this information, we looked at the current practice state and then reviewed state licensing board websites for publicly available board actions.

Results/Outcomes/Improvements

After review of the current licensing board status of a total of 78 trainees in an ACGME-accredited program at our institution who had been placed on one or more remediation plans between 2013 and spring 2023, we found that remediation status did not have an impact adverse board actions while the trainee is in practice. Of the group reviewed, there was a small number of trainees who were not able to be found on a US licensing board (five trainees) or were licensed in a state where adverse actions are not publicly available (one trainee). However, all trainees for whom information was accessible (72 trainees), none had received adverse board actions or medical board restrictions. Of note, at the time of this study, nine trainees had limited or resident licenses in their practice state.

Significance/Implications/Relevance

Remediation, a time consuming and challenging process, is worth the effort for learners and their future practice. Our data indicates that being in remediation does not correlate with later adverse board actions. Remediation is overwhelmingly successful, and residents and fellows

who successfully remediate go on to autonomous practice. This data demonstrates that there should be a reduction in stigma for those who undergo remediation and even extension of training.

Poster #15: What Changed? Factors Influencing the General Surgery Residency Match over Time

Author(s): Ramy Khalil, BS; Mouhamad Shehabat, BS; Muhammad Karabala, MS; Jimmy Wen, BA; Bhagvat Maheta, BS; Samuel C. Neubuerger, MD; Peter Whang, MD; Eldo E. Frezza, MD, MBA, FACS; Ethan Tabaie, BS

Institution(s): California Northstate University College of Medicine; Sutter Roseville Medical Center, Department of Surgery

Abstract Type: Research-focused

Background

General surgery (GS) residency programs (GSRPs) have become increasingly competitive to match in the United States (US) over the past decade. Between 1994 and 2014, there was an increase in applicants, leading to a 13% decrease in successful matches into general surgery. Previous studies have assessed the importance of high board exam scores and research productivity on a successful match; however, a gap in knowledge lies concerning how the location of a medical school influences the geographical location of the residency program where a student ultimately matches.

Objectives

This paper aims to 1) understand the trends in competitiveness for a GS residency spot, and to ascertain the effects of 2) geographical distribution and 3) research experiences on matching.

Methods

National Resident Matching Program (NRMP) data from 2013 to 2022 was analyzed for 1) total open positions per year, 2) the percentage of students matching annually, 3) average USMLE Step 1 and Step 2 scores, and 4) average research experiences for matched students. Geographical locations of GSRPs for matched US seniors were obtained from US medical school websites and through contacting each institution. Distances between medical schools and respective GSRP matches were used to assess the proportion of students matching within 100 miles, in the same state, in the same region, or in a different geographical region than their medical school.

Results/Outcomes/Improvements

Of 28,342 applicants between 2013 and 2023, 14,881 (52.50%) successfully matched into a GSRP. Between 2014 and 2020, there was a 1.59% and 1.56% increase in average USMLE Step 1 and Step 2 scores, a 20.69% increase in average research experiences (conferences, poster presentations), and a 48.94% increase in average research citations (abstracts, publications) per applicant. For matched GS applicants, there were significantly higher USMLE Step 1 scores and lower match rates compared to applicants who matched in emergency medicine and family medicine ($p < 0.001$). Between 2019 and 2023, significantly more applicants matched into GSRPs within the same state/region as their medical school than those who matched within 100 miles of their medical school ($p < 0.05$); students graduating from schools with an affiliated GSRP were significantly more likely to match at academic residency programs compared to students without affiliated GSRPs ($p < 0.001$).

Significance/Implications/Relevance

Higher board exam scores and increased participation in research experiences improve the likelihood of matching. Students are more likely to match into GSRPs in the same state or region as their medical school rather than within 100 miles. Institutions affiliated with GSRPs produce students who are more likely to match into academic programs, exacerbating health equity since a majority of medical schools and residency programs are in urban areas, making it difficult for patients in rural regions to get access to necessary surgical care. Future directions include an assessment of the impact of an affiliated residency program on overall successful match rates into GS and other competitive specialties.

Poster #16: Pipeline Development to Increase Diversity, Inclusion, and Equity in Radiology: A Data-Driven Program

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Institution(s): University of Illinois College of Medicine; Lutheran General Hospital; University of Illinois Hospital

Abstract Type: Innovation-focused

Background

The persistent lack of diversity in radiology training and workforce has been well-documented. With increased awareness that diversity in the healthcare workforce fosters improved health care outcomes, members of the radiology community have proposed greater measures to promote inclusion within radiology, with particular emphasis placed on pipeline development and recruitment. Using the 5Cs of Radiology (curriculum, coaching, collaborating, career, and commitment) as a framework, we have implemented a longitudinal education program at our institution since 2022 that is designed to increase awareness, knowledge, and interest in radiology among medical and undergraduate students. Our primary aim is to increase the gender and racial diversity of medical students ultimately applying to radiology residency. Data-driven strategies have been incorporated to collect quantitative and qualitative data for evaluation and continuous reassessment of the effectiveness of our program.

Objectives

Apply the 5 Cs of radiology framework to enhance a longitudinal pipeline development program in radiology, with the goal of increasing the diversity of students applying to radiology residency.

Methods

A series of virtual and in-person events were conducted at an urban, academic medical school and affiliated undergraduate university, ongoing since 2021. Eighteen medical student events were conducted: one women and underrepresented in medicine (URM) in radiology panel; three career advising events; two shadowing/mentorship programs; three post-MATCH panels; seven skills workshops; three procedure workshops; one transgender imaging event. Two introduction to radiology sessions were held for undergraduates. After each event, students were invited to participate in a survey, consisting of a demographics questionnaire and a knowledge questionnaire. The demographics questionnaire gathered information regarding gender, race/ethnicity, training level, and previous radiology exposure; the knowledge questionnaire gathered feedback on effectiveness of the event at addressing misconceptions and work-life balance and promoting future interests in radiology. Responses were obtained using a Likert scale and analyzed for trends.

Results/Outcomes/Improvements

Across all events, there were 247 attendees with a 49% survey completion rate (122 responses). Respondents were 54% female and 46% male. Two-tailed t-tests assessed statistical significance for trends across race/ethnicity, gender, radiology exposure, year in medical school, and session modality. Data demonstrates a statistically significant positive impact in addressing misconceptions, promoting work-life balance, and increasing interest of undergraduates when compared to graduate sessions ($p=0.0000026$). Although not statistically

significant, there was a greater positive impact on promoting work-life balance in women than men. There was a greater positive impact on increasing interest in radiology in URM vs. non- URM, though not statistically significant. Significantly greater positive perceptions were seen of procedure workshops and undergraduate events. Programs were effective; undergraduate events and shadowing/mentorship programs significantly peaked interest in radiology.

Significance/Implications/Relevance

This study demonstrates the utility of structured education programming for medical students in fostering interest in radiology. Upcoming programming will focus on continuing to expand outreach efforts to a larger audience, including undergraduate students, given the significant positive impact seen with earlier exposure to the field. Furthermore, plans to bolster virtual sessions are underway to broaden our audience at smaller, affiliated medical school campuses; prioritizing outreach through increased accessibility to our resources and sessions serves to cultivate radiology interest in geographical areas with less developed pipeline programs. An ongoing focus has been placed on greater trainee involvement, with the goal of increasing medical student and resident-driven education and outreach initiatives within our program.

Future data analysis centers on determining session modalities most effective at reaching underrepresented audiences of varying education levels.

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Poster #17: Impact of a Commensality Group on Physician Collegiality and Resilience in a Multi-Specialty Academic Medical Practice

Author(s): Jason Seto, BA; Holly Olson, MD; Malia Ramirez, MD; Jennifer Beals, MA; Kuo- Chiang Lian, MD; Todd Seto, MD, MPH; Susan Steinemann, MD

Institution(s): University of Hawaii - John A. Burns School of Medicine; The Queen's Medical Center

Abstract Type: Research-focused

Background

Burnout has a high prevalence in physicians, approximately one-third to one half in most series. Physicians who experience burnout have a higher risk of substance use disorders and suicidal ideation, they have a higher rate of attrition, and they are less effective teachers. Commensality, the act of eating together, with an intentional design is an evidence-based intervention that can promote engagement and reduce burnout among physicians.

Objectives

The purpose of this pilot study is to evaluate the feasibility, acceptance and impact of a structured commensality group intervention among physicians in a multi-specialty academic group. We used standard metrics of physician burnout and workplace satisfaction, as well as professional networking to assess the impact of a commensality intervention (CI).

Methods

This is a quasi-experimental pilot study at a university-affiliated hospital with a majority-minority teaching faculty. We designed a CI based on the Mayo Clinic model that consisted of six, 2-hour dinner meetings at local restaurants over six months.

Rotating facilitators each selected one topic from a curated list of topics developed by the Stanford WellMD and Mayo Clinic programs. Seven physicians (four male; three female) from various specialties participated, with each identifying a physician matched in the same specialty and career stage to serve as a control. All completed the Maslach Burnout Inventory and Areas of Worklife Survey (MBI/AWS) at baseline, after the CI, and at six months after the CI. The CI group also completed a survey on the attributes and weaknesses of the CI and impact on interactions with other participants. Results were analyzed using a Mann Whitney Test for comparison of CI members to controls for burnout scores.

Results/Outcomes/Improvements

At baseline, three of seven CI exceeded the Emotional Exhaustion (EE) and Depersonalization (DP) thresholds for burnout; one exceeded Personal Accomplishment (PA) threshold. Post-CI, MBI improved in all dimensions: EE 24.3 to 17.2; DP 7.1 to 5.1; PA 40.0 to 43.3. Improvement in EE was significantly greater for CI vs. controls ($p=0.01$). Similarly, every AWS dimension (except reward) improved, with significant improvements in Workload ($p=0.01$), Flexibility & Control ($p=0.03$), and Community ($p=0.04$). At 6 mo, improvements in EE (21.6), DP (5.3) and PA (42.7) persisted but were attenuated, with none of the changes in MBI or AWS from baseline statistically significant. In a post-survey of the CI group: 89% reported meeting a new colleague, 44% referred or were referred to a patient, and 33% had a "curbside consult" or other communication that they believe improved patient care. Two-thirds "strongly agreed" and one-third "agreed" that the CI was a unique and valuable program that should be expanded.

Significance/Implications/Relevance

This pilot study demonstrated the feasibility, acceptance, and impact of a CI coordinated and run

by multi-specialty physicians who are part of a majority-minority academic medical practice. Although limited by the small sample size and study design, our findings suggest significant improvements in physician burnout and workplace satisfaction following CI, with slightly attenuated results at six-month follow-up. Our study demonstrates that commensality has the potential to improve cooperativity among physicians and make connections across specialties. Results from this pilot study will be used to support the broader implementation of CI among our group practice.

Poster #18: Becoming Effective Educators of Health Care Disparities: Incorporating DEIJ-Centered Facilitation Techniques into Physician-Faculty Training

Author(s): Robert Belcourt, EdS; Jennifer Newman, EdS; Andrea Williams, Master of Science in Education; Ashleigh Larkin, Master of Arts in Teaching; Richard Bryce, DO; Mara Hoffert, PhD

Institution(s): Henry Ford Health

Abstract Type: Innovation-focused

Background

Health care disparities persist as a pressing national challenge; thus, the ACGME requires Sponsoring Institutions to provide a structured curriculum for addressing the social determinants of health and health care disparities. In the past years, faculty members often struggled with discussions on sensitive topics and health care disparities while facilitating education modules with trainees. Additionally, some trainees reported feeling uncomfortable during these discussions. Graduate medical education leaders realized teaching health care disparities can be emotionally and psychologically challenging, and that faculty members would benefit from training to facilitate this sensitive material. Our Diversity, Equity, Inclusion, and Justice Medical Education Taskforce program helped health care leaders increase cultural humility, improve facilitation skills, and create safe and inclusive learning environments when exploring these topics during residency and fellowship training.

Objectives

The primary objective of this project is to continue developing and incorporating a community of DEIJ educators into programs that address health care disparities. A key aspect of effective training is for facilitators to foster safe and inclusive learning environments when discussing topics such as implicit bias and social determinants of health. Using facilitation techniques rooted in cultural humility, Taskforce members infuse DEIJ principles into health care education and practice. This initiative aims to cultivate an inclusive learning environment, which will empower future practitioners with the knowledge and skills to provide culturally competent care for a more equitable health care system.

Methods

Forty-seven DEIJ Medical Education Taskforce members participated in a structured curriculum on how to facilitate inclusive conversations, invite vulnerability through questioning strategies, and explore difficult topics related to social justice. Using the Master Adaptive Learner Framework, Taskforce members practiced their skills over 35 hours. This project incorporates the Taskforce to compassionately educate trainees using culturally responsive andragogy, inclusive curriculum development, and DEIJ principles. Since the start of this project, 195 residents and fellows participated and completed curriculum for addressing the social determinants of health and health care disparities.

Results/Outcomes/Improvements

Interviews and post-survey results indicated a positive shift in participants' awareness of health care disparities and their ability to navigate complex DEIJ issues within health care contexts. Participants demonstrated increased cultural competence, empathy, and a

commitment to addressing disparities. Qualitative feedback highlights the value of the facilitator techniques in fostering open dialogue and critical reflection. The project leverages effective facilitator techniques to allow trainees to have meaningful discussions, increase engagement, and feel safe to explain and reflect on health care disparities.

Significance/Implications/Relevance

This project transcends its local setting by contributing to the broader discourse on health care equity. It underscores the importance of creating safe learning environments for integrating DEIJ principles into health care education and practice, laying the groundwork for a more inclusive and patient-centered health care system. The implications of this work extend to health care institutions, policymakers, and educators, emphasizing the need for ongoing DEIJ-focused training and curricular enhancements to create lasting change in health care.

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Poster #19: Implementing a Comprehensive Wellness Framework to Address Common Issues across Multiple GME Programs

Author(s): John Delzell, MD, MSPH, MBA; Holly Stewart, MS

Institution(s): Northeast Georgia Medical Center

Abstract Type: Innovation-focused

Background

It is well-documented that residents have a heightened risk of burnout, mental health conditions, and suicidal ideation. Professional burnout happens as a result of chronic, long-term, unmanaged stress related to the clinical learning environment. A focus on improving resident well-being should be a priority of every Sponsoring Institution. Our goal is to monitor well-being on an ongoing basis to identify at-risk residents and provide customized, timely resources and support. The wellness framework created for our institution can support multiple programs across different specialty and subspecialty areas in an efficient and effective manner.

Objectives

This project was created with the purpose of improving the quality of the clinical learning environment and the educational opportunities associated with residency training. With the high levels of burnout, emotional exhaustion, and depression that are associated with physicians and residents, it was important as a new Sponsoring Institution to envision a different wellness program. This was viewed as an opportunity to create a unique approach to the clinical learning environment that was outside of the silos of specialty-specific departments.

Our objectives are to:

- 1) Highlight the challenges associated with an institution-wide approach to wellness
- 2) Recognize the advantages and efficiencies of breaking down programmatic silos
- 3) Understand the impact of wellness programs on the clinical learning environment

Methods

In 2017, the Sponsoring Institution received accreditation and committed to a graduate medical education director for wellness prior to resident arrival. This provided time to create a framework to support trainee wellness across the institution. The framework is based on institutional core values and addresses multiple dimensions of physician well-being that impact the clinical learning environment. The wellness director interviewed stakeholders, including program leaders, hospital administration, physician practice leaders, faculty members, and medical staff leaders. This created an evidence-based program that was feasible in our new programs, developed partnerships, and established institutional buy-in. This ultimately led to the development of a comprehensive institutionally based curriculum designed to address the ACGME Common Program Requirements.

Results/Outcomes/Improvements

The wellness program has been in place since 2019. We collected baseline data on resident well-being starting in year one and continuing until now. This data includes a yearly assessment

with a validated burnout index and biweekly validated fuel gauge assessment of resident wellness. All of our programs complete the annual ACGME Surveys. We track institutional and program-specific results on the resident and faculty member well-being survey year over year as an overall measure of wellness. Every two weeks, residents receive a validated short form survey to monitor wellness that is known as the Fuel Gauge. Participation is voluntary, but over a five-year period remains above 80 percent of all residents. Since the beginning of the institutional wellness program, there has been broad institutional acceptance of the importance and impact of wellness on the clinical learning environment.

Significance/Implications/Relevance

The goal of our wellness program is to create a generation of practicing physicians who have an approach to well-being based on our institutional core values of passion for excellence, deep interdependence, responsible stewardship, and respectful compassion. Our purpose was to improve the quality of the clinical learning environment. With the high levels of burnout, emotional exhaustion, and depression that are associated with physicians and residents, it was important as a new institution and new residency program to envision a different wellness program. This was an opportunity to create a unique approach to wellness that is not tied to specific departments. Immediate takeaways include understanding the additive value of an institutional wellness department. The value is based on fiscal efficiency and intra-specialty collaboration. Different specialty programs can learn from each other within the wellness sphere.

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Poster #20: PCs Put the ME in GME: Creating a PC Newsletter to Promote Engagement and Professional Development across Departments

Author(s): JoLynn Noe, MS; Jessica Pennington, MS; Sarah Steen, BS

Institution(s): University of Kentucky; University of Kentucky Graduate Medical Education

Abstract Type: Innovation-focused

Background

Our graduate medical education (GME) community includes 67 program administrators embedded in 33 different departments across four regional locations. We have experienced high levels of attrition in these positions in recent years, coupled with self-reported concerns of burnout and isolation in the role. We identified a need to provide more outreach to this group and to engage them as members of a valued professional community.

Objectives

Implement a monthly newsletter for distribution to GME program administrators to foster engagement, networking, professional development, and communication among our PC community through a monthly PC newsletter.

Methods

The GME Office formed a small (six-member) committee to create a template, calendar, and process for generating the monthly newsletter. The committee agreed that regular monthly highlight features should include: PC of the month; GME staff of the month; Resident/Fellow of the month; a site/facility; program of the month; and a monthly feature article. In addition to the feature articles, the template includes ACGME news, PC professional development opportunities, an Excel tip, a “did you know” tip, and updates on new hires and promotions. The committee meets annually to plan monthly feature topics for the upcoming year, with careful attention to diversity of programs and locations for each feature. The content is generated through Canva software, which provides an interesting, aesthetically pleasing document, deliverable via email.

Results/Outcomes/Improvements

Our first GME PC newsletter was launched in March 2023. Initial and ongoing feedback has been overwhelmingly positive, from program administrators and our GME leadership team. Anecdotally, several of our program administrators have reported a sense of community- building and appreciation in response to the monthly feature articles. They also have shared a better understanding of the work and training conducted in our programs and facilities. As a result of our monthly professional development feature, we have witnessed an increase in professional conference and webinar participation. In addition, staff attrition of program administrator positions has decreased from 19% in 2022, to 3% in 2023 (to date).

Significance/Implications/Relevance

Our template, process, and format can be adapted to institutions, departments or learners. Other institutions can bring this initiative to their home institution to enhance program administrator knowledge and engagement and combat burnout. Also, building on the model of our monthly PC newsletter, our GME Office is building a similar monthly newsletter for program directors.

Poster #21: Real-Time Cerner EHR Data Extraction to Support Precision Medical Education in Anesthesiology

Author(s): Claire Ressel, BS; Jonathan Russell, BS; Glenn Woodworth, MD; McKenzie Hollon, MD; Sumeet Gopwani, MD

Institution(s): Georgetown University; Georgetown University School of Medicine; Oregon Health & Science University; Emory University School of Medicine

Abstract Type: Research-focused

Background

Residency education is shifting towards competency-based education, an approach that emphasizes individualized learning and personalized feedback [van Melle et al]. Utilizing precision medical education can enable individualized learning with relevant educational content tailored to each learner [Triola et al].

Objectives

This study aims to establish a Cerner Electronic Health Record (EHR)-integrated case-based directed reading (DR) program for anesthesiology residents to show the feasibility and acceptance of one example of precision medical education programming.

Methods

A novel software application was built to extract daily anesthesiology resident case assignments from the Cerner EHR, map clinical assignments to educational materials, and deliver reading to residents before clinical exposures. Real-time learner specific case data was extracted through Cerner Command Language based MPage utilization and through an enterprise web service. Case descriptions were mapped to a curated database of 144 relevant articles. PGY-2 anesthesiology residents at a single academic center were randomized to participate in the study for two of four months. The baseline reading of residents was assessed at the beginning with their report of hours per week they read in relation to their clinical practice, and intermittently queried throughout the study. During the two of four months in which they were in the directed reading group, residents received 12 reading assignments per month of enrollment that were specific to their cases in that time frame.

Results/Outcomes/Improvements

All PGY-2 anesthesiology residents at MedStar Georgetown University Hospital agreed to participate in the study and there was a 100% completion rate of baseline measurements, study period, and monthly reading assessments. Residents reported a statistically significant change in reading time by 2.5 hours/week from while enrolled in the study ($p = 0.0079$).

Significance/Implications/Relevance

This study utilized anesthesiology resident case assignments to suggest relevant educational content from a set of readings. Residents participating in the study demonstrated a significant increase in hourly reading. This finding provides evidence that precision medical education and individualized content can have a meaningful impact on learning outcomes. Future directions for this project include expanding the number of case assignments and relevant key content, and integrating the technology into a larger precision medical education project from The Anesthesia

Research Group on Education Technology (TARGET). This project integrates an array of resident data, including assigned cases or procedures and knowledge as evaluated by practice questions and competency assessments from faculty, to present relevant educational content via a mobile application. This study suggests residents are more likely to consume personalized educational content that is temporally relevant to their cases.

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Poster #22: Multivariate Analysis of the Factors Associated with Imposter Syndrome in Female Physician Trainees: A Multi-Institutional Study

Author(s): Kanapa Kornawad, MD; Aesha Aboueisha, MD; James Yan, BS; Maria Woodward, MD, MS; Ami Shar, MD; Adrienne Mann, MD; Tyra Fainstad, MD

Institution(s): University of Texas Health San Antonio; University of Michigan; Rush University; University of Colorado School of Medicine

Abstract Type: Research-focused

Background

Impostor syndrome is an issue that is increasingly becoming recognized in resident physicians. Studies have shown a higher rate of impostor syndrome (IS) in female physicians compared with their male counterparts in graduate medical education (GME), as well as higher rates of burnout, depression, and suicide. Women physicians consistently rate themselves lower than men in various competencies despite either no objective disparity between genders or emerging evidence that women have better patient outcomes than men. While IS has been well described as a phenomenon, there is little data on contributing or protective factors to IS, limiting effective intervention strategies.

Objectives

To examine the prevalence of IS among a national sample of female physician trainees; to elucidate the factors associated with IS in a national sample of female physician trainees

Methods

A baseline survey was administered to 1,017 female trainees who volunteered to participate in a professional coaching program across 26 GME training programs in September 2022. The survey included demographics, the Young Impostor Syndrome Scale (YISS), the Self-Compassion Scale-short form (SCS-SF), the Trauma Symptoms of Discrimination Scale (TSDS), the Maslach Burnout Inventory (MBI), the Moral Injury Symptom Scale for Healthcare Providers (MISS-HP), and the Secure Flourishing Index (SFI). The YISS is an eight-item instrument with yes/no scoring. A score ≥ 5 indicates the presence of IS. A univariate analysis was run on YISS and demographic factors. Multivariable analyses were run on YISS (binary) with the following as independent factors: SCS-SF, TSDS, Burnout Depersonalization (DP), Burnout Emotional Exhaustion (EE), Burnout Personal Accomplishment (PA), MISS-HP, and SFI.

Results/Outcomes/Improvements

Of the 1,017 trainees enrolled in the program, 784 (77.1%) completed the YISS instrument. Of those, 598/784 (76.3%) were positive for IS (YISS score ≥ 5). The data revealed no significant correlations between any measured sociodemographic characteristics and IS. A multivariate analysis showed a strong inverse association between YISS score and SCS-SF score. Those participants with lower self-compassion had 11% higher odds of IS (OR=0.89, CI=0.86-0.92). Those participants with higher TSDS scores had 2% higher odds of IS (OR=1.02, CI=1.00- 1.04). No significant association was noted with Burnout DP (0.106), Burnout EE (0.457), Burnout PA (0.786), MISS-HP (0.353), or SFI (0.558).

Significance/Implications/Relevance

In our national sample of 784 female physician trainees who completed the YISS instrument, we found over three quarters to score positively for IS, across all sociodemographic factors. We also found a significant inverse relationship between SC and IS. The SC deficit in physicians is likely multifactorial stemming from a culture which often asks physicians to do more with less and

normalizes self-sacrifice. Furthermore, medical training often responds to trainee mistakes with shame and blame which frame SC as unnecessary/counterproductive and can encourage IS. Reframing this belief, therefore, and teaching tools to create and protect SC may be an effective way to mitigate both the SC deficit, and also IS. We know from previous research that SC can be improved through interventions such as compassion-focused therapy, mindfulness-based focused treatments, and coaching. Professional coaching is a promising intervention to both increase SC and decrease IS.

Poster #23: Cultivating the Culture through Continuous Professional Development

Author(s): Karen Entrekin, BA, MHA; Kelly Cash, BA; Sarah Gonzalez, BA

Institution(s): UNC Health

Abstract Type: Innovation-focused

Background

Background: During the COVID-19 pandemic, graduate medical education (GME) administrative staff members transitioned to a remote workforce. Workforce isolation led to lack of collaboration, erosion of the collegial culture, burnout, and employee turnover, which poses risk of instability of successful program administration and support of GME trainees. Also during this time, our institution experienced leadership changes with several program directors new the role.

After the pandemic, academic medical centers across the country have experienced an erosion of our cultures due to burn-out, fatigue and years of effort to simply keep our institutions afloat - an extremely challenging time to work in healthcare. Our GME communities are uniquely positioned to emerge as leaders in resilience and agents of change towards rebuilding the cultures that inspired so many of us to dedicate our careers to academic medicine.

Objectives

Our objective was to leverage the unique position of the graduate medical education community, which includes all clinical specialties, to emerge as leaders in resilience and agents of change in rebuilding the culture that inspired us to dedicate our careers to academic medicine via professional development and engagement.

Methods

Over the last two years, our office has implemented several professional development opportunities for both program coordinators/administrators and program directors. These efforts were reflective of needs identified in part from our annual program coordinator survey. These include training sessions for new program coordinators, quarterly program coordinator forums, leadership development and training course for new program directors with CME credit, creation of a GME-specific Grand Rounds series and annual GME retreat. Additional support for professional development includes financial support for TAGME certification and GME conference attendance. Community engagement activities have been established, including program coordinator and GME staff teambuilding retreats/activities, community service events, and the development of an annual Program Coordinator of the Year Award.

Results/Outcomes/Improvements

Increased attendance and engagement in GME activities with positive feedback from program coordinators and staff members, and improved metrics from the 2023 annual program coordinator survey.

Significance/Implications/Relevance

Significance: Implementation of continuous professional development and engagement opportunities has led to improved collegiality among our GME community and increased GME activities engagement.

Poster #24: Building Successful Leaders: A New Program Director Onboarding Program

Author(s): Kelsie Kelly, MD, MPH; Elaina Smith, MEd; Andrea McMillin, BA; Brogan Barry, MD; Jeff Norvell, MD, MBA

Institution(s): KU Medical Center; University of Kansas Medical Center

Abstract Type: Innovation-focused

Background

Program director (PD) recruitment and success is critical to the sustainability and continued advancement of a residency or fellowship program. The corporate world has shown that successful onboarding to leadership roles can help clarify expectations, build relationships, and improve retention.⁽⁵⁾ There is limited literature on onboarding physician faculty members, including PDs.⁽¹⁻⁵⁾ Most faculty onboarding programs involve traditional didactics, which miss opportunities for complete understanding of topics and development of mentorship. Case-based learning formats, monthly seminars, and formal mentoring programs have been proposed as successful ways to improve satisfaction, promote engagement, networking, and collegiality.⁽²⁻⁴⁾ The University of Kansas Medical Center (KUMC) surveyed PDs in 2019 to identify self-reported gaps in knowledge, particularly with new PDs. The GME Faculty Development subcommittee developed a PD Onboarding Program to help fill those gaps.

Objectives

The overall goal of the program is to foster growth of new PDs through structured mentorship with experienced current or former PDs at KUMC and to provide quarterly case-based learning seminars on identified topics addressing how to handle topics within our own institution. The purpose of this project is to evaluate the PD Onboarding Program from the perspective of the new PD participants and the PD mentors.

Methods

The GME Faculty Development subcommittee created a New PD Onboarding program. There are two components: (1) New PDs are paired with mentors, identified as former PDs or current PDs who have been in their role for more than three years. Mentor and mentee PDs meet quarterly to review general ACGME core and specialty-specific topics using a PD Onboarding Guide with identified topics. (2) There are case-based learning (CBL) topics reviewed in small group sessions with the new PDs. Topics include GME Budget/Finance, Competency-Based Medical Education, Struggling Learner, and Curriculum Development. New PDs have two years to finish the program. At completion PDs will receive a certificate of completion for their CV. New PDs take a pre- and post-survey before beginning and after completion of the program to assess confidence in ACGME content areas and to gather feedback on the program. Mentors are surveyed as well for further input.

Results/Outcomes/Improvements

14 PDs have started the PD Onboarding program since November 2020, n=9 for the pre-/post-survey. All PDs were in their role for <1 year. All nine recommended to continue CBLs, eight to continue quarterly mentor meetings (rating 4.1). On a Likert scale, PDs rated confidence on GME topics, all showing an increase at program completion. ACGME Common Program Requirements, PEC/CCC responsibility, Organizing faculty development, Using MedHub to manage residency, GME program-specific budgeting/financing, Trainee recruitment/promotion showed a ≥ 1 point increase. Ten PD mentors completed the post-survey, all had >5 years of experience. Eight recommended continuing mentor meetings (rating 4.2). Narrative comments show this program was well received. There was joy found in the mentor/mentee meetings with the desire to connect.

Improvements were suggested, including differentiating the program for residency and fellowship, providing asynchronous onboarding options, and improving mentor meeting scheduling.

Significance/Implications/Relevance

Successful onboarding programs are known to improve success and retention of those entering leadership roles in the corporate world; the same rules can apply to onboarding PDs. The ACGME Common Program Requirements cite that “the program must demonstrate retention of the program director for a length of time adequate to maintain continuity of leadership and program stability.”(6) While this is a program applied at one academic medical center for three years, we believe this PD Onboarding program has shown to improve collegiality and confidence in GME content areas. While content areas are broad, they are focused on how items are handled at the local level in our institution, bringing relevance directly to the success of our new PDs. One example is regarding the topic of managing the struggling learner, we review available resources, appropriate documentation, and assessing these learners that may be unique to our own institution. We plan to continue this program and are excited for the future.

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Poster #25: Foundations of Research Methods: An Educational Intervention to Improve Trainees' Research Literacy at an Academic Medical Center

Author(s): Lauren Irwin, PhD, MBA; Eburn Ebunlomo, PhD; Christine Ford, EdD; Kamilla Guinn, MEd

Institution(s): Houston Methodist Hospital

Abstract Type: Innovation-focused

Background

In general, health care professionals do not get formal training on how to approach research in a systematic manner. Recent research has found that many trainees, faculty members, and staff members do not feel comfortable in many aspects of conducting research and reviewing literature. These gap areas include understanding statistics, using research to inform their practice choices, understanding specific research language, and not feeling supported by their institution in conducting research. Educating trainees, faculty members, and staff members around these concepts improves their understanding and willingness to participate in research. Improving research literacy—the understanding of how research is conducted and how to interpret research findings—has also been shown to improve the safety of care.

Objectives

Most ACGME-accredited programs require their trainees to conduct research projects, but little guidance is given on how to do so. Given that trainees have a limited amount of time to complete their required research project, it is important for them to have the knowledge and skills to meet this requirement effectively and efficiently. This workshop series was developed in response to a need, with the aim of standardizing a research education program at an academic medical center. In the series, we outline the topics that trainees should be familiar with in order to begin a research project and address the responsible conduct of research. This workshop series is facilitated by the Office of Curriculum and Educational Development, in consultation with the Office of Research Integrity and the Institutional Review Board. Our goal is to reach all residents and fellows by the end of 2024-2025 academic year.

Methods

In fall 2022, we created a workshop series consisting of four, one-hour sessions called Foundations of Research Methods (FORM). The content development team included diverse stakeholders within our academic medical center from the Office of Human Research Protections, Library, Faculty Development, Continuing Medical Education, Continuing Nursing Education, and Health Data Science and Analytics. The four sessions of FORM are as follows: Session 1- What is Research/Research Problem; Session 2- Approaches to Research; Session 3- Data Collection; Session 4- Data Analysis. The series includes a pre- and post-knowledge test from the objectives for each session to gauge participant knowledge before the series and learning after the series, respectively. Trainees are also given a companion guide which includes information from the course depicted through infographics, a list of research resources available throughout the hospital, and one on one coaching for their own projects.

Results/Outcomes/Improvements

In spring 2023, two iterations were conducted for internal medicine and urology/otolaryngology residents. In fall 2023, two iterations were conducted for pathology and neurology residents. Collectively, we have reached 105 trainees from the five different programs listed above. On the pre-test, trainees rated their research knowledge a 4.4 (average) on a 10-point scale and scored an average of 75% on the knowledge test. On the post-test, trainees rated their research knowledge a

7.5 (average) on a 10-point scale and scored an average of 85% on the knowledge test.

Significance/Implications/Relevance

We have demonstrated that the FORM series is a feasible approach to trainee research education. It provides uniform, standardized information and removes the burden of teaching this content from ACGME-accredited programs. Our first-year cohorts have demonstrated increased research knowledge in both self-assessment and on the knowledge test. Additionally, many trainees have stated that they now know where to go to for help with their own research and are more aware of research-related resources within the hospital. FORM is a possible model for other academic medical centers to consider streamlining research education for trainees. It is important to gain buy-in from program directors and other department leadership to encourage such education and participation. As a result, this training can help to translate knowledge and skills into research and scholarly productivity.

Poster #26: Zooming In: Virtual Interviews on Ophthalmology Match for Applicants with vs. without Home Programs

Author(s): Lauren Ong, BA; Ashley Niu, MS; Priya Manhas, MS; Bhagvat Maheta, BS; Jaycob Avaylon, MD; Joseph Martel, MD; Michael Wong, MD, MBA, FACS

Institution(s): California Northstate University College of Medicine; University of Kentucky Department of Ophthalmology

Abstract Type: Research-focused

Background

Beginning with the 2020-2021 match cycle, the Association of University Professors of Ophthalmology (AUPO) enacted guidelines for the ophthalmology residency match to transition from in-person to virtual residency interviews to abide by COVID-19 pandemic guidelines. This recommendation has continued despite many other COVID-19 restrictions being lifted worldwide, as virtual interviews may improve financial equity by negating the costs of traveling for interviews. Conversely, virtual interviews present challenges for applicants and residency programs in recognizing personal attributes and building profound connections throughout the match process. This new landscape of virtual interviews poses fascinating analyses, as this may factor into how applicants with versus without home ophthalmology programs have historically garnered disparate resources and match outcomes.

Objectives

This study aims to compare the trends in matched ophthalmology residency applicants from schools with and without home ophthalmology residency programs during in-person and virtual interview application years.

Methods

US allopathic medical school seniors were assessed retrospectively for their match rate list published on each institution's official website and the SF Match (2019-2023). In addition to publicly available SF Match data, data collected included the medical school of matched students and whether or not they have a home residency program, the number of ophthalmology faculty at the medical school, residency program matched into, and residency program classification (i.e., academic, community, or military). The data was stratified based on those who matched during the 2019 and 2020 (in-person) and the 2021-2023 (virtual) application cycles to consider the impact virtual interviews had on the ophthalmology residency match. An odds ratio analysis and Chi-squared test were conducted to determine the likelihood that medical students with a home ophthalmology residency program successfully matched compared to those without a home residency program, pre-virtually and virtually.

Results/Outcomes/Improvements

Data on 563 matched ophthalmology applicants from 2019 to 2020 (in-person) and 971 applicants from 2021 to 2023 (virtual) application cycles were analyzed. During in-person interviews, among all matched MD seniors from schools with a home ophthalmology program, 2.68% matched into ophthalmology, compared to 2.04% of those without a home program. This gap increased during virtual interviews, with 2.75% of those with a home program and 1.69% of those without a home program. Overall, applicants with home programs were 1.5x more likely to

match into an ophthalmology residency program than those without ($p < 0.001$). During the pre-virtual era, those with home programs were 1.3x more likely to match ($p < 0.001$) and increased to 1.6x more likely during the virtual era ($p < 0.001$).

Significance/Implications/Relevance

Limited literature exists that analyzes the multi-year effect of virtual interviews on ophthalmology residency match outcomes. Our comparative analysis revealed that over the past five years, applicants from medical schools with home ophthalmology programs displayed an increased matching likelihood into ophthalmology during the virtual compared to the pre-virtual era. Future directions include analysis of other predictor variables, such as number of interviews applicants received, which can further elucidate the inequities of virtual interviews for applicants without home ophthalmology programs. Additionally, examining match outcomes, such as the geographic distribution of matched applicants and associations to a particular residency program type, can guide future applicants on maximizing their chances of successfully matching into an ophthalmology residency program.

Poster #27: Factors Affecting GME Program Accreditation and Compliance

Author(s): Manuel Vallejo, MD, DMD; Anna Zukowski, BS; Christa Lilly, PhD; Erica Shaver, MD; Norman Ferrari, MD

Institution(s): West Virginia University

Abstract Type: Research-focused

Background

The ACGME is committed to enhancing health care quality and population health by evaluating and enhancing the educational standards of resident and fellow physician training through advancements in accreditation and education. When an ACGME Review Committee identifies substantial non-compliance with accreditation requirements, a citation is issued. Additionally, an area for improvement (AFI) may be designated for less significant issues that could lead to a citation if left unresolved.

Objectives

This study aims to identify factors linked to program citations and/or AFIs in order to address and prevent adverse events in the future.

Methods

After obtaining local Institutional Review Board (IRB) approval, a three-year data set (2020-2023) was examined, with the study's focus on citations and/or AFIs in the final year (2023). Factors studied included program type (accredited or non-accredited), accreditation status (Continued Accreditation [CA] or Initial Accreditation [IA]), program leadership details (academic titles and service lengths of chair, program director, and program coordinator), compliance levels of resident and faculty surveys (<70%), and internal program audit scores. The audit assessed administrative, educational policies, procedures, and trainee evaluation components for ACGME compliance. Data were presented as frequencies, valid percentages for nominal data, and analyzed using statistical tests like Chi-square and nonparametric t-tests (Wilcoxon signed rank) with a significance level set at 0.05.

Results/Outcomes/Improvements

Among 53 ACGME-accredited programs, 12 received citations and/or AFIs in 2023, while 41 did not. Among the cited programs, the number of citations ranged from 0 to 4 (average of 0.83), and AFIs ranged from 1 to 4 (average of 1.83). Significant factors for programs with citations and/or AFIs included IA status (CA: n=7, 17% vs. IA: n=5, 45%; p = 0.04). Factors with weaker associations included recent audits (yes: n=5, 42% vs. no: n=7, 17%, p = 0.07), special program reviews in the past two years (yes: n=5, 42% vs. no: n=7, 17%, p = 0.07), recent program director changes (yes: n=7, 35% vs. no: n=15, 15%, p = 0.09), and program chair academic title (full professor: n=8, 19% vs. associate/assistant: n=4, 40%; p = 0.14). For programs with citations and/or AFIs, low compliance with Faculty Survey questions (<70%) (average of 3.00 vs. 0.66; p = 0.06) and fewer years as program director (average of 2.25 vs. 3.80, p = 0.15) also exhibited weak associations.

Significance/Implications/Relevance

IA status emerged as the primary factor linked to program citations and/or AFIs. Other potential contributing factors included program chair academic title, inadequate ACGME Faculty Survey compliance (<70%), and less experienced program directors. Our findings underscore the vulnerability of programs with IA status to citations and/or AFIs. Monitoring tools, such as recent program audits, special program reviews, program director changes, program chair academic title, Faculty Survey compliance, and program director experience, can help identify programs at risk and prevent and adverse outcome.

Poster #28: Adapting Well-Being Rounds to Residents Hungry to Learn More about Nutrition

Author(s): Mark Mason, PhD, CGP; Denise Taylor, MS, RD; Brian Levine, MD

Institution(s): Christiana Care Health System; ChristianaCare

Abstract Type: Innovation-focused

Background

While many medical residents and fellows believe in the importance of counseling patients about nutrition, most do not feel qualified to engage on the topic. Furthermore, many residents cite difficulty in making healthy food choices for themselves, given limited time for food shopping, meal preparation, and even insufficient time to eat during demanding, often 60+ hour work weeks. The discrepancy between counseling patients and residents' own eating habits may contribute to internal dissonance and difficulties with teaching and role modeling healthy eating. Recognizing the desire for residents to discuss and learn more about nutrition, we formed a multi-disciplinary team including a wellbeing specialist/licensed psychologist, registered dietitian, nursing education professional, and community health specialist to design Nutrition Wellbeing Rounds for residents and fellows at a large independent academic medical center.

Objectives

To provide resident and fellow physicians an opportunity to have open, honest conversations about nutrition and diet related to their own well-being and patient care.

Methods

Wellbeing Rounds are confidential, quarterly, one-hour structured discussions held during protected education time. They are designed to be interactive, experiential, and reflective in tone, and invitational rather than prescriptive or didactic. This year, healthy nutrition was identified as the first topic. Residents and fellows discussed habits and barriers for eating healthy during training. They also shared inexpensive, easy, nutritious recipes that will be collected and distributed as an ongoing electronic Resident/Fellow Recipe Exchange.

Additionally, we discussed how to have difficult conversations about diet with patients as it relates to their health. Books for further learning were reviewed (*How Not to Die*, *This is Your Brain on Food*, *Prevent and Reverse Heart Disease*, *Why We Eat What We Eat*). Fruit (apples, oranges, and bananas) was purchased at a cost of \$300 and shared during the sessions. An anonymous survey was distributed to collect feedback from residents and fellows.

Results/Outcomes/Improvements

From July-September 2023, the resident well-being specialist facilitated one-hour sessions to 18 different residency and fellowship programs. One hundred twenty residents/fellows participated in Nutrition Wellbeing Rounds. Post-survey data (n=86) suggested high satisfaction with the discussion ("Session was worthwhile"; 4.83 on 5-point scale), including learning new concepts (4.77), skillful facilitation (4.91), and feeling safe to share thoughts during rounds (4.86). Qualitative feedback included appreciation for the topic and open discussion, a desire to have learned more about nutrition during medical school, and gratitude for the healthy snacks during the rounds.

Significance/Implications/Relevance

With this innovative 'stealth-health' approach, we provided a non-threatening educational experience for residents and fellows to learn about and share practical tips to improve their own nutrition and that of their patients. Well-being efforts should consider incorporating nutrition and diet topics into ongoing curricula to empower residents and fellows during training.

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Poster #29: Competency-Based Time-Variable Graduate Medical Education: What Evidence of Value Do Stakeholders Need to See?

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Institution(s): The Children's Hospital of Philadelphia (CHOP); Harvard Medical School and Boston Children's Hospital; Harvard Medical School, Massachusetts General Hospital

Abstract Type: Innovation-focused

Background

"Promotion in Place" (PIP) is a competency-based time-variable (CB-TV) graduate medical education (GME) pilot program where residency graduation is based on demonstrated competence. Training duration may be standard length, shorter, or longer, depending on when competence is achieved. Residents who graduate early function as independent physicians in situ, with "sheltered independence" until their scheduled graduation date. The PIP model received American Medical Association (AMA) funding in 2019 and 10 GME programs in nine specialties expressed initial interest. PIP launched in one program in spring 2021; two other programs that planned for >1 year to launch did not receive board exemptions from "time in program" and "case volume" requirements. Other programs have demonstrated variable interest in participating. Across these both participating and non-participating programs, we sought to capture stakeholder perspectives of perceived value of the PIP model.

Objectives

To describe and analyze the perceived value of CB-TV GME training, specifically the PIP pilot, by capturing perspectives and lived experiences of diverse stakeholders (local and external). Our understanding of value was informed by Harvey and Green's conceptualization of quality in higher education as Fit for Purpose, Transformation, Standards Monitoring or Value for Money.

Methods

As part of program evaluation, we conducted a stakeholder analysis using qualitative semi-structured interviews. Participants were invited via email: 1) All PIP eligible residents AY 2020-2021; AY 2021-2022; AY 2022-2023; 2) PDs from 10 programs who demonstrated interest; 3) Chairs from programs that planned participation; 3) Service chiefs overseeing PIP participants in "sheltered independence"; 4) external leaders of national organizations knowledgeable about medical education, accreditation, and board certification. We developed a semi-structured interview guide to explore the value of CB-TV GME and PIP from the perspective of diverse stakeholders. The guide was piloted, revised, and the study was Institutional Review Board-approved. Interviews were recorded via Zoom from June 2022-August 2023. Interviews were transcribed verbatim. In line with general inductive analysis, we created codes and granular sub-codes, informed by the work of Harvey and Green. Two of us coded interviews and critiqued each other's coding.

Results/Outcomes/Improvements

Thirty-four interviews were conducted: 13 residents, seven program directors, five service chiefs, four chairs, and five external stakeholders/national leaders.

All stakeholder groups frequently cited aspects of PIP that are Fit for Purpose as evidence of value, e.g., PIP supported workforce readiness and provided sheltered independence as intended. All stakeholder groups cited aspects of PIP that aligned with Transformation as evidence of value. Most commonly residents, program directors, and external stakeholders spoke of how PIP supported readiness for independence and confidence in trainees.

External stakeholders, program directors and service chiefs, but not residents, cited aspects of PIP that aligned with Standards monitoring as evidence of value, e.g., potentially impacting patient, clinical, and resident outcomes. Chairs and external stakeholders, but not residents or program directors, cited aspects of PIP that showed Value for the money, e.g., PIP as being cost neutral or having hidden costs. Value for money was least frequently cited.

Significance/Implications/Relevance

Stakeholder perceptions of value in a CB-TV GME pilot project varied widely by role group, underscoring that value means different things to different stakeholders. CB-TV GME and PIP are resource intensive and require buy-in from multiple stakeholders. Thus understanding what each stakeholder group values is critical to engaging trainees, program directors and key institutional and national leaders in conversations that will facilitate extending CB-TV GME training to more programs and specialties. The transformative nature of PIP and resident “readiness for independence” were noted across all groups and underscore the added value of PIP in residency training.

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Poster #30: Determining Effective Communication Strategies for Palliative Medicine Family Meetings

Author(s): Mayuri Kathrotia, MS; Aung Sitt Naing, MD; Temple West, MFA, MMHPE, CHSE; Jennifer Styron, PhD; Marissa Galicia-Castillo, MD, FAAHPM

Institution(s): Eastern Virginia Medical School; Eastern Virginia Medical School Sentara Center for Simulation and Immersive Learning (SCSIL); Eastern Virginia Medical School, Glennan Center for Geriatrics and Gerontology

Abstract Type: Innovation-focused

Background

Palliative medicine focuses on improving the quality of life for people facing a serious illness. Family meetings are an effective method of communicating with patients and their families. These meetings serve as an opportunity to discuss the patient's condition and prognosis, share information about their preference, address goals of care, identify any concerns, and engage in shared decision-making. An important area of clinician skill in palliative medicine is communication; however, directing a family meeting can be challenging because it requires the clinician to build a relationship with the patient and family, facilitate the conversation, and employ several communication strategies in a short period of time. Prioritizing these areas, in addition to family dynamics and time pressures can be challenging. There is currently a lack of formal training for residents and fellows to hone these skills.

Objectives

The objective of this project was to assess how communication between providers and their families can be improved to help strengthen the skillset needed for a successful family meeting. This will provide residents and fellows with individualized feedback that can immediately be incorporated into clinical practice and will inform curriculum revisions to enhance palliative medicine training at the resident and fellow level. This study was specifically interested in exploring the length of time spent in family meetings and the breakdown in speaking between the resident/fellow and the patient/family during these meetings. Topic areas addressed, and their relationship to patient satisfaction, will also be explored.

Methods

Using a descriptive quantitative research design, our team explored the descriptive data and cross-sectional relationships between topic areas and patient satisfaction. A total of 22 family meetings were reviewed from 2019-2023. A standardized patient (SP) family consisted of the patient, husband, and daughter. Every encounter had the same scenario, which involved a patient with a terminal diagnosis of heart failure. The role of the provider was to set up the conversation, assess the patient's understanding, investigate patient values, and engage in a shared decision-making process. SPs completed a survey assessing their satisfaction level. We analyzed the duration of speech in each session and evaluated the patient-provider interaction by using a scoring system that quantifies the performance on components of discussion, such as the definition of palliative medicine in simple terms, what matters most, understanding of illness, code status, advanced care planning, and recommendations.

Results/Outcomes/Improvements

Descriptive data will be reported with additional cross-sectional data shared at the conference. Over half of the participants were from internal medicine (N = 8) or hospice/palliative medicine (N = 6) specialty areas, with the remainder representing family medicine (N = 3), geriatrics (N = 2), psychiatry (N = 2), and anesthesia (N = 1). The total time spent in family meetings was 26.93

minutes (SD = 5.67), with a balance between the time participants spoke (M = 12.19, SD = 4.30) and the time patient/family members spoke (M = 14.80, SD = 3.06). Almost all participants provided patient education (N = 20), defined palliative medicine (N = 19), and sought to better understand the patient's definition of quality of life (N = 19). Seventy-three percent of residents/fellows addressed end-of-life preferences (N = 16), and half were observed asking the family to sit down for the discussion (N = 11). However, less than half of participants (N = 9) explored resources specific to the diagnosis.

Significance/Implications/Relevance

Efficient and empathetic communication is the cornerstone of medicine, particularly palliative medicine. Evidence supports the use of simulation to hone skills, receive feedback, and practice communication strategies. This study revealed several implications for consideration. First, incorporating simulation at the onset and conclusion of the program provides an opportunity to integrate feedback into clinical practice and to assess communication effectiveness. Second is the incorporation of patient and family member feedback. This will provide insight into the most effective strategies in ensuring the patient's perspective is heard, and care plans reflect their wishes. Recommendations for future research include the need for a larger sample to understand if relationships are statistically significant to define key aspects of a successful family meeting. All findings continue to help improve palliative medicine training and provide recommendations for curriculum.

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Poster #31: Implementing Oversight of Non-Standard Training Programs**Author(s):** Megan Ping, MFA, I-A; Michael Green, MD; Nisha Mathews, MEd**Institution(s):** UT Southwestern**Abstract Type:** Innovation-focused**Background**

Sponsoring Institutions can receive recognition status by the ACGME for Non-Standard Training (NST) programs to offer advanced clinical training for foreign national trainees on J-1 visas in subspecialties without ACGME accreditation or American Board of Medical Specialties (ABMS) certification. These trainees are sponsored by the Educational Commission for Foreign Medical Graduates (ECFMG) to enable training in NST programs. Sponsoring Institutions must have NST recognition for any J-1 visa holders to participate in non-ACGME-accredited programs and must provide oversight of NST programs. The NST Recognition Requirements, established by ACGME, ensure that Sponsoring Institutions demonstrate substantial compliance. NST Recognition safeguards the quality and integrity of medical education, making oversight paramount in meeting these standards.

Objectives

This project describes the challenges and barriers experienced in our large Sponsoring Institution as we obtained NST Recognition and subsequently provided oversight and ensured compliance and quality in NST programs.

Methods

To enhance NST program oversight and ensure ACGME compliance, we employed a comprehensive approach. We began with a thorough review of NST Recognition Requirements to establish understanding of essential standards. For streamlined program evaluation and alignment with ACGME standards, we developed an internal application for NST program assessment. This tool facilitated systematic review and Graduate Medical Education Committee endorsement. Concurrently, we introduced a new NST policy, ensuring uniformity with an existing policy for General Requirements for Graduate Medical Education Programs. Targeted training sessions, including individualized program training, focused on accurate ADS data entry and compliance. Broader training initiatives reviewed ongoing NST program management and provided an open, interactive forum through Q and A sessions. This approach equipped stakeholders with tools and knowledge to manage NST programs effectively, achieve compliance, and enhance GME quality.

Results/Outcomes/Improvements

Our approach to NST program oversight had several notable results. We began this process with 76 non-ACGME-accredited programs. Twenty-four programs applied for NST Recognition status. Program review and focused training ensured compliance and aligned NST practices. We reduced administrative burden and expedited program commencement by streamlining approval with an internal electronic application. We tailored training sessions and Q and A forums to enhance staff proficiency in Accreditation Data System data entry. We encouraged transparent communication to foster collaboration and to address challenges proactively. Aligning the NST Program Policy with General Requirements ensured consistency. These efforts elevated graduate medical education (GME) quality, positioning NST programs as hubs for advanced subspecialty training. Our results highlight the value of systematic NST oversight, efficient approval, and knowledge dissemination in GME. Currently 11 programs have active NST Recognition status and 13 programs are in review to receive NST Recognition status.

Significance/Implications/Relevance

The NST oversight approach extends beyond individual institutions, bearing significant implications for the broader landscape of GME. It serves as a framework that enables SIs to enhance NST programs, streamline complex approval processes, and elevate GME standards.

This innovative methodology aligns with the evolving requirements of the ACGME. It facilitates consistent improvements in NST programs, significantly benefiting foreign national physicians pursuing advanced subspecialty training. By ensuring the delivery of high-quality educational experiences, it solidifies the reputation of these institutions as premier destinations for medical training. In summary, the NST program oversight approach transcends the boundaries of individual institutions. It provides a comprehensive blueprint, aligns with evolving ACGME requirements, enhances the educational experiences of trainees, and elevates the global standing of institutions in the field of medical training.

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Poster #32: The Pod Model: Restructuring a Medical Education Office to Meet ACGME Requirements while Championing PC Development and a Cohesive, Fortified Team

Author(s): Melissa Perry, Med, C-TAGME; Julie Lively, MS

Institution(s): UTSouthwestern Medical Center

Abstract Type: Innovation-focused

Background

Graduate medical education (GME) is a field that relies heavily on dedicated administrative professionals who are skilled in clerical-centered work but applied to a very specific and well-defined set of rules and guidelines outlined by the ACGME. To be a successful program coordinator (PC), it takes years of dedication to master the ins and outs of the “annual cycle.” As we see record numbers of GME professionals exiting the field for more general administrative or other industry roles, we identified the need to rethink how PC roles and teams are structured, while meeting all accrediting requirements and promoting staff development. We oversee the largest centralized education team in a clinical department on our campus, spanning 240+ residents/fellows, 28 residency and fellowship programs, and an education team of 24 staff members. Post-pandemic, our education team experienced significant turnover, reduced employee engagement survey scores, and concerns about a lack of development and growth opportunities within GME.

Objectives

Our aims for this project were to:

Address significant staff turnover following the pandemic, specifically the unprecedented levels of staff exiting GME-specific roles;

Foster a self-sustaining staffing model, wherein we create an infrastructure that supports our GME programs from inside the department;

Build an internal career ladder to further support the development and growth of our dedicated GME professionals, as a component of enhancing overall PC engagement and retention; and

Provide PCs who are entering their GME career with more individualized, focused mentoring and coaching from a seasoned GME professional who has dedicated full-time equivalency (FTE) for support of staff development.

Methods

We met individually and as a team with PCs to address concerns, learn their values and GME career goals, and discuss opportunities for growth and sustainability of the education team. From these conversations, we identified multiple qualified PCs already on the team for senior-level titles with the opportunity to supervise other staff members. We evolved our organizational chart to demonstrate a self-sustaining “pod” model consisting of pod leaders, each with three direct reports. Informed by ACGME guidelines for minimum PC FTE commitment, we thoughtfully paired programs to preserve a reasonable FTE “buffer” within each pod. This would allow for ancillary education-related tasks outside of GME program-specific needs, in addition to further soft-skills and technical training, along with staff development, to further fortify the pods. The new staffing model was pitched to key stakeholders, and favorable feedback was received. We implemented the first pod in 2022, consisting of seven programs.

Results/Outcomes/Improvements

Since implementation of the new organizational structure, we have successfully built five pods, spanning 18 GME PC staff members, supporting 23 accredited programs and five non-accredited programs. Since the adoption of this structure, we have promoted three senior GME PC staff

members from our existing team to assume the role of Pod Leader. We have received feedback from PCs that morale and job satisfaction have increased. Enhanced leadership effectiveness has been observed through empowering teams of Pod Leaders running their individual pods while working as a cohesive leadership team. Since implementation of the pod model, we have successfully backfilled all vacancies due to turnover in 2022 and added four incremental FTEs to ensure compliance with July 2023 ACGME FTE requirements. Turnover rates within the education team have stabilized and have most recently been attributed to individual personnel factors, rather than team morale or concerns with leadership/structure, as we experienced in 2022.

Significance/Implications/Relevance

Early measures of success from this project have included reduced staff turnover and an elevation in team morale and participation in engagement activities. Additional measures of success of the model over time will include comparison of pre- and post-implementation employee engagement survey scores and conducting IDI follow-up interviews of PCs for qualitative feedback. We were recently invited to introduce our GME pod staffing model to the largest clinical department on our campus, who is in the process of evolving their structure to a centralized format that emulates what we have successfully executed. We welcome the opportunity to further collaborate with other GME stakeholders on additional ways to improve program support and PC professional development and career growth. As we further delve into this new team-centered culture within our own education team, we plan to continually monitor outcomes of this model and adapt it as appropriate with the ever-changing environment of GME.

Poster #33: Long-Term Reduction in Treadmill Stress Test Reporting Error by Means of a Structured e-Learning Module: A Multi-Centre Study

Author(s): Chee Yang Chin, MD, MSc; Swee Leng Kui, MB, ChB;
Shane Christopher Chew, BSc

Institution(s): National Heart Centre Singapore; Singapore Health Services Pte Ltd

Abstract Type: Research-focused

Background

Treadmill stress tests (TMX) are often provisionally reported by a cardiology resident prior to vetting by an attending cardiologist, sometimes over a week later. Inaccurate provisional reporting could potentially lead to delay in treatment. Yet, training in TMX reporting tends to be informal and mostly self-directed. In October 2017, we introduced a new TMX e-learning module comprising slide presentations and formative quizzes, mandatory for completion by all new cardiology residents at three different institutions. The reporting error rate (i.e., the percentage of provisional resident reports requiring subsequent modification by an attending) was reviewed in the immediate three months following implementation. Then, there was a statistically significant 2.8% reduction in error rate as compared to a corresponding three-month period before implementation; results of which have been presented previously. However, whether this reduction could be sustained in the longer term was unclear.

Objectives

The aim of the present multi-centre study was to assess the long-term impact of our TMX e-learning module on TMX reporting error rates among cardiology residents in three different institutions. We hypothesized that there would be a sustained reduction in TMX reporting error rates following the implementation of the e-learning module, as compared to before implementation. Furthermore, we aimed to assess the false negative and false positive rates, as each could have implications on patient safety and health care resource management, respectively.

Methods

All TMX reports across the three hospitals from the beginning of available electronic records in January 2015 to December 2022 were reviewed. Reporting error rate was defined as the percentage of provisional resident TMX reports requiring subsequent modification by an attending cardiologist. False negatives were defined as provisionally “negative” reports, which were subsequently modified to “positive.” False positives were defined as provisionally “positive” reports, which were subsequently modified to “negative.” Comparisons were made before (“pre”) and after (“post”) the implementation of the e-learning module in October 2017. Statistical analyses were performed using the Chi-square test.

Results/Outcomes/Improvements

A total of 14,055 and 56,561 TMX reports were reviewed in the pre and post groups, respectively. Compared to the pre group, there was an overall lower error rate in the post group (17.1% vs. 12.3%, $p < 0.001$). Amongst reports provisionally reported as negative, there was a lower error rate in the post group (16.8% vs. 12.2%, $p < 0.001$). Amongst reports provisionally reported as positive, there was no difference in error rate (16.8% vs. 16.5%, $p = 0.916$). The primary strength of our study is our very large sample size of TMX reports collected over a seven-year period. The primary limitation of our study is that our comparator for TMX reporting is the final report as interpreted by an attending cardiologist, which may not always be accurate. It was not possible within the scope of this study to measure hard clinical endpoints.

Significance/Implications/Relevance

In this multi-centre study, the standardization of cardiology resident training in TMX reporting through a structured online e-learning module led to a statistically significant overall 4.8 percent reduction in erroneous reporting. This was predominantly driven by a reduction in false negative reporting, which could be important for patient safety as it reduces delay in treatment.

Improvements to the module targeted at reducing false positive reporting could potentially save unnecessary health care costs by reducing over-treatment of patients. Our findings show that well-designed e-learning modules can potentially have significant clinical impact, promote patient safety, and improve health care resource management.

Poster #34: Feel the Breath, Reduce the Stress: Practical Mindfulness-Based Stress Reduction (MBSR) and SKY Breathing Techniques to Incorporate into Your Hospital

Author(s): Nicole Delgado-Salisbury, EdD; Israel Nemet, MD; Yardley Etienne, MD; Sukhpreet Hans, MD

Institution(s): New York Medical College at Saint Joseph's Family Medicine Residency Program

Abstract Type: Innovation-focused

Background

The ACGME requires the topic of resident well-being to be addressed throughout the year in different ways. More than 40 percent of physicians, of which 50 percent are female physicians—are burned out (Yates, 2020). Mindfulness techniques positively impact physician burnout (Davis et al., 2012). Sudarshan Kriya Yoga (SKY) is a cyclical controlled breathing practice with roots in traditional yoga. SKY meditation is distinct from other stress management techniques because it uses specific breath patterns to automatically settle the mind into deep meditation without mental effort, concentration, or observation (Belli, 2020). SKY is self-empowering and a low-cost approach to improving physical and mental/emotional vitality (Huston, 2020). Its effects have been studied in open and randomized trials with varying populations.

Objectives

The objective of this study was to incorporate mindfulness and SKY breathing techniques into the daily practice of health care workers and leaders to reduce stress and burnout.

Methods

An 18-month wellness curriculum, which includes Mindfulness-Based Stress Reduction and SKY Breathing Techniques, was incorporated into the didactics of a family medicine residency program on a monthly basis. Wellness was incorporated into other rotations as well, including orientation, community medicine, population health, behavioral medicine, and longitudinal behavior medicine. The Mini Z Burnout assessment was taken before the start of the course series and every six months after that. Results of this study indicate that residents and faculty members are becoming less burned out.

Results/Outcomes/Improvements

In April 2022, 76 percent of our residents and faculty members reported no burnout compared to October 2022, six months later, when 86 percent reported no burnout. This is an increase of 11 percent of faculty members and residents reporting no symptoms of burnout. In April 2022, 19 percent of our faculty members and residents reported one or more symptoms of burnout, compared to October 2022, where only 14 percent of our faculty and staff members reported one or more signs of burnout. Our results indicate that our residents are becoming less burned out. One hundred percent of our faculty members and residents completed the April and October surveys (N=37). Incorporating mindfulness and breathing into the residency program has improved the feeling and signs of burnout amongst residents and faculty members compared to pre-implementation. This program should continue and expand to include all hospital workers. Data for 2023 is available and will be analyzed by December 2023.

Significance/Implications/Relevance

Everyone will experience some aspects of stress/burnout in their career. Health care leaders need tools to help employees cope with job-related stress. Everyone in the health care field will benefit from learning mindfulness and breathing techniques. This study is relevant to all people in a health care setting.

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Poster #35: Improving the Quality of Individual Supervision: The Psychiatry Residents' Experience

Author(s): Ahmed Assar, MBBCh; Sahar Hamuda, MBBS; Yousaf Iqbal, MBBS; Sazgar Hamad, MBBS; Omer Dulaimy, MD; Walid Hasan Riziq Elkhaled, MD

Institution(s): Hamad Medical Corporation (HMC)

Abstract Type: Innovation-focused

Background

In the process of training a specialized doctor, junior doctors (residents) can obtain knowledge, experience, and skills under the care of more senior doctors (fellows and attendings). Measures are taken to standardize the process in order to provide equitable opportunities for all the juniors and to allow seniors to mentor and transfer their knowledge to the younger generation. For instance, the residents are required to do one hour of 1:1 supervision with their assigned faculty member at least once a week. This could be related to anything from issues pertaining to certain patients to difficulties they might face at home or in their social life. This is done following the latest ACGME-I site visit in 2022, as this has been a citation since 2018. Improvements in the supervision process largely contributed to helping the psychiatry residency program avoid probation.

Objectives

The primary objectives of this quality improvement project were as follows:

1. Assessing the Provision of Supervision:
 - To determine whether residents were consistently receiving one-to-one supervision sessions as per the prescribed guidelines.
 - To ensure that the prescribed measures for supervision were being consistently applied across the program.
2. Evaluating the Impact of Supervision Hours:
 - To measure and analyze the impact of the supervision hours on resident learning, skill development, and overall professional growth.
 - To identify the extent to which these supervision sessions contributed to the residents' clinical competence and confidence.
3. Collecting Resident Feedback:
 - To actively solicit feedback from residents regarding their experiences with one-to-one supervision.
 - To gather insights into what aspects of the supervision process were effective and where improvements or adjustments were needed, as perceived by the residents.

Methods

To assess and enhance one-to-one supervision in the Psychiatry Department at HMC, residents participated in an anonymous survey with eight key questions. They reported their PGY level, current rotation, satisfaction with supervision, and suggestions for improvement. Residents also indicated if they received consistent individual supervision and how inconsistencies affected them. Dates of supervision sessions were recorded, and residents provided additional feedback. Surveys were available through WhatsApp, as hard copies, and via email to maximize participation. Data collection spanned from Block 5 (10/23/2023) to Block 6 (12/17/2023), ensuring anonymity. Aggregate survey data was analyzed, leading to discussions on improvements in supervision practices.

Results/Outcomes/Improvements

Following the survey, a significant positive shift was observed, with over 90 percent of residents

now consistently receiving one-to-one individual supervision. Among these residents, a remarkable 90 percent expressed satisfaction with the current supervision process. This data signifies a substantial improvement in the quality and consistency of supervision within the Psychiatry Department at HMC. Moreover, this enhancement has had a profoundly positive impact on the psychiatry residency program as a whole. It has elevated the clinical competency of residents and facilitated the successful achievement of the ACGME-I Milestones, reinforcing the program's excellence and commitment to resident education.

Significance/Implications/Relevance

Key Outcomes and Impact:

1. The quality improvement project effectively addressed the citations from ACGME-I site visits by systematically enhancing one-to-one supervision.
2. Resident feedback was instrumental in identifying and rectifying issues in the supervision process.
3. The project's success in improving supervision played a pivotal role in lifting the psychiatry residency program out of probation.
4. Ongoing cycles have demonstrated sustained positive outcomes and a commitment to continuous quality improvement.

Poster #36: Trends in Research Productivity among Residents Applying for Orthopaedic Foot and Ankle Fellowships

Author(s): Peter Tortora, MA, BS; Emily Tufford, BS; Andrew Kim, BS; Michael Aynardi, MD

Institution(s): Pennsylvania State College of Medicine

Background

Among all surgical specialties, orthopaedic surgery has the highest rate (87.4%) of residents who plan on pursuing a fellowship following residency (1). This trend is becoming universal, and fellowship-trained orthopaedic surgeons have increased employment opportunities (2), academic leadership appointments (3), and higher financial returns (4). Foot and Ankle (F&A) fellowships are attractive due to a very high level of career satisfaction (5), though little empirical research has been done on quantifiable factors of successful F&A fellowship applicants. The purpose of this study is to identify research trends and characterize the academic profiles of recent F&A fellows in the US when they applied for fellowship.

Objectives

The purpose of this study is to identify research trends and characterize the academic profiles of recent F&A fellows in the US when they applied for fellowship, including total number of publications, first author publications, focus area of publications, and citations, and identify trends across years, geographical regions, and demographic parameters.

Methods

The American Orthopaedic F&A Society website was used to identify accepted F&A fellows between the years 2018-2022. Fellow profiles were confirmed by cross-referencing with publicly available information from departmental websites, LinkedIn, and Doximity profiles. Fellows were excluded if their information could not be confirmed. A retrospective bibliometric analysis was performed using the total number of publications published up to December 31 of the year prior to the start of fellowship, collected from each fellow's Scopus profiles. Recorded data included total number of publications, citations, authorship position, and publications with an F&A focus. These data were then compared between years, and fellowship program and residency program region using one-way ANOVA on ranks with Dunn's post-hoc comparisons between groups. Data were compared by type of medical degree and fellow sex using unpaired Mann-Whitney u- tests. P values < 0.05 were considered significant.

Results/Outcomes/Improvements

A total of 325 F&A fellows from 2018 to 2022 were identified, and 293 (90.15%) met inclusion criteria. Fellows averaged 5.853 ± 9.439 publications and 60.866 ± 149.088 citations. Fellows were listed as first author in 31.5% publications and middle author in 65.8% publications, while 82.59% of fellows had at least one publication, and 54.61% percent had at least one first author publication. Additionally, 43.34% of fellows had one or more publication with a F&A focus. A statistically significant increase in average number of publications was identified between the years 2018 and 2020, 2021, and 2022. There was also a statistically significant difference in average number of citations based on type of medical degree, with MDs having higher average citations per paper compared to DOs. There were no statistically significant differences based on sex or fellowship region, however there were statistically significant differences based on residency region.

Significance/Implications/Relevance

The vast majority of fellows had a minimum of one publication at the time they applied to fellowship, with over half of fellows having published at least one first authorship article, and just under half with a publication focused on F&A orthopaedics. Moreover, there exists a statistically significant, increasing trend in research productivity of orthopaedic F&A fellows across the years 2018-2022, largely driven by increases in middle authorship publications. Additionally, there was also a statistically insignificant ($p < 0.1$) increase in first authorship publications between 2018 and 2022. Thus, research output appears to be an increasingly influential factor considered in fellowship applications. However, a significant portion of fellows sampled here, 17.41%, did not produce any publications prior to the start of fellowship.

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Poster #37: The Resident Wellness Scale: A Multisite Psychometric Analysis

Author(s): R. Brent Stansfield, PhD

Institution(s): Wayne State University School of Medicine

Abstract Type: Research-focused

Background

Medical residency, the required supervised training phase after medical school, is emotionally, physically, and cognitively taxing. The ACGME Common Program Requirements state that residency programs “have the same responsibility to address well-being as they do to evaluate other aspects of resident competence.” To this end, the Wayne State University GME Office (WSUGME) created The Resident Wellness Scale (RWS; Stansfield, Giang, & Markova 2019), a short self-report instrument designed to measure resident wellness. Eight institutions used the RWS through a custom-built website at WSUGME and agreed to have their data used for psychometric analysis of the RWS.

Objectives

Our goal was to investigate the psychometric properties of the RWS with an eye toward expanding and revising it. We hypothesized that a factor analysis of a large, multisite sample would yield a factor structure matching the aspects of resident wellness that drove its creation.

Methods

The RWS is a 10-item instrument using a five-point frequency scale. All items are positively worded (Stansfield, Giang, & Markova, 2019). Institutional Review Board approval was obtained and eight institutions signed a Data Sharing Agreement. Each institution received a unique web page URL to send their residents to complete the RWS and then see a feedback page with links to wellness resources. Anonymous resident responses (N = 1,274: 31 to 309 per institution) collected over three years were analyzed. The factor structure of the scale was explored using the methods recommended by Fabrigar et al. (1999). Differences in factor scores were analyzed using a multilevel model with institution entered as a random factor (intercept only) and post-graduate training year and gender entered as fixed factors.

Results/Outcomes/Improvements

The parallel analysis found that four factors would explain rating variance meaningfully: Self Care; Personal Involvement; Institutional Tragedy Support; and Meaning in Work. Self-Care: Institution effect size was small ($d=.20$). Males were significantly higher than females (difference = $.20$). Scores rose significantly by year (rose $.08$ per year, $p < .0005$). Personal Involvement: Institution effect size was small ($d=.20$). Males were not different than females (difference = 0.00). Scores rose significantly by year (rose $.08$ per year, $p < .0001$). Institutional Tragedy Support: Institution effect size was small ($d=.22$). Males were non-significantly lower than females (difference = $-.03$). Scores rose significantly by year (rose $.07$ per year, $p < .005$). Meaning in Work: Institution effect size was small ($d=.20$). Males were non-significantly higher than females (difference = $.07$). Scores rose significantly by year (rose $.11$ per year, $p < .0001$).

Significance/Implications/Relevance

A large multisite sample of residents completing the RWS over three years found the scale was sensitive to four correlated but distinct aspects of resident wellness. These align largely with the constructs that guided the scale design. Institutional differences were small for all sub-scores, female residents were found to have lower Self-Care scores, and scores rose with year in residency. The construct of institutional support was measured by one item only. A revision of the

RWS should expand its conceptual scope of resident wellness while maintaining the strong psychometrically reliable core of these 10 items.

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Poster #38: Wellness Challenges of J-1 Residents during COVID-19

Author(s): Rayan Shammet, MPH; Nicholas Yagmour, MPP; Katie Powell, MA

Institution(s): ACGME; Inthealth

Abstract Type: Research-focused

Background

As part of its responsibility to monitor health, safety, and welfare of foreign national physicians training in the US, the Educational Commission for Foreign Medical Graduates (ECFMG) administers an annual well-being survey to physicians training on the J-1 visa within the BridgeUSA exchange visitor program. Since 2018, the ECFMG has partnered with the ACGME to analyze the data collected from this survey. In 2020 and 2021, the survey included open-ended items querying challenges faced by J-1 physicians because of the COVID-19 pandemic. This research project focuses on analyzing the responses of ECFMG participants during this period to understand their experiences, challenges, and adaptations in the context of the pandemic's disruptions to their pursuit of medical careers in the US.

Objectives

The objective of this project is to comprehensively analyze the experiences and responses of ECFMG participants by reviewing the open-ended survey responses during the 2020-2021 period, with a specific focus on the impact of the COVID-19 pandemic. By examining their challenges, adaptation strategies, and the implications for their medical careers, this research aims to provide valuable insights for improving the support and resources available to international medical graduates.

Methods

In 2020 and 2021, all ECFMG J-1 residents and fellows were invited to complete an optional, anonymous survey of well-being. The 2020 survey was distributed between October 26 and November 16. The 2021 survey was distributed between December 9 and January 3, 2022. For the purposes of this study, the open-ended COVID-19 item analyzed was, "What wellness challenges did you face as a result of the COVID-19 crisis?" Retrospective qualitative analysis followed a thematic approach to uncover meaningful themes within the responses.

Results/Outcomes/Improvements

In 2020, 8,119 of 11,971 J-1 physicians responded to the survey (68%). In 2021, 9,065 of 12,706 responded (71.3%). From 3,000 responses analyzed thus far, seven themes emerged: (1) Travel Restrictions; (2) Social Isolation; (3) Exercise; (4) Mental Health; (5) Burnout; (6) Workload; (7) Mask and Protective Equipment Issues. Over 40 percent of J-1 physicians referenced having trouble with travel restrictions, leaving them unable to visit loved ones. Another 15 percent of respondents shared difficulties with social isolation, not being able to socialize with friends and family. Over 34 percent commented about difficulty exercising and frustration from gym closures. Twelve percent of respondents mentioned mental health difficulties such as anxiety or depression, while seven percent experienced burnout. More than seven percent of respondents commented on the increased workload from COVID-19 patients and staffing shortages. Nearly seven percent expressed having issues with wearing masks and access to personal protective equipment (PPE).

Significance/Implications/Relevance

The impact of COVID-19 on J-1 residents included disrupted exercise routines, social isolation, emotional stress, increased workload, and mental health stressors. Uneasiness stemmed from the threat of contracting the virus while working and the concern of infecting loved ones. The inability

to physically interact with friends, family, and peers placed an emotional and psychological strain on residents. J-1 residents who did not reference mental health stressors were likely to experience disruptions in their coping mechanisms. Residents expressed limited access to gyms. Many residents were unable to visit their family. Providing resources that address these concerns and instilling a more supportive environment. Identifying challenges is crucial for developing targeted interventions and support. Strategies can be developed to mitigate burnout, depression, and anxiety that better address the personal welfare of J-1 medical residents.

Poster #39: Impact of the Economic Crisis, COVID-19, and the Beirut Explosion on Ophthalmology Training in Lebanon

Author(s): Rola Hamam, Doctor in Medicine; Hanadi Ibrahim, Doctor in Medicine; Alaa Bou Ghannam, Doctor in Medicine; Bassel Hammoud, Doctor in Medicine

Institution(s): American University of Beirut Medical Center

Abstract Type: Research-focused

Background

On August 4, 2020, a devastating explosion occurred at the port of Beirut, resulting in widespread damage and loss of life. This incident coincided with an already-challenging situation in Lebanon, as the country was struggling with a severe economic crisis and a rising number of COVID-19 cases. This economic crisis in Lebanon has had a significant impact on the health care sector, leading to shortages of supplies and financial difficulties for both hospitals and health care professionals. Despite the growing evidence of the impact of these stressors on the training and well-being of health care professionals, limited research has focused on ophthalmology residents and faculty members in Lebanon.

Objectives

This study aims to address this gap by exploring the effects of the COVID-19 pandemic, economic crisis, and Beirut explosion on ophthalmology residents, faculty members, and training in Lebanon.

Methods

The study is an observational cohort survey-based research conducted between January and December 2022 targeting all ophthalmology residents and core faculty members in Lebanon. The primary and secondary outcome measures included data on demographics, training/employment information, the impact of the COVID-19 pandemic, economic crisis, and Beirut explosion on participants' work/training, as well as their mental health effects. Descriptive statistics were reported as means with standard deviations for continuous variables, and frequencies and percentages for categorical variables.

Results/Outcomes/Improvements

A total of 52 participants, including 27 residents and 25 core faculty members, completed the survey. The study found that the majority of ophthalmology residents and core faculty members were significantly affected by the COVID-19 pandemic, Beirut explosion, and the economic crisis in Lebanon. Half of residents and core faculty members reported being infected with COVID-19, with 39 percent contracting it from a patient and 82 percent of the residents reporting being posted to help in the COVID-19 care units. Ninety percent reported that their workplace experienced a shortage of equipment and supplies, and [that they] were under a financial burden due to the financial crises. In terms of the personal effects of the explosion, 52 percent reported a direct or an indirect effect (physical or psychological damage to person or acquaintances), with about 70 percent reporting that it negatively affected their training. Eighty-five percent reported a negative impact of the pandemic, financial crisis, and Beirut explosion on their mental health.

Significance/Implications/Relevance

Overall, the study highlights the need for a concerted effort to support ophthalmology residency training programs in Lebanon and around the world, as residents are on the frontlines and can experience high levels of stress, anxiety, and depression. This could include measures such as increasing funding for training programs, ensuring the availability of equipment and supplies, providing counseling support for faculty members and residents, and creating contingency plans to mitigate the effects of crises on the training program. By doing so, the provision of eye care in

Lebanon and elsewhere can be improved, and residents can receive the training they need to become competent and skilled ophthalmologists.

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Poster #40: Personality Characteristics of Orthopaedic Surgery Residents and Faculty: Preliminary Results from the POST Study Group

Author(s): Ryann Davie, MD; Noah Harrison, MD; Rebecca Pool, MA; Patrick Rosposa, PhD; Stephanie Tanner, MS; POST Study Group; Gabriella Ode, MD

Institution(s): Hospital for Special Surgery; Washington University; Clemson University; Prisma; POST Study Group

Abstract Type: Research-focused

Background

Interpersonal skills, including Communication Skills and Professionalism, are central to the ACGME Core Competencies. Current assessment methods for these Core Competencies are primarily subjective and easily biased by interpersonal interactions between the rater and trainee. These domains may vary because of different personality dynamics in faculty- resident or senior-junior resident dyads. There is growing interest in measuring the cognitive and affective domains in orthopaedic trainees in order to aid in resident selection, improve interpersonal relationships between residents and faculty members, and improve physician leadership skills. The Myers-Briggs Type Indicator (MBTI) and the Five Factor Model or 'Big Five' personality tests are readily available cognitive metrics used to assess personality and communication style, which have frequently been used to evaluate different populations within medicine.

Objectives

The purpose of this study is to explore personality traits of orthopaedic trainees and faculty members using the MBTI and Big Five.

Methods

The MBTI and Big Five, alongside a demographic questionnaire, were administered to residents (n = 129) and faculty members (n = 78) at the 12 academic medical institutions participating in the POST (Profiling of Orthopaedic Surgery Trainees) research collaborative. Residents were classified as Junior (PGY-1-3) or Senior (PGY-4-5). Descriptive statistics were used to analyze and report demographic data, the mean scores of each Big Five dimension (O-C-E-A-N), and the frequency of each MBTI dichotomous domain and personality type (I-E, S-N, T-F, J-P) among all junior residents, senior residents, and faculty members collectively. Independent samples of t-tests and Chi-square analyses were performed to compare Big Five dimensions and MBTI domain/personality type frequency between residents and faculty members, as well as between junior and senior residents.

Results/Outcomes/Improvements

The most common personality type for senior orthopaedic residents among the 12 participating institutions was ISTJ (Introversion, Sensing, Thinking, Judging). The most common personality type for junior residents and faculty members was ENFJ (Extroversion, Intuition, Feeling, Judging). The most significant variation in individual MBTI factors were increased characterization by "judging" among faculty members and "perceiving" among junior residents (M = 35.6 vs. 30.5, d = 0.37). Faculty members scored significantly higher in conscientiousness on the Big Five than residents did overall (M = 74.7 vs 69.8, d = 0.33); conscientiousness scores were higher among senior residents than junior residents (M= 74.0 vs 68.0, d = 0.42). Junior residents had higher scores for extroversion when compared to faculty members (M = 61.9 vs. 52.2 d = 0.30). Finally, faculty members scored higher for agreeableness than senior residents (M = 68.5 vs 63.0, d = 0.44). There were no significant differences in scores among the different programs.

Significance/Implications/Relevance

The current study demonstrates that personality differences can be quantified and qualified in orthopaedic residencies and that there are significant differences in the personality types and traits between orthopaedic surgery junior residents, senior residents, and faculty members. When evaluating residents, orthopaedic faculty members and educators must be cognizant that diverse personality types among resident orthopaedic surgeons can increase their risk of bias in evaluations – particularly in the domains of interpersonal and communication skills. Better understanding of how these differences could influence interpersonal communication during orthopaedic training is critical to improving interconnection between junior/senior residents and residents/faculty members. Programs should consider baseline testing of residents and provide ongoing education to faculty members about personality differences and how to most effectively teach and more importantly provide formative feedback to diverse types of learners.

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Poster #41: Using Patient Safety Event Reports to Report People Rather than Problems: A Content Analysis of Professionalism-Related Safety Event Reports.

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Institution(s): Hospital of the University of Pennsylvania; Dell Seton Medical Center at University of Texas

Abstract Type: Research-focused

Background

A pervasive threat to the clinical learning environment and exceptional patient care outcomes is an undercurrent of incivility. While there is clear evidence of the impact of overt unprofessional behavior on patient outcomes and organizational culture, less attention has been paid to subtler interpersonal interactions that impact health care worker well-being. These behaviors include intimidation, refusing to complete tasks, deliberately ignoring team members, or other passive-aggressive behaviors. Many different health care professionals can be negatively impacted by such poor interactions and experiences with coworkers. Over the past two decades, there has been an increasing emphasis on the use of safety event reporting (SER) systems to enhance safety culture with the goal to reduce preventable harm in health care. An unintended consequence of SERs in some teaching hospitals is the use of these systems for reporting interpersonal concerns.

Objectives

We aimed to understand the themes from patient safety event reports that were submitted by residents, faculty members, and other health care team members and characterized as a professionalism concern.

Methods

A total of 872 professionalism safety event reports (PSERs) were submitted between July 1, 2021 through June 30, 2022. These reports were de-identified and 36 duplicates were removed. An interprofessional research team used a previously published taxonomy for PSERs and iteratively refined this taxonomy based on group discussion while reviewing 35 event reports.

With the refined taxonomy, three research team members independently reviewed the remaining SERs. To check for ongoing inter-rater agreement, a matrix sampling approach was employed in which 217 (25%) SERs were reviewed by all three reviewers over the course of the coding process. An additional 132 entries were identified by the coders for discussion and subsequently reviewed and coded with the entire team. Intra-class correlations were calculated to assess rater agreement.

Results/Outcomes/Improvements

Nurses were the most frequent reporters (467, 55.8%), with 156 PSERs involving other nurses and 116 involving physicians. Physicians, including faculty members, residents, and fellows, were the second most frequent reporters of PSERs (155, 18.5%), with 66 citing other physicians and 33 citing nurses. Sixty-three percent of PSERs occurred between departments (e.g. emergency medicine and surgery), while 37 percent occurred within a single department (e.g. medicine nurse and medicine resident). Two themes that emerged were (1) communication (64%, n=539), and (2) failure to complete role-related responsibilities (58%, n=518). Within the domain of communication, four subthemes emerged: 1) unclear/inconsistent/confusing (n=107, 13%); 2) disrespectful/offensive (n=355, 42%), 3) aggressive verbal (n=131, 16%), and physically intimidating (n=42, 5%). Examples of failure to complete perceived responsibilities included failure to perform hand-offs and assessments and failure to take responsibility for a patient in the electronic health record.

Significance/Implications/Relevance

We found that the majority of PSERs documented by health care team members were in the areas of communication and perceived failure to take responsibility for one's role in the health care setting. These maladaptive behaviors are even more impactful in the clinical learning environment where learners are present. Our taxonomy provides a tool that other institutions may find useful in performing similar analyses. Future work to promote a culture of civility should include interprofessional strategies which emphasize a foundation of psychological safety, promote relationship-building, and training in direct conflict management. Institutions should also consider reevaluating their structures and processes for managing professionalism concerns in SERs to ensure that accountability is present. This type of multidimensional approach would serve to reverse the unintended consequences of conveying personal grievances in SERs.

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Poster #42: Teaching Effective Written Communication to Official Complaint Letters and Clinical Communication for Conflict Resolution

Author(s): Hui Men Selina Chin, BA, MBBS, MA, MRCOG; Xiaoqi Yong, MBBS, MRCOG; Manisha Mathur, MBBS

Institution(s): KK Women's and Children's Hospital; Singhealth

Abstract Type: Research-focused

Background

Receiving official patient complaint letters is usually an unexpected source of stress and anxiety for residents, no matter their seniority. We proposed an initiative on bridging the gap between residents and the complaints department, focusing on improving residents' skill in written communications when replying to official complaint letters – to build sustainable confidence and reduce emotional trauma and burn out in the community.

Objectives

Our project aims to enhance the interactions within three key partnerships:

1. Physician-Staff (between residents and personnel from complaints department) to demystify what is expected from residents
2. Physician-Patient (and patient's family) in conflict de-escalation, to address and manage expectations and reduce misunderstandings
3. Physician-Physician (between residents and core faculty members) for senior guidance and emotional support
4. We postulate that this initiative will encourage open and active communication between all parties to improve clinical work efficiency and work satisfaction as we continue to put patients at the heart of our care.

Methods

We formulated a workshop for our hospital's obstetrics and gynaecology residency program in September 2023. Before the workshop, residents were given two mock scenarios where they received written complaint letters and were instructed to submit their written replies anonymously. During the workshop, these replies were used in a large group setting to facilitate discussion on effective tone and typology. The complaints department also shared about the workflow of a complaint. Subsequently, residents participated in small group simulated sessions with mock patients and family members in a variety of common clinical scenarios, with core faculty staff members as facilitators. Stations included de-escalating frustration about multiple failed treatment, receiving conflicting medical advice, and patient's perceived lack of empathy and poor communication, addressing mistakes in explaining a wrong patient's report and clearing up misdiagnosis by colleagues.

Results/Outcomes/Improvements

Pre- and post-workshop surveys on residents' attitudes and confidence levels in several domains were sought:

1. Ability to craft an official written reply to complaint letters
2. (2) Conflict resolution with angry patients and family members
3. (3) Dealing with aggressive behavior in clinical care

We found that the workshop was successful in improving residents' confidence in all three domains. On a scale of 1-5 (1 being not confident at all, 3 neutral, 5 very confident), residents felt more confident about crafting a response to complaint letters (mean score from 2.94 pre-workshop to 4.14 post-workshop), dealing with aggressive behavior (from 2.70 to 3.95), resolving conflict with

an angry patient (from 3.18 to 4.09), and resolving conflict with an angry patient's family member (from 3.02 to 4.00). One hundred percent would change their clinical practice in resolving conflict after the workshop. However, a limitation of this workshop is the small group size of 37 from a single residency program.

Significance/Implications/Relevance

In conclusion, we developed an interactive workshop-based educational curriculum to teach residents important written and clinical communication skills to reduce conflicts in clinical care and patient complaints. This significantly increased residents' confidence and helped them adopt a more positive and constructive attitude towards what is usually negatively associated. The core strength of this workshop was its highly interactive nature, allowing residents to fully participate and understand how to navigate patients' and their own emotions when dealing with patient conflict and complaints. We hope to run this workshop for junior clinicians in other levels and hospital sites in the future in order to increase the power and maximize benefit in improving confidence and work morale for effective and compassionate clinical care.

Poster #43: The Application and Impact of ChatGPT in Medical Education: A Scoping Review

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Institution(s): Peking University Third Hospital

Abstract Type: Research-focused

Background

ChatGPT is a natural language processing model capable of deep learning and generating human-like responses. The integration of this cutting-edge technology into medical education remains an ongoing challenge. While ChatGPT continues to evolve at a breakneck pace, medical education lags behind in proposing comprehensive curriculum reforms and usage standards in a timely manner. Consequently, issues such as academic dishonesty and excessive reliance on artificial intelligence tools have emerged. Nevertheless, the potential of ChatGPT to enhance teaching quality for educators and alleviate the academic burden on students should not be underestimated.

Objectives

This review aims to shed light on the specific applications of ChatGPT in the realm of medical education and the significant challenges it has introduced. The literature currently lacks a comprehensive understanding of these facets. Therefore, this article seeks to consolidate and analyze existing knowledge regarding ChatGPT's applications and its attendant issues in the hope that it will serve as a valuable reference for medical education leaders as they contemplate curriculum revisions and usage guidelines.

Methods

Adhering to JBI guidelines, our search on PubMed, using the query "ChatGPT and medical education," was limited to articles published between December 30, 2022, and September 15, 2023, resulting in the identification of 179 relevant articles. The screening process involved two reviewers, with disagreements resolved through consensus or the intervention of a third reviewer. This process comprised three primary steps: (1) removal of duplicate articles; (2) screening based on titles and abstracts; (3) full-article assessment. Inclusion criteria necessitated that the title or abstract of each article explicitly reference ChatGPT and medical education (excluding patient education) and demonstrate a connection between the two. To facilitate data extraction, we developed a customized data extraction form in accordance with JBI standards, which our two reviewers employed to compile relevant information from the articles.

Results/Outcomes/Improvements

We included 25 articles in our review. These studies were published by researchers from a total of 14 countries, with US (36%), Pakistan (12%), and Qatar (8%) ranked as the top three. The application of ChatGPT in medical education was primarily focused on assisting students in improving efficiency and skill development (84%), followed by aiding educators in enhancing teaching efficiency as virtual teaching assistants (12%). Problems arising from ChatGPT's application in medical education included: (1) the emergence of harmful and biased "hallucinatory" content (68%); (2) utilization of outdated and incomplete training data (36%); (3) over-reliance leading to a weakening of critical thinking (32%); (4) ethical and legal dilemmas (28%); (5) instances of academic misconduct (28%); (6) challenges to existing assessment systems (12%); (7) implications for the teaching profession (8%); and (8) concerns regarding diversity and equity (8%).

Significance/Implications/Relevance

By comprehensively summarizing and analyzing the specific applications and challenges posed by ChatGPT in the context of medical education, this review equips medical educators with valuable

insights to shape curriculum reforms and usage guidelines for ChatGPT. Timely action is imperative, and medical educators should actively pursue the seamless integration of ChatGPT into medical education across different stages and disciplines.

Poster #44: Health Disparities: Addressing Food Insecurity in a Community Health Center

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Institution(s): NYMC at Saint Joseph's Medical Center Family Medicine Residency Program

Abstract Type: Innovation-focused

Background

Social determinants of health (SDOH) are conditions, forces, and systems that shape daily life and affect overall well-being (Galea, 2011). Poor SDOH harm a patient's overall health and are a primary driver for health inequities (McGinnis, 1993; Braverman, 2011). The COVID-19 pandemic has exacerbated these inequities (Shah, 2020). An SDOH patient questionnaire administered at our health center showed an increased concern for food insecurity in our community, where 17 percent of the population is below the federal poverty level.

Objectives

Administer an SDOH questionnaire to identify food insecure patients. Provide a clinic-based food pantry to meet the needs of the local community served. Identify the demographics of those served by the program. Highlight nutrition education and healthy eating to a population with multiple chronic co-morbidities.

Methods

A primary care health center in an underserved community integrated the SDOH questionnaire into the workflow for rooming patients in 2019. The SDOH questionnaire responses were analyzed and consistently showed that the pandemic significantly affected patients' and families' ability to feed themselves. In 2020, the Family Health Center at Saint Joseph's Medical Center became an Emergency Mobile Food Distribution Site. A clinic-based food pantry opened in May 2021 with 750lbs of food distributed each month to our registered patients at the time of their medical appointments.

Results/Outcomes/Improvements

Twelve months of data are available for the patients who accessed the food pantry. Data analysis provides multiple parameters, including age, individuals served, household served, zip codes, ethnicity, dietary requirements, participation in social programs, and households and individuals served by the number of visits. The program served 693 individuals and 285 households from May to December of 2021 for a total of 406 visits. The program served 334 individuals and 147 households from January to May of 2022 for a total of 202 visits. Most of those served by the food pantry are over age 55, Hispanic, with a household size of one, and live in the same zip code as the clinic.

Significance/Implications/Relevance

Integrating SDOH questionnaires into patient care is important for understanding the needs of the population the health center is serving. It is important to re-examine the data from these forms to understand how societal events affect the community's needs. Responses should be analyzed periodically to see if the needs of the patients have shifted and can be used by the health center to offer appropriate resources to the patients.

Poster #45: Dealing with the Extraordinary: How Residents' Training Experiences during the COVID-19 Pandemic Support Professional Identity Formation

Author(s): Jolene Ee Ling Oon, MBBCh BAO, MHPE; Lorraine Lewis, EdD; Halah Ibrahim, MD, MEHP; Sophia Archuleta, MD

Institution(s): National University Hospital; Accreditation Council for Graduate Medical Education-International; Khalifa University College of Medicine and Health Sciences

Abstract Type: Research-focused

Background

The practice of medicine is 'situated' in its learning and occurs within a community. This community of practice (COP) is a combination of having a shared domain of interest where members regularly interact to learn from each other (community) and develop a shared repertoire of resources (practice). Integrated within the COP is the concept of workplace or experiential learning, which influences the residents' journey from peripheral participation to becoming fully participating members of the physician community through the acquisition of a professional identity. Residents training during the early phases of the COVID-19 pandemic experienced this journey under extraordinary circumstances when existing curricula, teaching, and assessments were overshadowed by the evolving pandemic.

Objectives

Our study aimed to explore how the residents' experiences of training and learning in an unfamiliar and rapidly changing, complex environment impacted professional identity formation.

Methods

A qualitative approach using content analysis was conducted on program director written responses to a COVID-19 supplementary survey administered by ACGME International. The survey was sent to all accredited programs via the Accreditation Data System July 1-September 30, 2020, and included narrative reflections on the pandemic's impact on clinical learning environments, training experiences, and ensuing adaptations. Responses were anonymized and analyzed using a template analysis technique. A priori themes were defined based on the conceptual framework for medical education and moral resilience through a community of practice lens. Thereafter, a coding template was developed and included grouping the themes into smaller groups of higher-order codes. The final coding template, revised and adapted based on insights from analysis, was applied to the full data set. The authors independently analyzed the data before obtaining a consensus.

Results/Outcomes/Improvements

Responses from 138 programs in six countries were analyzed. Four dominant themes emerged. Residents learned about capability building, defined as ability to integrate and apply knowledge and skills to adapt to changing, complex situations. This included engaging uncertainty in a meaningful way, rapid upskilling of prior knowledge and skills, and engaging virtual platforms to continue patient care and training. They gained resilience in facing the unknown through altruism, volunteerism, and support networks from faculty members and peers. Their learning was enhanced by interprofessional and interdisciplinary teamwork and communication. Learning in a rapidly changing and complex environment was essential for residents to conceptualize, reflect, and adapt accordingly with support from a group of professional doctors with a shared purpose of combating the rapidly evolving pandemic. This accelerated the cycle of experiential learning support for professional identity formation through engagement within the COP.

Significance/Implications/Relevance

Learning in medical education is contextual and situated in the community. Thus, the training curriculum needs to support and assist residents as they progress from learners to full participation as professional doctors. Membership and engagement in this community become an essential source of learning and support during major disruptions, such as the COVID-19 pandemic. The results of our study can help inform residency programs on how to better support residents in professional identity acquisition and formation.

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Poster #46: Integrating Graduate Medical Education Learners in Patient Safety Initiatives at Regional Campuses

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Institution(s): UK GME; Med Center Health; University of Kentucky

Abstract Type: Innovation-focused

Background

It is a priority of graduate medical education (GME) to ensure that new learners are immersed in a culture of safety and the health system's patient safety analysis processes from the beginning of training. With Sponsoring Institutions increasingly including multiple campuses and hospital systems, GME leaders are challenged to find ways to incorporate this experience across differing systems. Our primary institution oversees multiple campus locations, including three regional campuses geographically separated across the state, with each utilizing distinct patient safety analysis (PSA) systems. While the main campus successfully integrated first-year GME learners into patient safety initiatives in 2017, the regional campuses faced unique challenges due to their differing systems.

Objectives

This innovation aimed to engage first-year residents and fellows at the institution's largest regional campus in authentic, site-specific patient safety event analysis, thereby enhancing their patient safety knowledge and fostering a culture of patient safety from the outset of their training.

Methods

Institutional leaders and GME administrators conducted a workflow analysis of patient safety processes at regional campuses. The workflow was adapted to incorporate site-specific procedures for incident reporting, investigation, root cause analysis, and action item follow-up. Starting in fall 2022, first-year residents and fellows actively participated in patient safety analysis events. Orientation included a didactic session on patient safety analysis and a simulated patient safety event. During the first year of training, they participated in a patient safety analysis event conducted by trained regional campus facilitators and interprofessional staff involved in the event. Learners were actively engaged in using analysis tools to identify root causes and propose action items. An action plan with process owners and deadlines was developed based on the analysis. The regional patient safety office used tracking forms to ensure the timely completion of action items.

Results/Outcomes/Improvements

To-date, 67 of 74 (90%) of GME learners at the regional campus have engaged in a patient safety analysis since fall 2022 with one hundred percent completion of new residents and fellows projected by June. Multiple action items have been achieved as a result of events, including interdisciplinary educational initiatives and communications improvements. These actions have transcended individual training programs at the institution, having a larger interprofessional impact on multiple specialties. After participation in a PSA, residents reported on evaluations feeling more comfortable with reporting incidents and analyzing patient safety events.

Significance/Implications/Relevance

This innovation outlines a systematic approach to integrating GME learners into patient safety initiatives at regional campuses through site-specific, real-time analysis events. The method used to develop synergistic systems at regional campuses could be replicated by other sponsoring institutions. The process involves key stakeholders, fosters active engagement, and ensures accountability for system improvements. Continuous feedback and refinement of this workflow are vital for sustaining a culture of patient safety in GME.

Poster #47: Advancement of Career Path and Wellness Activities for GME Coordinators

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Institution(s): University of Utah

Abstract Type: Innovation-focused

Background

In 2013, our university-based hospital witnessed a notable turnover in the role of program coordinators. With a significant proportion, 41 percent of coordinators held their current positions for less than five years and 39 percent were contemplating resignation. To proactively understand and tackle this issue, our Program Coordinator/Manager Advocacy Committee (PCMAC) initiated a survey of our coordinators. The survey revealed the challenges faced by coordinators within the organization. Coordinators perceived a significant deficiency in career development support within the organizational framework. This sentiment is underscored by their perception of limited opportunities for skill enhancement, growth, and advancement. Simultaneously, the survey identified that burnout among coordinators had reached an unprecedented peak.

Objectives

By advancing a clear and purposeful career path and also crafting wellness activities tailored to graduate medical education (GME) coordinators, these initiatives seek to address the specific needs and aspirations of coordinators and foster an environment where their professional growth is aligned with the institutional and department frameworks. Ultimately leading to improved retention rates and enhanced overall wellness by fostering a culture of self-care and work-life balance. The wellness initiatives aim to optimize coordinators' mental, emotional, and physical health.

Methods

Over the course of the last decade, our PCMAC has consistently conducted surveys targeting coordinators. This ongoing effort has been undertaken to systematically gather data and discern patterns, with the objective of monitoring retention rates, promotion trajectories, and the efficacy of our wellness initiatives in positively impacting the well-being of coordinators. The PCMAC developed a comprehensive career path structure accompanied by salary recommendations tailored to diverse GME roles within the organization. Encompassing positions ranging from coordinator to director, this framework aims to provide employees with clear advancement trajectories while ensuring fair and competitive compensation. To elevate the well-being of coordinators, we introduced fresh wellness initiatives, crafted best practice templates, facilitated training sessions, and established an exclusive support group dedicated to coordinators.

Results/Outcomes/Improvements

Three PCMAC members, the GME Director, and the Vice Dean of the School of Medicine advanced our GME career path encompassing positions ranging from coordinator to director. Our 2022 survey unveiled substantial career growth within our career path. Notably, in 2013, 56.36 percent of coordinators held non-exempt roles, and as of 2022 this drastically decreased to a mere five percent. As a result, non-exempt positions have been eliminated from our career path. We organized a monthly coordinator support group featuring a licensed therapist, [introduced] a walking challenge, sustained our mentorship program, developed best practice templates, and held Zoom training sessions for recruiting. We implemented a Tableau report that allows coordinators to retrieve faculty scholarly activity at the click of a button, resulting in time savings and enhanced efficiency. As a result of these wellness initiatives, 55 percent of coordinators have reported experiencing improvements in their job and overall job satisfaction.

Significance/Implications/Relevance

By proactively engaging and advocating to key stakeholders, including administrative directors, the vice dean of the School of Medicine, Human Resources personnel, program directors, and department chairs, our goal is to drive positive change within our institution. This multifaceted approach aims to enhance understanding, collaboration, and support for career development and well-being initiatives. Our objective is to create an environment conducive to employee growth, wellness, and alignment with the institution's mission. While these observations underscore the success of our efforts in enhancing career progression, stability, and improved wellness, an area of ongoing concern pertains to the attrition of coordinators within three to five years. To address this, we remain committed to conducting surveys, creating tailored wellness initiatives, and analyzing outcomes. This commitment seeks to uncover insights guiding strategic measures for better retention of coordinators during this critical career phase.

Poster #48: Better Together: Online Well-Being Group-Coaching Program for Female Physician Trainees: A Randomized Clinical Trial

Author(s): Tyra Fainstad, MD; Adrienne Mann, MD

Institution(s): University of Colorado School of Medicine

Abstract Type: Research-focused

Background

Physician burnout is highly prevalent in the US, disproportionately affects trainees and females, and is associated with substance abuse, job turnover, higher medical errors, and patient mortality. Professional coaching (“coaching”) is a promising intervention to reduce burnout, and evidence is growing, but literature in physician trainees is sparse, limited to small samples, single specialties, and short duration. An online group-coaching program, Better Together Physician Coaching (BT), was piloted in response to high physician trainee burnout and initially evaluated in female residents at the University of Colorado in a pilot, single-site randomized controlled trial (RCT), which showed that BT improved burnout.

Objectives

The objective of this multi-site RCT was to evaluate the generalizability of the four-month BT program in reducing distress and improving well-being in a national sample of female physician trainees across 26 graduate medical education (GME) programs.

Methods

A randomized clinical trial involving trainees in 26 GME institutions in 19 states was conducted between September 1 and December 31, 2022.

The intervention was a four-month, web-based group coaching program. The primary outcome was burnout measured by the Maslach Burnout Inventory, defined by three Likert-type seven-point subscales: emotional exhaustion (EE); depersonalization (DP); and professional accomplishment (PA). Secondary outcomes of impostor syndrome, moral injury, self-compassion, and flourishing were assessed using the Young Impostor Syndrome Scale the Moral Injury Symptom Scale–Healthcare Professionals, Neff’s Self-Compassion Scale–Short Form, and the Secure Flourishing Index respectively. A linear mixed model analysis was performed on an intent-to-treat basis.

Results/Outcomes/Improvements

Among the 1,017 female trainees (mean [SD] age 30.8 [4.0] years; 189 [18.6%] surgical trainees), EE decreased by -3.81 points in the intervention group compared with an increase of 0.32 in the control (delta: -4.13 [CI: -5.94, -2.32]; $p < 0.001$). DP decreased by -1.66 points in the intervention compared to a 0.20-point increase in the control (delta: -1.87 [CI -2.91, -0.82]; $p < 0.001$). Impostor syndrome decreased by -1.43 points in the intervention compared to -0.15 in the control (delta: -1.28 points [CI: -1.63, -0.93]; $p < 0.001$). Moral injury decreased by -5.60 points in the intervention compared to -0.92 points in the control (delta: -4.68 [CI: -6.95, -2.41]; $p < 0.001$). Self-compassion increased by 5.27 points in the intervention and by 1.36 in the control group (delta: 3.91 points, [CI: 2.73, 5.78]; $p < 0.001$). Flourishing improved by 0.48 points in the intervention versus 0.09 in the control (delta: 0.38 points, [CI: 0.17, 0.60]; $p < 0.001$). A sensitivity analysis found similar results.

Significance/Implications/Relevance

In this randomized clinical trial, four months of professional group-coaching improved all measured outcomes of well-being and distress in a national sample of female physician trainees. The improvement in burnout is significant and likely meaningful, with past studies showing even a one-point increase in EE has been associated with a seven percent increase in suicidal ideation and a

five percent increase in self-reported major medical errors. Additionally, intervention trainees reported less moral injury, 74 percent lower odds of impostor syndrome, and increased flourishing and self-compassion. The large impact may be due to iterative refinements and maturity of the program and the addition of nationwide participants who create community and normalize otherwise isolating challenges. Given the digital platform, BT is easily accessed by rural and less resourced programs. BT is an example of an institutionally provided, individually harnessed tool to build a culture of connection necessary to heal physician burnout.

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Poster #49: Novel Opt-Out Approach to Impact Culture and Enhance Awareness of Mental Health Resources in Graduate Medical Education: Results from a Three-Year Study

Author(s): Uma Anand, PhD; Carol Kirshnit, PhD; Margaret Rea, PhD

Institution(s): UC Davis Health

Abstract Type: Innovation-focused

Background

Interventions to support trainee well-being at an institutional level continue to be an area for continuous improvement. In its Common Program Requirements, the ACGME has outlined that residents be given time off to attend mental health appointments. While this is encouraging, the reality remains that there are several barriers that make it difficult for trainees to ask for mental health care. Lack of time, concerns about stigma, fear of others' perceptions, fear of licensure-related issues, or possible financial constraints are some barriers that have been identified. In recent years, offering opt-out sessions has gained traction (5,6,7). While initial results are promising, previous models are time consuming, assessment focused, and may include additional financial constraints on programs.

Objectives

At UC Davis Health, we implemented a unique opt-out approach that was non-assessment-focused and cost- and time-effective. We designed brief virtual 'meet and greet' opt-out sessions. Our goal for these sessions was to connect individual interns and fellows directly with counselors within our internal Employee Assistance Program (EAP), which serves graduate medical education (GME) trainees. The objectives were to destigmatize seeking support for mental health, to increase awareness of resources, and to provide an opportunity for trainees to familiarize themselves with on-site individual counselors and reduce barriers to seeking care.

Methods

The opt-out initiative, called 'meet and greet,' was a collaboration among the UC Davis Health EAP, the Office of GME, and individual GME programs. It was developed for incoming GME trainees working at a Level 1 Trauma hospital system in Sacramento, California. Information about this opportunity was shared with all program directors and the initiative was offered to programs that responded. Meet and greet sessions were optional, 20-minute virtual sessions with an EAP counselor scheduled as part of the orientation process. They were conceptualized as friendly introductory sessions and were neither assessment nor therapy, where information about counseling services available to them was reviewed and trainees could get any individual questions answered. A follow-up survey was developed.

Results/Outcomes/Improvements

Nine programs participated in Year 1, six in Year 2, and nine in Year 3. Out of 323 trainees from varied programs who were sent invites over three years, 182 (56%) attended the sessions. In the follow-up survey, 60 percent indicated that they were more likely to seek mental health services as result of attending the optional opt-out session. Irrespective of whether they attended the session or not, 85 percent agreed that the program scheduling time for such appointments made them feel like the program cared for their well-being. Seventy-four percent reported feeling that the sessions helped to reduce barriers to seeking mental health care.

Significance/Implications/Relevance

Prescheduling incoming residents and fellows for opt-out sessions with in-house counselors can serve as one of many ways to start changing the culture of medicine surrounding seeking out mental health care services. The unique friendly, short, non-evaluative nature of this format

provides a safe space for trainees to show up, meet a counselor, and learn about the mental health support available to them during their training and normalizes seeking support.

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Poster #50: Empowering Future Physician Educators: Developing a Resident-Led Medical Education Track

Author(s): Zaheer Choudhury, MD; Samantha Gutierrez, MD, MPH; Brittany May, DO; Mario Garcia, DO; Prashanth Bhat, MD, MPH, AAHIVS; Amy Oyler, MD; Collins Rainey, MD, MTS, FAAFP

Institution(s): Baptist Memorial Medical Education Family Medicine Residency

Abstract Type: Innovation-focused

Background

Newly graduated family medicine physicians have a difficult path towards academic medicine. The Association of American Medical Colleges highlighted this issue in its Report on Residents – only five percent of family medicine residents who completed training between 2008-2017 had faculty appointments in 2018. This was the lowest percentage out of all specialties. The Society of Teachers in Family Medicine (STFM) published a study on barriers to residents in pursuing careers in academic medicine. Main points from this study included the following: 31 percent of residents stated that lack of readiness or mentorship was their primary obstacle to pursuing a career in academic family medicine even though 25 percent of those surveyed said they were very likely to pursue a career in academic medicine. At our own residency program, multiple residents were interested in pursuing academic medicine following residency. Along with an interest in improving residency didactics, interested residents organized a proposal for a medical education track (MET).

Objectives

Residents aimed to develop an elective MET that would support them in gaining the knowledge, skills, and methods necessary to assume positions as faculty members in academic medicine, as well as become leaders in medical education. Residents also sought to improve the quality and breadth of their residency didactics. Specific learning objectives for the track included the following: confidently develop lectures and present them in a way that stimulates learning; lead engagement in mentoring medical students and junior residents; and develop a portfolio of lectures, scholarly achievements, and evaluations.

Methods

Research was done to examine other residency programs' medical education tracks, as well as fellowships in academic medicine. Common denominators were obtained and adapted to what would be feasible at Baptist Memorial Medical Education's Family Medicine Residency Program. Moreover, needs assessment surveys to both medical students and residents. For medical students, we sought to evaluate the quality of resident teaching in the prior year, as well as poll interest in expanded teaching from residents. For residents, we asked about quality of didactics sessions, preferences for faculty member- or resident-led didactics, and perceptions on increased engagement in developing and giving lectures from residents interested in academic medicine. Past residents were also asked about their own readiness for careers in academic medicine. Following this, an initial proposal for the MET was developed.

Results/Outcomes/Improvements

The MET was first drafted in March 2023. The proposal was reviewed by resident leadership, as well as prospective members of the track. Following this, the initial presentation of the track to the faculty took place in May 2023. Presentation of the track included the following components: need for the track; objectives of the track; components of the track; and requirements for entrance and completion. During this meeting, faculty members gave an initial green light for the proposal and gave feedback for improvement, as well as a request for the specifics of implementation. In the

following months, a curriculum and points system were developed to define logistical components, exact dates, and activity tracking for completion of the program. The track gained full approval with a start date in June 2023, and an inaugural class of four MET residents was formed. Pursuant to this, the track undergoes constant revisions to adapt to challenges and opportunities in its implementation.

Significance/Implications/Relevance

The resident-led development of a medical education track was a unique approach towards improving the capacities of a residency program. Resident initiatives in medical education can enhance a culture of education within their institutions. Implementation of similar tracks can boost resident engagement, leading to more effective didactic presentations and fostering a sense of ownership in educational endeavors. It also promotes peer-to-peer and resident- medical student mentoring, enriching the learning experience for all parties involved. Lastly, as residency programs grow, they can retain competent residents as faculty members, nurturing a pipeline of skilled educators for the future.

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Poster #51: Improving Transgender Care Education within an Endocrinology Senior Residency Program: A Singapore Perspective

Author(s): Cherng Jye Seow, MBBS, MRCPS, FRCP, FACE

Institution(s): Tan Tock Seng Hospital

Abstract Type: Innovation-focused

Background

Patients with gender dysphoria face significant health disparities with many reporting the need to educate their providers on gender dysphoria-specific health care and highlight lack of knowledgeable providers as a barrier to receiving quality care. A US study in 2017 assessed the status of transgender health care education in US endocrinology fellowship training programs and highlighted that while many health care practitioners were interested in caring for transgender individuals, they felt inadequately equipped to provide the needed care. A local study investigated stigma in health care for LGBTQI+ patients in Singapore and suggested that part of the stigma within health care may be due to a lack of training. Gender-affirming hormone therapy is an integral part of gender dysphoria management provided by endocrinologists but little is known about the confidence of endocrinology senior residents (SRs) in the care of this group of patients.

Objectives

The aim of the study is to assess the knowledge, attitudes, and confidence among endocrine SRs in transgender care. With the results of the study, we endeavour to identify gaps and implement steps to improve the transgender health care education within the senior residency program, so as to increase the confidence and competence of endocrinologists in transgender care.

Methods

Endocrine SRs in Singapore were surveyed anonymously with a printed questionnaire. The survey comprised questions that assessed their attitudes towards treating transgender patients, as well as questions that assessed knowledge and confidence in providing care. There was also an open-ended question on how transgender care education to SRs can be improved on. The responses were collated and analyzed in a descriptive study. Based on the results and feedback from the SRs, steps were taken to improve the medical education in transgender medicine.

Results/Outcomes/Improvements

Sixteen (76.2%) out of 21 SRs responded to the survey. More than half (56.3%) were uncomfortable treating transgender patients. None were taught transgender medicine in medical school and only five (31.3%) felt that their post-graduate training in this was adequate. Fourteen (87.5%) felt that endocrine senior residency should include training in transgender medicine. Out of 10 knowledge questions, the mean score among the respondents was 7.88 (S.D. 1.02). Severe measures were introduced, including (a) Recurring didactic lectures addressing both psychological and medical aspect of transgender care, (b) Scholarly activities, such as journal club presentation and participation in transgender academic conferences, (c) Continuing medical education sessions involving endocrinologists, paediatricians, psychiatrists, psychologists, and speech therapists, (d) Increasing clinical exposure by observing and learning from the consultation of mentors with a special interest in this, and (e) Managing patients under supervision.

Significance/Implications/Relevance

A significant proportion of endocrine SRs are not comfortable or confident in the management of transgender patients. This is largely fueled by the lack of exposure, experience, and education on transgender care. The measures introduced to better training on transgender care, such as didactic lectures, multidisciplinary meetings, participation in scholarly activities, and rotations to

transgender specialty clinics, has improved the confidence of endocrine senior residents in managing these patients. Several SRs have also expressed interest and moved on to managing transgender patients independently upon graduation. This study suggests that an increased focus on transgender medical education can increase confidence and may help address the health care disparities of this underserved population.

Poster #52: Transforming Patient Care: A Quality Improvement Initiative for Improved Communication and Coordination in a Large Internal Medicine Residency Program

Author(s): Deema Al-Souri, MD; Akhil Kallur, MD; Fred Bien-Aime, MD; Abhinav Saxena, MD; Sailaja Pindiprolu, MD

Institution(s): Medstar Washington Hospital Center; MedStar Health/Georgetown-Washington Hospital Center

Abstract Type: Innovation-focused

Background

Research suggests that incorporating interdisciplinary care plans has many advantages, serving the interests of both patients and health care team members actively participating in care planning. Improved collaboration among health care professionals, particularly between physicians and nurses, leads to favorable outcomes for patients with interdisciplinary care plans. These benefits include shortened hospital stays, reduced care complications, and decreased overnight nursing phone calls.

Objectives

Our objectives encompassed the facilitation of a multidisciplinary approach to patient care, emphasizing enhanced communication among the primary care team, the patient's nurse, and social work/case management, alongside the reduction of page burden on cross-cover residents.

Methods

Our study aimed to elucidate the factors contributing to overnight pages received by cross-cover residents. To address this issue, we implemented an intervention strategy centered on integrating the Interdisciplinary Model of Care (IMOC) during monthly ward orientation sessions. Furthermore, our intervention emphasized the comprehensive documentation of the IMOC bundle within each patient's chart. This bundle encompassed the Plan of the Day, Disposition Plans, Anticipated Date of Discharge, Names of Nurses Involved in Patient Care, and Nursing Concerns. Additionally, we implemented dedicated IMOC rounds on specific hospital floors.

Subsequently, we conducted a post-intervention assessment by analyzing the volume of pages received by cross-cover residents.

Results/Outcomes/Improvements

Among the 360 data entries analyzed, the IMOC bundle was completed in 45 percent (165/360) of cases. Nurses' names were documented in 40.2 percent (144/360) of entries, while nurses' concerns were documented in 27 percent (97/360). Notably, cross-cover pages related to diet orders saw an eight percent reduction, and overnight pages for telemetry or restraints orders decreased by 0.3 percent. Moreover, there was a substantial (33%) decrease in pages related to medication, laboratory, or diagnostic orders. Interestingly, the number of incorrect pages remained consistent both before and after the intervention.

Significance/Implications/Relevance

In conclusion, our implementation of the IMOC approach effectively reduced the workload for overnight cross-cover residents and lightened the burden on nurses, resulting in an overall enhancement of patient care quality. However, there remains a need for further interventions to boost the rate of IMOC completion among residents.

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Poster #53: The Program Director's Word... It's Stronger than the Word of God: Epistemic Injustice Revealed through Narratives of Remediated GME Residents

Author(s): Candace Percival, MD; Lauren Maggio, PhD; Tasha Wyatt, PhD; Paolo Martin, PhD

Institution(s): Uniformed Services of the Health Sciences/59MDW/SAUSHEC; USUHS

Abstract Type: Research-focused

Background

Graduate medical education (GME) represents a formative experience for physicians. Most trainees complete training on a predictable timeline; however, some require remediation defined as additional time or supervision to advance in training. Remediation programs have reported varied success and remediated residents may feel shame, self-doubt, or isolation. Historically excluded groups experience even higher rates of academic deceleration or remediation in GME. Epistemic injustice involves discrediting, ignoring, or doubting people as legitimate knowers, often based on their social identity. In particular, women, racially minoritized individuals, children, and students experience high levels of injustice because of asymmetric structural power differences. In a hierarchical GME setting, though residents are anticipated to have areas for improvement, the presence of learner deficits may be inappropriately extrapolated to their capacity as knowers in other areas.

Objectives

To date, most studies are written from the perspective of medical educators with little published from remediated learners' perspectives. Our study aims to synthesize the narratives of participants personally impacted by remediation. We pay particular attention to their stories through the lens of epistemic injustice as a theory that describes how one's status as a legitimate knower may be discredited based on their social identity.

Methods

Between January and July 2022, we interviewed 10 US physicians who self-identified as having experienced remediation during residency. Participants experienced remediation as recently as a year to over 20 years prior to the interview and their training programs included surgical, medical, and indirect patient care specialties. They shared events that led to remediation, personal perspectives and emotions about the process, and resulting outcomes. An iterative process was used in which data was simultaneously collected and analyzed revealing a story-like nature to the interviews; therefore, sequential narrative analysis was paired with initial coding. An overarching theme noted was the participants' positioning of the program director (PD), so this informed secondary analysis and created a sense of cohesion among the 10 narratives. We then examined the narratives through the lens of epistemic injustice to better understand how participants made meaning from their experiences.

Results/Outcomes/Improvements

Participants described being targets for remediation due to their backgrounds that preceded their training (e.g., previous academic difficulty/non-traditional path, medical disability, or minoritized racial, gender, or sexual identity), which, from their perspectives, set them up to be dismissed by program leadership. In each case, the remediation experiences profoundly impacted their emotions and confidence as trainees. Participants commonly perceived their agency was minimized and described being dismissed by their PD, often feeling powerless and ignored in their capacity to contribute. Many acknowledged they needed additional academic assistance, but wished they had been approached with more humanity, including open communication and input into their remediation plans. When approached with humility from their PD, positive outcomes were reported. Five participants experienced remediation that led to dismissal or resignation from their initial

residency programs.

Significance/Implications/Relevance

Participants' remediation experiences were fraught with epistemic injustice, exacerbated by PDs who dismissed residents' perspectives. Residents with unique backgrounds were at further risk for epistemic injustice due to prejudices about their specific backgrounds. The power PDs wield in their positions may increase their likelihood of perpetrating epistemic injustice as PDs were perceived to hold all power in the remediation process despite participants' desire to collaborate. Perceptions of being dismissed and ignored align with prior research describing a tipping point in remediators who feel an unquestioned conviction and commitment to diagnose failure in a trainee. At this tipping point, residents are at high risk for epistemic injustice because PDs have limited perception of improvement in trainees. For this reason, we suggest that PDs practice epistemic humility and afford greater opportunities to residents to be heard and to participate in the remediation process.

Poster #54: Call Schedule Differences for Burnout in Trainees May Be More Complex than the Hours: A Comparative Analysis of Burnout among Neurology Residents

Author(s): Rachel Green, MD; Anne Coogan, MD; Murli Mishra, MD, PhD; Keerthana Akkineni, MD; Christopher Lee, MD

Institution(s): Vanderbilt University Medical Center

Abstract Type: Research-focused

Background

Physicians and medical trainees experience burnout at higher rates than the general population. Residents are particularly vulnerable to burnout, depression, and fatigue. Unfortunately, despite ongoing wellness initiatives, the rates of burnout continue to rise. The downstream effects of burnout are monumental, including increased depression, suicide, and medical errors, and decreased quality of care. There is no clear consensus in the literature on the impact of call schedules on burnout of residents with regards to the night float versus 24-hour call system, especially for neurology trainees, who are within one of the most consulted specialties nationwide. Thus, further insight into how neurology resident burnout may differ between the different call systems may be helpful when program directors of any residency program are determining the type of call schedule to implement for trainees.

Objectives

To compare the efficacy of a night float system with a 24-hour call system in reducing burnout among neurology residents

Methods

Between April and August of 2023, we surveyed PGY-2-4 neurology residents at our institution. Each survey included the training year, the Stanford Sleepiness Scale, and the work burnout section of the Copenhagen Burnout Index. For half of the survey period, the PGY-2 residents were on a 24-hour call schedule where they were expected to manage the neurology inpatient services, consults and stroke protocols for 24 hours once a week followed by an off- day. For the other half of the survey, these residents were on a night float system where they would perform the same duties for 11 hours for five consecutive nights. We conducted four cross-sectional surveys throughout the survey period which were sent to the residents. The PGY-2 class served as the cohort for the primary analysis given that PGY-3-4s were on night float throughout the entire data collection period. Mann-Whitney U and Z-tests were used for the analyses.

Results/Outcomes/Improvements

The response rate for the cross-sectional data was >90 percent for each survey (four survey time points total). The data showed no significant difference between 24-hour call and night float in the PGY-2 group for all parameters assessed. However, the night float group showed a trend towards lower self-reported fatigue and exhaustion responses. Interestingly, the night float group also showed a tendency towards higher self-reported sleepiness index scores and burnout. When analyzing the entire cohort of residents, scores of fatigue and exhaustion were significantly higher in the 24-hour call group for PGY-2-4 residents ($p = 0.01$ for reported work fatigue by hour, $p=0.029$ for exhaustion and $p=0.022$ for fatigue scores).

Significance/Implications/Relevance

Overall, our study is one of very few that compares night float to 24-hour call within the same cohort of neurology residents. Statistical significance could not be achieved when analyzing responses comparing 24-hour call and night float from the PGY-2 cohort alone. However, the data

suggests that burnout from being on call in neurology residency is more complex than the hours worked. From this study, additional factors that may be considered to impact burnout include resident perception of fatigue and exhaustion. Even though hours worked only changed for PGY-2 residents in our study, the call schedule still had a statistically significant impact on self-reported measures of fatigue and exhaustion for the entire residency class (PGY-2-4). In addition to this, literature supports several factors not captured by our survey that affect call burnout outside of hours including work-flow interruptions, educational value, and social energy.

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Poster #55: Implementing an Immersive Intern Boot Camp for Incoming Interns

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Institution(s): Medstar Washington Hospital Center

Abstract Type: Innovation-focused

Background

The beginning of residency can prove to be a challenging time for incoming interns, particularly due to the diverse backgrounds of the residents we attract. To facilitate this transition, we have introduced an immersive curriculum and boot camp developed by the Department of Medicine at Medstar Washington Hospital Center Internal Medicine program.

Objectives

We implemented a two-week boot camp program for incoming internal medicine interns at Medstar Washington Hospital Center. This structured program has been designed to assist interns in grasping the fundamental workflow, which has been thoughtfully organized based on valuable input from our current residents and program leadership.

Methods

The boot camp spanned two weeks and included workshops, didactics, and electronic medical record (EMR) training. Workshops were led by resident volunteers who utilized provided guides for effective moderation. The clinical component spanned 10 days, gradually increasing interns' clinical responsibilities. In addition to daily didactic sessions, interns engaged in shadowing experiences, gaining insight into inpatient team dynamics and workflow. The boot camp featured Boot Camp A and B sessions where interns participated in discussions and role-playing scenarios. Boot camp A focused on topics such as handoffs, time management, sick patients, and consults, while Boot Camp B covered EMR skills, including order placement and note writing. Following these sessions, interns entered "Block Zero," a period of escalating clinical responsibilities over Days 7-14, with additional education on factors pertaining to residency.

Results/Outcomes/Improvements

Following the completion of the boot camp program, we administered an electronic survey to interns, achieving a response rate of 78 percent. The survey yielded overwhelmingly positive feedback for all the sessions, with 92 percent of interns rating Boot Camp A as "excellent" or "very good," and 76 percent expressing the same sentiment for Boot Camp B. When asked about the most helpful sessions in Boot Camp A, 74 percent cited the sick patients-rapids, 47 percent mentioned hand-offs-sign-outs, and 32 percent found time management-cross cover to be beneficial. Additionally, 91 percent of interns found the lecture series to be "excellent" or "very good," with the most popular sessions being the wellness talk (51%), hypoxia discussion (51%), and intern survival tips (47%). Overall, interns reported feeling more comfortable after completing the boot camp series. Furthermore, interns received lectures on well-being, social determinants of health, documentation, ethics, micro-aggressions, and insights into the intern experience.

Significance/Implications/Relevance

The success of the boot camp curriculum and its implementation is evident in the overwhelming positive feedback received from interns. This meticulously designed curriculum, encompassing program policies, clinical skills, EMR training, and a gradual integration of clinical responsibilities, stands as a pivotal resource for interns as they begin their training. While the feedback included some constructive suggestions, such as the need for more critical care sessions for ICU-bound interns and improvements in the EMR training structure, it underscores the importance of ongoing

refinement. The inclusion of a resident and intern feedback system allows for continuous modification and enhancement of the boot camp sessions in subsequent years. Overall, this structured boot camp schedule and curriculum, addressing essential facets of residency training, can serve as a valuable tool not only for interns but also for residency programs seeking to provide a robust foundation for their trainees.

Poster #56: The Postpartum Polaroid Project: A Mixed-Methods Study Evaluating Resident Use of Polaroid Photos as an Intervention for Mindfulness in Obstetrics

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Institution(s): Kelsey-Seybold Ob/Gyn; Hospital of the University of Pennsylvania; Perelman School of Medicine

Abstract Type: Innovation-focused

Background

Although the delivery of a child is a coveted opportunity to cultivate wonder and professional satisfaction among obstetrics and gynecology residents, it is threatened by volume and documentation demands. In a 2015 survey distributed by the Council on Residency Education in Obstetrics and Gynecology to all obstetrics and gynecology residents, 89.4 percent of residents reported that they or a colleague experienced wellness issues, 87.5 percent reported burnout, 71.48 percent reported depression, 38.42 percent reported binge drinking, 8.23 percent reported drug use, and 2.86 percent reported suicide or suicide attempts. To address this professional crisis, the ACGME Council of Review Committee Residents (CRCR) created the *Back to Bedside* initiative.

Objectives

Our objective was fostered as part of the *Back to Bedside* initiative. The goal of this initiative is to empower residents and fellows of all specialties to develop projects that combat burnout by fostering meaning in their learning environments and allowing deeper engagement with patients. Specifically, we aimed to create a reproducible, cost-effective intervention for obstetrics residents that cultivates mindfulness, meaning, and connection with patients on labor and delivery through a physical memento.

Methods

Thirty-two residents were recruited to participate in the intervention during their labor floor rotation. They were encouraged to return to the patient's bedside after delivery to gather for a group polaroid photo with members of the care team. Patients and RNs were provided with a copy as a keepsake, while resident copies were compiled into individual keepsake books.

Resident experience was assessed via RedCAP administration of the validated Stanford Professional Fulfillment Index, pre and post. Semi structured, qualitative interviews were then conducted with residents and RNs. The authors used a constant comparative approach to iteratively identify themes. Team analysis continued until a stable thematic structure emerged, which was then applied to the entire data set using Dedoose software.

Results/Outcomes/Improvements

This was a sequential explanatory mixed-methods design. Twenty residents participated with an average of 8.8 polaroids taken over their labor block. After the intervention, there was a significant improvement in scores indicating personal fulfillment ($p=0.02$) and personal disengagement ($p<0.001$). There were no significant differences in worker exhaustion. A logistic regression showed those with higher pre-intervention disengagement had less of an improvement in professional fulfillment. In addition, residents with ≥ 10 polaroids had an average increase in professional fulfillment of 4.04 points compared to those with nine or fewer. Thematic analysis of the qualitative interviews linked professional development and identity to the polaroid's creation of a 'forced pause' – a concrete moment in time and physical proximity that fostered patient connection, affirmation of the resident's legitimacy as delivery provider, and closure.

Significance/Implications/Relevance

The Postpartum Polaroid Project offers a novel approach to address resident professional fulfillment on labor and delivery through the creation of a physical memento that opens a moment in time for shared humanity. Our data suggest that this is a simple, feasible, and low- cost intervention that can be introduced in any obstetrics and gynecology residency program to increase professional satisfaction. The Polaroid also offers a tangible reminder to physicians of the purposeful and life-giving aspects of residency, potentially for many years to come.

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Poster #57: Multi-Center Study of Optional In-person Visits to Residency Programs after Virtual Interviews

Author(s): Alec O'Connor, MD, MPH; Amy Blatt, MD; Kathlyn Fletcher, MD, MA; Shannon Martin, MD, MS; Mark Rasnake, MD; Brian Uthlaut, MD; Donna Williams, MD

Institution(s): University of Rochester; Medical College of Wisconsin; University of Chicago; NCH Healthcare System; University of Virginia; Wake Forest University School of Medicine

Abstract Type: Research-focused

Background

Virtual recruitment promotes equity and substantially reduces costs, disruption to applicants' schedules, and the environmental impact of travel. However, few applicants prefer exclusively virtual recruitment because in-person visits allow applicants to better assess program culture and fit, helping applicants make more informed rank list decisions.

Objectives

We piloted a recruitment process for the 2022-2023 residency match that aimed to maintain the benefits of virtual interviews, while also allowing applicants an opportunity for an in-person visit if they wanted. We hypothesized that this process would be feasible for programs, have acceptable financial costs, time expenditure, and administrative burden, and that applicants would find this process equitable, informative, and helpful.

Methods

Six internal medicine residency programs collaborated to pilot a recruitment process consisting of virtual interviews and early program rank list finalization and certification, followed by optional, "no stakes" in-person visits for previously interviewed applicants. Applicants, program directors, and program administrators were surveyed after completion of recruitment, and details of the in-person visits were compiled.

Results/Outcomes/Improvements

Participating programs virtually interviewed an average of 379 applicants, with an average of 39 (10.3%) applicants also completing in-person visits. Of 1,808 interviewed applicants, 464 responded to the survey (25.7% response rate); 88 percent of respondents believe that an optional in-person visit should be offered next year after programs finalize their rank lists. Seventy-five percent of applicant respondents found the pilot process equitable. However, only 56 percent trusted programs not to change their rank list based on an applicant's decision about whether to visit, despite programs' verbal and written commitments. Several applicants who indicated that this process was not equitable cited programs' ability to change their rank lists based on applicant decisions to visit in this pilot. All participating program directors and administrators liked having the in-person visit, and all program directors think future applicants should be offered a similar in-person visit.

Significance/Implications/Relevance

We successfully piloted a recruitment approach that featured the option for applicants to have a "no stakes" in-person visit if they wanted. This approach balances equity and the other benefits of virtual interviewing with helping applicants make a more informed decision about their rank list. A formalized mechanism allowing programs to finalize their rank lists prior to applicants' deadline would help applicants trust the fairness of the process.

Poster #58: Assessment of Patients' Perception of Physicians' Communication Skills: 15 Minutes Is What it Takes

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Institution(s): Aga Khan University Medical College Pakistan

Abstract Type: Research-focused

Background

Patient satisfaction with physicians' communication skills is imperative to patient-centered care and improving health care outcomes. In less developed countries, this need is further amplified by the dearth of health care personnel, due to which health care delivery focuses on addressing high patient volumes, and patient-physician communication is at risk of not receiving enough attention.

Objectives

To understand patients' perception of resident-physicians' communication skills and their needs surrounding ideal patient-physician communication.

Methods

The study utilized a cross-sectional survey design where data were collected from June to September 2021 at a large academic medical center in a low-resource setting. Participants included outpatients with at least two prior follow-up visits in clinics and inpatients admitted for at least 48 hours via convenience sampling. Patient-reported ratings of residents' communication skills were measured using the Communication Assessment Tool (CAT). An adjusted multivariable model with patient- and resident-related factors was built to determine their associations with excellent/poor patient-resident communication.

Results/Outcomes/Improvements

A total of 434 patients (61.29% females and 38.71% males, mean age: 42.5 ± 0.83 years) were surveyed. The patient-resident interaction time was the most significant factor associated with patients' satisfaction with residents' communication skills when adjusted for patient gender, age, marital status, specialty visited, number of visits and days admitted. Regression analysis showed that patients rated residents who spent at least 15 minutes as excellent [OR = 1.86 (1.05 – 2.97)]. Increasing levels of patient education and inpatient care settings were significantly associated with poor patient ratings of residents' communication skills.

Significance/Implications/Relevance

Residents who interacted with patients for at least 15 minutes received a higher satisfactory communication skills rating by patients. Knowledge of a specific time target can help health care structures schedule resident workload assignments to ensure effective patient-physician communication and thus improve health care outcomes.

Poster #59: Developing a Novel Communication-Skills Training Curriculum for Resident-Physicians in a Low-Resource Setting through a Delphi Consensus

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Institution(s): Aga Khan University Medical College Pakistan

Abstract Type: Research-focused

Background

Effective patient-physician communication is a cornerstone of health care and is linked with increased treatment adherence and better patient outcomes. Accreditation bodies like the ACGME list interpersonal and communication skills as one of the six Core Competencies to be acquired by residents during their training. Hence, residency curricula in high-income countries like the United States train and assess their residents in these domains. However, there is a dearth of such curricula in low- and middle-income countries (LMICs), where residency programs primarily focus on teaching clinical skills to trainees.

Objectives

To develop a communication skills curriculum by organizing a conference of experts based on the Delphi method.

Methods

A two-stage, three-round Delphi consensus between panels of local and international medical education experts was conducted at one of the largest Academic Medical Centers (AMCs) in an LMIC. A proposed communication skills training curriculum was presented to the experts in round one. Participants were divided into groups to rate their agreement on each curriculum objective, teaching, and assessment methodologies on a nine-point Likert scale (1-3 = not recommended, 4-6 = neutral and 7-9 = strongly recommended). After one month, participants were asked to rate their agreement using the same survey to see if there was a change in their response. Using results from rounds one and two, items not receiving consensus were removed from the curriculum. This revised curriculum was then shared with a panel of international experts who were asked to provide their ratings on each component. Their feedback was then incorporated into the curriculum to refine it further.

Results/Outcomes/Improvements

The first two rounds included medical education experts from the AMC (n=14), while the third round included international experts (n=11). These experts included residency program directors, residents, and medical educators. The curriculum aims that were strongly recommended (defined as receiving over 80 percent agreement from the participants) in the final round included being accessible, attentive, and caring for the patient, communicating with the patient and their family honestly and supportively and ensuring patient and their families' participation in decision-making. For assessment, faculty evaluation and feedback from residents for identifying areas of improvement every month were most strongly recommended. It was also suggested that the end-users of this curriculum, the residents, should also provide feedback on the helpfulness and relevance of the content taught.

Significance/Implications/Relevance

Through critical input from medical education experts from various settings, we developed a novel curriculum to teach communication and international skills to residents at one of the largest AMCs in a resource-limited setting. Implementing this curriculum will ensure standardization of residents' communication skills to improve health care outcomes. Once implemented and assessed for feasibility, this curriculum can be scaled nationally to ensure that all residency programs across the country are at par with standards set by educational bodies.

Poster #60: Empowering Women in Medicine: A Comprehensive Analysis of Women Physician Engagement in the Workforce

Author(s): Muhammad Tariq, MBBS, MRCP, FACP, FRCP, MHPE; Maham Vaqar, MBBS; Sohaib Muhammad Khan, MBBS; Noreen Afzal, BS, MPhil; Shayan Shah, MBBS; Asma Altaf Hussain Merchant, MBBS; Saad bin Zafar Mahmood, MBBS, FCPS; Komal Abdul Rahim, BScN; Saqib Kamran Bakhshi, MBBS, FCPS; Namra Qadeer Shaikh, MBBS; Muhammad Rizwan Khan, MBBS, FCPS, FRCS, MHPE; Adil H. Haider, MD, MPH, FACS

Institution(s): Aga Khan University Medical College Pakistan

Abstract Type: Research-focused

Background

Performance evaluation of graduates serves a vital role in the continual improvement of an academic institution. The Aga Khan University Hospital, one of South Asia's largest Academic Medical Centers (AMCs), is renowned for producing medical graduates who continuously push the envelope of health care in Pakistan and globally. Operating in a lower- and middle-income country (LMIC), the institution is geared towards ensuring an equal learning opportunity regardless of gender, caste, and socio-economic status. To assess the impact of our graduate medical education program, we surveyed our alumni on the institution's 40th anniversary. We hope to shed light on our residency program's comprehensive learning environment, highlighting its effectiveness in producing productive members of the health care community and society.

Objectives

1. To examine gender differences in career outcomes/pathways and achievements among graduates from the AMC's residency programs.
2. To assess the impact of AKU alumni who have completed their residency program from the AMC over the past four decades in terms of their research and academic impact.

Methods

An alumni survey was conducted to assess the impact and outcomes of the Aga Khan University, Pakistan (AKU)'s residency programs since its inception. An online questionnaire was distributed to alumni who had graduated from 1988-2017 over two months from January to March 2023. Aimed at gathering data for higher education, training, and practice settings, the survey examined four key outcomes: participants' current employment status, type of practice (academic/non-academic), research impact, and contributions to health care and educational innovations. All statistical analyses were performed using Stata.

Results/Outcomes/Improvements

The survey was distributed to all alumni with functional email addresses. A total of 548 respondents completed the survey. Most of the respondents (55.29%; n=303) were male. The results showed that 234 (42.70%) of the respondents had academic roles, of which 104 (44.44%) were female. Full-time employment rates were 77.92 percent (n=427) while female full-time employment rate was 74.69 percent (n=183) compared to 80.52 percent (n=244) for males. Coupled with part-time employment, pursuit of further training and self-employment, female presence in the work field was 91.02 percent (n=223). Alumni involvement in research was noted at 82.66 percent (n=453), of which 42.16 percent (n=191) were female. Furthermore, 51.35 percent (n=57) of those who received research grants were also female. Of those involved in research, 28.83 percent (n=158) had 11-50 publications.

Significance/Implications/Relevance

This study showcases the strength of Aga Khan University's graduate medical education

programs. It shows that by an academically nurturing environment and a holistic curriculum, our institute has been able to break the socio-cultural barriers regarding gender in the landscape of an LMIC. In a traditionally male-dominated society, the university's focus on ensuring equal opportunities for its residents has resulted in our female graduates having a comparable performance with their male counterparts, a rare finding in the region. Furthermore, the significant research output of our graduates, especially females, reflects the lasting effect of our curricula and research-supportive environment. These significant findings denote an underlying difference in the institution's approach to graduate medical education, which we believe can be studied and emulated by others to improve health care practice and research within the region.

Poster #61: Beyond Rounds: Improving Physician Wellness on the Gyn-Oncology Service through Meaningful Connection

Authors: Katherine Chua, MD; Alice Barr, MD; Neel Rana, MD; Rebecca Brooks, MD; Gary Leiserowitz, MD; Rachel Ruskin, MD; Nikki Rubin, MD

Team Institution: UC Davis

Abstract Type: *Back to Bedside*

Background

In obstetrics and gynecology residency, the time spent on the gynecologic-oncology service is emotionally grueling, physically demanding, and intellectually challenging. Those on our service range from post-operative patients reckoning with a new cancer diagnosis to patients who are critically ill and navigating their final months. Yet, there are still moments of joy, love, and humor—and it is those moments of human connection that we hold on to as physicians. However, as trainees much of our time is consumed by minutia and tasks performed from behind a computer, far away from a patient's bedside—and while this work is essential to providing care, it is challenging to feel you've made a dent in the patient's suffering, and those moments of human connection become rare. Our project improves the wellness of those on the gynecologic-oncology service, by creating an opportunity for our residents and fellows to return to their patient's bedside and have the chance to develop a meaningful connection that goes "Beyond Rounds."

Objectives

Our quality improvement project seeks to improve the wellness of physician trainees on the gynecologic-oncology (gyn-onc) service by returning them to their patients' bedsides to engage in activities and develop connections that go "Beyond Rounds."

Methods

Each week the team identifies a patient who may potentially benefit from a meaningful activity, along with a paired trainee on the gyn-onc service. If the patient agrees, the patient and trainee select an activity together, such as manicures, painting, coffee, chatting one-on-one, etc. Trainees are guaranteed 60 minutes of protected time during normal work hours for this activity. Outcomes are measured using the Physician Fulfillment Index (PFI), which measures both professional fulfillment and burnout. Trainees are asked to complete a pre- and post-survey via a QR code, which includes the PFI and short-answer questions. A paired t-test was used to compare professional fulfillment and burnout before and after completing the activity. Furthermore, Cohen's D was used to measure the effect size of the intervention. A p-value <0.05 was deemed to be statistically significant. Our project has a specific focus on equity and inclusion and prioritizes patients who face barriers to care.

Results/Outcomes/improvements

A total of 18 participants have completed the study. Results from the study demonstrate a significant difference in both professional fulfillment ($p = <0.01$) and burnout ($p = <0.01$) before and after the intervention. The average change in fulfillment score was +2.41 and burnout score was +3.65, and both scores are consistent with an improvement in trainee wellness after completing the activity. Cohen's D was 0.78 (large effect size) and 0.61 (medium effect size) for professional fulfillment and burnout, respectively. There were two outliers who had an increase in their burnout score. Three post-surveys were not completed and not included in the statistical analysis. Common descriptors used in the short-answer questions included: humbling; healing; inspiring; gratifying; therapeutic; and fun.

Significance/Implications/Relevance

Our quality improvement project shows that creating opportunities for physician trainees to return to the bedside can have a positive and measurable effect on their fulfillment and burnout. Although causes of burnout are complex and multifactorial, improving wellness at work can improve professional fulfillment and help combat burnout.

Poster #62: Implementing a Narrative Medicine Curriculum for Dermatology Residents to Mitigate Bias and Burnout

Authors: Mariam Alam, MD; Caitlin Crimp, MD; Linda Oyesiku, MD, MPH; Andrea Kalus, MD; Michi Shinohara, MD; Victoria Wilk, BS

Team Institution: University of Washington

Abstract Type: *Back to Bedside*

Background

The demands of clinical and academic responsibilities leave dermatology trainees with limited time to listen to, understand, and reflect on patients' medical journeys. Dermatologists care for many patients with conditions that have impact beyond physical symptoms with associated stigma from visible disease. These conditions uniquely affect marginalized communities.

Narrative medicine is a practice of deep listening to the patient experience, analyzing literature to facilitate an emotional connection to the relational and psychological dimensions of illness, and self-reflection to deepen the capacity to respond with empathy and generosity. Narrative medicine has been shown to improve well-being and may reduce physician burnout. Less is known about its impact on bias.

Objectives

In this project, we aimed to improve dermatology residents' understanding and connection to patients through narrative writing workshops centered around patient sessions, and in doing so, mitigate both bias and resident burnout.

Methods

We implemented a two-year narrative medicine curriculum for dermatology residents at the University of Washington. Residents participate in quarterly three-hour sessions centered on unstructured dialogue with patients with shared experiences of personal identity or clinical diagnosis. During these sessions, residents also read poetry, short stories, or excerpts of literature and engage in reflection using writing prompts. Residents complete baseline, mid- point, and post-curriculum assessments on burnout (Maslach Burnout Inventory), bias (Harvard Implicit Association tests), and study-specific surveys addressing burnout, bias, and feedback regarding narrative medicine. We plan to perform qualitative analysis of resident writing samples looking at how themes of burnout and bias change over the course of the curriculum.

Results/Outcomes/improvements

Our results are pending. Impact of the curriculum after the first year includes an overwhelmingly positive response from residents. Specifically, residents appreciate the protected time to talk with patients and the closeness gained with peers from open discussions. Participation in the curriculum has facilitated the discovery of patient needs and implementation of several changes to clinical care; for example, residents curated a list of patient-recommended wound and skin care products for hidradenitis suppurativa.

Significance/Implications/Relevance

Our curriculum has shifted the culture within our residency program, emphasizing self-reflection and bolstering cohesion. To our knowledge, our narrative medicine curriculum is the first within dermatology residencies and could be extrapolated to other programs.

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Poster #63: Knowledge Is Power: Pathology Clinic

Authors: Kenechukwu Ojukwu, MPP, MD; Chandra Smart, MD; Robin Dietz, MD; Erica Fermon, MD; Jamar Uzzell, MD; Erin Collier, MD; Jana Tarabay, MD; Edwardo Rodriguez, MD; Christopher Gonzalez, MS

Team Institution: UCLA

Abstract Type: *Back to Bedside*

Background

Patients often struggle to understand pathology results. Understanding of their diagnosis enables shared decision-making and follow-through with treatment plans, as well as satisfaction with care and health outcomes. This project gathers national survey data from pathology residents on their attitudes toward and comfort with direct communication with patients, and designs and evaluates a novel pathologist curriculum for best practice communication with patients 65 years and older who are minority and medically underserved. There is both a need and opportunity to build capability and capacity in patient communication relating to pathology. Proper training could improve multidisciplinary collaboration for patient care. Preparing pathologists to effectively assist treating physicians in communicating diagnoses (including addressing diagnostic uncertainty), to patients, as well as direct communication with patients in some instances, could improve diagnostic understanding of many patients. The need is particularly great for older adults. For some diagnoses in older adults, decisions in therapeutic management can be challenging due to comorbidities and frailty, and communication is fraught for these reasons and others (such as language discordance with the provider). Patients do not typically have direct contact with a pathologist who may be able to address the legitimacy of their diagnosis and specific patient questions. Patients who do receive such consultation are typically well-resourced. For underserved minority patients, this is a gap that can potentially be remedied with a pathology clinic where patients see their pathology specimen microscopic slides and ask questions related to the diagnosis. Studies in other populations (primarily middle-age white populations) show that this communication enhances patient understanding, emotional well-being, satisfaction, trust, and quality medical decision-making.

Objectives

Our goal is to assess the interest and comfort with communication in a national survey of pathology residents. This survey information will be used to design and implement a prototype pathology resident and fellow curriculum at a county hospital dermatology clinic. We have the following aims: Specific Aim 1. To identify attitudes and perceived efficacy of pathologists via a national survey regarding providing direct communication of pathology specimen results to patients and considerations regarding older, minoritized patients. Specific Aim 2. To design and implement a prototype patient communication curriculum for pathology residents/fellows.

Methods

Specific Aim 1: We have been invited to add survey questions about pathologist-patient communication to a national survey sent out by a national pathology educational organization. The survey is distributed annually to all pathology residents immediately following their in-service examination. Based on prior survey responses, we expect to have, at minimum, three hundred pathology trainees respond. We will examine overall findings, as well as variation by trainee characteristics, training program, and location. Specific Aim 2: We have been developing an educational curriculum for the past 12 months. Informed by results of the national

survey, we will complete the design, implement, and evaluate a communication curriculum for UCLA pathology residents/fellows. The curriculum includes how to customize explanations to patients with different knowledge base and medical literacy. It includes curriculum that we have developed specifically for patients who may mistrust medical institutions and information for reasons associated with minoritized status and socioeconomic disadvantage. The curriculum will include a one-hour didactic training (including concepts on multilingual research and translator use), followed by participation in the prototype pathologist-patient clinic at an underserved hospital, and focusing on a diagnosis (basal cell carcinoma) that affects people of all races/ethnicities. Pre- and post-proficiency survey data will be obtained from all residents/fellows participating in the clinic. Short patient satisfaction questionnaires will also be distributed to evaluate patient experience.

Results/Outcomes/improvements

Results and outcomes for specific Aims 1 and 2 are still pending.

Significance/Implications/Relevance

Basal cell carcinoma (BCC) is the initial training example because it affects quality of life by functional and cosmetic complications, secondary infection, and/or pain and affects people of all racial/ethnic groups and occurs with sufficient frequency in the participating clinic to be an effective prototype example. BCC is also appropriate for this study because the diagnosis is confusing for patients and the treatment plan involves shared decision-making. Learnings from BCC will be applied in future to other pathologies that affect minority older persons facing particular inequities.

Poster #64: A Multimodal Curriculum on Home-Based Care for Medically and Socially Marginalized Patients across the Lifespan

Authors: Jasmine Blake, MD, MSPH; Damian Suarez, MD, MA; Elizabeth Batista, MD; Joseph Truglio, MD, MPH

Team Institution: Icahn School of Medicine at Mount Sinai

Abstract Type: *Back to Bedside*

Background

As the medical conditions of patients become increasingly complex, and as marginalized groups face difficulties accessing care, alternative models of care may offer innovative steps to equitable health care. Studies show that home visits improve patient outcomes, satisfaction, and physician-patient relationships. Yet there is limited literature on formalized curricula. Studies show that fewer than 50 percent of internal medicine and family medicine programs have formal curricula on home-based care. There is far less data for pediatric home visits and less so for formalized curriculum. Studies of programs with home visits concluded that lack of a formal curriculum is a barrier to longitudinal care. Since the majority of care in the world is completed in the community/home setting, there is a large gap in US residencies' curricula, which focus on hospital/clinic care. The development and implementation of a curriculum on home-based care is much needed in our residences.

Objectives

The focus of this project is to develop, implement, and evaluate a multimodal curriculum on community and home-based care. As part of this, we aim to establish the need for a formalized curriculum. The final product will be a longitudinal curriculum that will be embedded into the internal medicine-pediatrics residency program and delivered quarterly. This curriculum will accompany and enhance a current project to improve the home visiting program within the residency.

Methods

We identified three areas for improvement in our home visit process that we aimed to target within our larger program: referrals; the visit itself; and resident education. For resident education, we aimed to create a multimodal curriculum that included lectures, in-home training, and assessment tools. To establish the need for a formal curriculum, we created a cross-sectional survey that was delivered to internal medicine-pediatrics and neurology residents. The survey assessed baseline knowledge, skills, satisfaction with current teaching, and prior formal home visit education, and was conducted at the beginning of the project. At the project end, we aim to measure changes in residents' knowledge, satisfaction in work, and competence with conducting home visits. To assess these outcomes, we administered baseline and end-of-project cross-sectional surveys, including the Work as Meaning Inventory (to assess satisfaction with work).

Results/Outcomes/improvements

In a cross-sectional survey of 13 internal medicine-pediatrics and neurology residents, we found that 62 percent of residents had not received formal education about home visits and that 46 percent of residents felt uncomfortable with performing home visits. Furthermore, 54 percent of residents are currently unsatisfied with the teaching/modeling they have received about home visits in their residency program. Sixty-two percent of residents have a future interest in providing home visits after residency. In response to the survey results, our team developed a curriculum for the residency programs. We implemented a lecture series consisting of six lectures that included introduction to home-based care, epidemiology and demographics of East Harlem, assessments/procedures in the home, case studies, and collaboration and co-management with

community partners. Additionally, our curriculum included in-home modeling and standardization of home visits, along with reflections on prior home visits.

Significance/Implications/Relevance

The implementation of this project will move our program from supporters of social and racial justice in medical care to leaders and innovators in this field. A large change will be the inclusion of in-home teaching, which will move our knowledge from the theoretical to the practical. There is a paucity of literature regarding home-based care, particularly in medical education. The majority of education around home-based care is focused in the public health sector and in low- and middle-income countries. High-income countries, such as the US, largely do not teach home-based care in medical education, despite its use in most countries of the world. We plan to disseminate our findings and our curriculum through peer-reviewed publications to offer a model for teaching home-based care in residency programs. The dissemination of our model and results has the potential to create a framework for other programs in the future. Our program plans to collaborate with other residency programs that are conducting home visits to create a formalized and standardized curriculum to implement across the country.

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Poster #65: I See You: Bringing Providers “Back to Bedside” in a Pediatric Intensive Care Unit

Authors: Talin Arslanian, MD; Myke Federman, MD

Team Institution: UCLA/David Geffen School of Medicine

Abstract Type: *Back to Bedside*

Background

Burnout is a well-known phenomenon in the medical workplace and has been extensively studied. Quite concerning are its effects on quality of patient care, provider productivity, and job satisfaction. Given the demands of clinical training, along with the degree of complex decision-making, trainees are especially at risk. Many residents experience burnout during their pediatric intensive care unit (PICU) rotations, during which they experience high acuity of critical illness, chronically ill children, and death and dying. Residents may have feelings of inadequacy surrounding their comfort and ability to cope. With the amount of multidisciplinary care coordination that is required, residents may also struggle with time management, leading to workdays becoming “task-oriented” and detracting them from being at the bedside. Currently, many workplace-based interventions focus instead on global changes, such as schedule changes, wellness sessions, and establishment of support-based professionals.

Objectives

We aimed to engage residents in pediatric critical care, empower them in caring for complex children, and reduce burnout associated with the rotation by providing protected time to enhance the humanistic connection and teaching coping strategies to be used within the workplace.

Methods

This was a cohort study of pediatric residents rotating through a quaternary-level PICU in one academic year. Residents were surveyed on burnout levels, workplace resilience, and happiness, consisting of the Mini Z Burnout Scale, Brief Resilience Scale, and Subjective Happiness Scale. Nurses and fellows were surveyed regarding perception of resident engagement. Pre-intervention responses were completed from July-December 2022; post-intervention from January-June 2023. The intervention consisted of “social rounds,” where the teams would round on a new patient and family three times weekly to learn about them from a non-medical perspective; and the establishment of a PICU resident resiliency curriculum, which expanded upon an existing physiology-based one. Skills-building sessions included guides on Grief, Communication, and Active Listening, among others. To examine the population average effect of the intervention on each outcome, generalized estimating equations were employed.

Results/Outcomes/improvements

Approximately 42 percent of residents completed the pre-implementation survey and 40 percent completed the post-implementation survey. Approximately 41 percent of nurses and 67 percent of fellows completed the pre-implementation survey; 49 percent of nurses and 67 percent of fellows completed the post-implementation survey. The resident surveys consisted of three validated tools, each measuring a different outcome (burnout, resiliency, and mood), and were scored according to their respective scoring guidelines. Nursing and fellow surveys were based on a Likert scale. There was no statistically significant change in outcomes for any of the scales, however further statistical analysis is still underway regarding subset scores.

Significance/Implications/Relevance

While no statistical significance was reached on the outcome measures, this intervention remains an important and unique feature of our PICU and may be adaptable to other pediatric units and

wards. Limitations included low survey completion rate and inconsistent use of the “social rounds” intervention. Low use was thought to be primarily due to time constraints and busy workflows. Future directions include building protected time into the workday for “social rounds” to increase the frequency of its use, expanding surveys to include qualitative data, and trending parent responses to the intervention.

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Poster #66: Engaging Physician Trainees through Bedside Intensive Care Unit Narratives: A Multi-Site Expansion Study

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Team Institution: Icahn School of Medicine at Mount Sinai Morningside West, New York, New York

Abstract Type: Back to Bedside

Background

Intensive care unit (ICU) patients are at high risk for dehumanization. Barriers to providing empathic care include high workload, non-communicative patients, and provider burnout, which can also result in physician disengagement. In 2019, the authors implemented a novel narrative medicine intervention to promote increased engagement with patients and increased fulfillment from work. Patient biographic and social information was elicited via questionnaire (Patient Bios), shared during ICU rounds, and posted in patients' rooms (the intervention). Post-intervention, resident physicians spent more time at the patients' bedside, developed easier rapport with surrogates, and derived more meaning from work. In this multi-site expansion study, we hypothesize that eliciting and sharing Patient Bios with ICU physician trainees will increase interpersonal engagement and increase professional fulfillment irrespective of ICU type or geographic location.

Objectives

1. To assess the feasibility of implementing the intervention across ICUs in various geographic settings.
2. To examine post-intervention impacts on resident physician attitudes, experiences, work fulfillment, wellness, and engagement in the ICU.

Methods

We designed a longitudinal, mixed-methods study to implement the intervention across ICUs in New York and New Jersey. To date, the study has been conducted for a six-month period at one of seven planned ICU sites. Qualitative and quantitative data was collected at the following intervals: pre-ICU rotation; end-rotation; and three months post-ICU rotation. At each data collection point, residents submitted prompted audio or written diaries and completed the Stanford Professional Fulfillment Index© (PFI), a validated assessment of professional satisfaction and burnout in the workplace. Iterative thematic analysis of diary submissions was performed. Statistical analysis of PFI surveys is planned via a within-subject design.

Results/Outcomes/improvements

One hundred thirty-four Patient Bios were completed over six months at Site 1. Twenty-two physician subjects were enrolled. End-rotation diary submission and PFI surveys were completed by 100 percent and 72 percent of physician subjects, respectively. Further quantitative data analysis will be conducted once the three months post-ICU rotation data for Site 1 is available and once expansion site implementation and data collection is completed. To date, preliminary thematic analysis of qualitative data responses generated five thematic categories: human-centered care (26%); communication and relationship building (28%); impact on patient care (14%); impact on emotions and burnout (23%); and fulfillment from work (9%). There was an increase in human-centered care comments post-intervention. Responses were sub-codified as 'positive' or 'negative.' At end-rotation, there was a 35 percent increase in positive responses compared to the pre-rotation. Implementation has begun at four additional sites.

Significance/Implications/Relevance

Implementation of this novel narrative medicine intervention is feasible and positively accepted by site-based implementation teams and physician subjects. Qualitative responses indicated that physician subjects have a positive perception of the intervention citing an improved humanistic perception of patients. ICU workflow was not disrupted. As multi-site data is collected and analyzed, the authors anticipate continued positive perception of the intervention, continued acceptance of the intervention in the daily ICU workflow, and continued positive impacts on physician engagement with patients and fulfillment from work.

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Poster #67: Minimizing Patient Trauma during a Traumatic Admission: Effectiveness of Resident-Led Structured Interdisciplinary Bedside Rounds

Authors: Jarod Shelton, MD; Zi Huang, MD; Diane Shih, MD; Ebondo Mpinga, MD

Team Institution: WellSpan Health

Abstract Type: *Back to Bedside*

Background

Structured Interdisciplinary Bedside Rounds (SIBR), as defined by Stein et al., is a new model of care that brings all members of the interdisciplinary team to the patient's bedside, thus promoting interprofessional accountability and encouraging the patient and the family to participate in most aspects of care. Emerging evidence suggests that the use of SIBR has a positive impact on patient outcomes and improves communication amongst the interdisciplinary team. Identifying and implementing measures that maximize provider-patient communication has been empirically shown to reduce overall length of hospital stay (LOS), health care costs, and readmission rates, and to improve patient satisfaction. Surprisingly, our literature review could not identify any prior investigations that evaluated the utility of SIBR in patients of trauma.

Objectives

The purpose of this investigation will be to assess the impact of SIBR on various aspects of patient care during traumatic admissions.

Methods

The effectiveness of SIBR on LOS, 30-day mortality, and readmission, in addition to other clinical outcomes, will be quantitatively analyzed with the assistance of a statistician. Our control group will be patients who received trauma care one year prior to the implementation of SIBR, and our comparison group will be patients who received care for the one year after its implementation.

Data will be matched and analyzed based on age, comorbidities, trauma mechanism, injuries, etc. to identify how SIBR can improve patient outcomes. Patients will be surveyed using a modified version of the validated Picker Patient Experience (PPE) Questionnaire, which has been previously shown to provide a meaningful picture of patient experiences of health care. Surveys will be postage mailed to both the control and comparison groups. Both groups will be ~2,200. The modified version of the PPE will specifically address the role of residents and their effectiveness of leading SIBR.

Results/Outcomes/improvements

Data collection is ongoing. We are in the process of collecting survey results prior to the implementation of SIBR.

Significance/Implications/Relevance

Instead of spending time chart reviewing and virtually communicating, residents will lead in-person group rounds to provide all team members with the opportunity to discuss their goals of care with the patient. This patient-centered care approach will improve the personability of patient interactions and increase the amount of time residents can spend at bedside.

Additionally, the utilization of SIBR will create a more inclusive environment for all interdisciplinary team members to discuss any questions or concerns they may have regarding the patient's anticipated outcomes. By implementing SIBR, our team believes that we can foster meaning in work and get residents back to bedside to provide care to those who matter most – our patients.

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Poster #68: A Just Start: A Mixed-Methods Study on Obstetric Medical-Legal Needs among Diverse, Low-Income Pregnant People

Authors: Jecca Steinberg, MD, MSc; Hebron Kelecha, MD, MPH; Madeline Perry, MD; Nivedita Potapragada, BA; Allie Valenzuela, BA; Thwisha Sabloak, BA; Samanvi Kanugula, BA; Sydney Cush, BA; Dario R Roque, MD; Ashish Premkumar, MD, PHD; Erica O'Neill, MD; Lynn M Yee, MD, MPH

Team Institution: Northwestern

Abstract Type: *Back to Bedside*

Background

Unmet legal needs, poverty, and poor obstetric outcomes track together, with low-income Pregnant women often facing insurmountable barriers to health. Upstream factors, such as substandard housing, unemployment, and denial of public benefits (e.g., food assistance, health insurance), are associated with adverse obstetric outcomes (e.g., preterm birth). A vast body of literature demonstrates the impact of health-harming legal needs (HHLN) on patients in primary care, but little is known about obstetric medical-legal needs. Pregnant individuals comprise a uniquely vulnerable population with special legal entitlements who face distinct biases and discrimination due to their pregnant state. We aimed to address this gap in the literature by elevating the voices of diverse, low-income patients and understanding their perception of legal needs during pregnancy.

Objectives

To qualitatively assess the HHLN that impact pregnant patients through one-on-one semi-structured interviews; to quantitatively assess HHLN through a validated medical-legal partnership survey; and to investigate the stress caused by HHLN during pregnancy through a validated stress survey and qualitative interviews.

Methods

We applied community-engaged strategies to design qualitative interviews covering HHLN in pregnancy and the associated stresses and coping mechanisms related to HHLN. All interview materials and surveys were reviewed with community advocates and representatives following community-based participatory research methods. Pregnant patients were recruited to participate in semi-structured, one-on-one interviews in a clinical setting in both English and Spanish. Demographic data, HHLN-validated surveys, and validated stress surveys were collected in English and Spanish. Quantitative data were characterized with descriptive analyses. Qualitative data were analyzed with iterative, mixed inductive and deductive transcript-based coding and theme analysis.

Results/Outcomes/improvements

From June 2023 to December 2023, 29 low-income pregnant people from ages 18-39 participated in interviews (60% English, 40% Spanish). Participants identified as Black (12, 41%), Latinx (16, 55%) and White (1, 5%). Most participants (18, 62%) were born outside of the US, were below the federal poverty level (22, 76%), and had Medicaid/public health insurance or no insurance (28, 95%). Approximately one-third of participants identified as refugees who immigrated in the past six months. All participants denied having medical-legal needs, but most participants had one or more health-harming legal issues. Participants described financial, professional, housing and immigration barriers to health that negatively impacted their pregnancies. Many described being fired due to a condition related to pregnancy and few described work-place pregnancy accommodations. Among migrants, few had access to a legal support navigating their refugee status. Participants described a variety of coping mechanisms.

Significance/Implications/Relevance

Pregnant people face unique medical legal obstacles to health during pregnancy. To address the legal determinants of obstetric health, we must first identify and understand how they impact the pregnant population. This qualitative study of diverse, low-income pregnant individuals demonstrated most pregnant patients are not aware of their legal obstacles to health, even though most pregnant people in this sample faced significant medical-legal issues.

Obstetricians are uniquely poised to address the social determinants of health with the most hard-to-reach families during the perinatal period. Obstetricians could address the unique legal disparities that harm patients during pregnancy.

Poster #69: Optimizing Care for the Whole Person: An Intervention to Promote a Holistic Approach to Patient Care

Authors: Anna Shah, MD; Colleen Christmas, MD; Paul O'Rourke, MD, MPH

Team Institution: Johns Hopkins Bayview

Abstract Type: *Back to Bedside*

Background

While medicine was founded on relationships between physicians and patients, modern medicine has many barriers that prevent patient-centered care. One such barrier is the electronic health record (EHR). It often causes physicians to spend more time documenting clinical encounters and creating problem lists of diagnoses and clinical test results rather than learning about their patients and focusing on the patient as a unique human being. These documentation requirements may take time away from other activities, leading physicians to overlook social determinants of health and miss valuable opportunities to better understand the context of health in communities of people who may live in neighborhoods different from their own. These are the exact concepts that allow for deeper connections between physicians and their patients. These deep connections are what brought many to the medical profession, and they have been shown to mitigate burnout.

Objectives

To leverage the her to help physicians better connect with patients and tailor plans to individual patient goals; to restore joy in deep connections at the bedside; and to give physicians a systematic way of connecting with their patients holistically and checking to ensure treatment choices reflect overarching person-centered goals and values.

Methods

We created a "Whole Person Care" EHR Smartphrase that is inserted into the "Assessment and Plan" portion of primary care clinic notes to prompt discussion of each individual patient's goals, values, and determinants of health. This encourages physicians to discuss concepts with their patients to integrate health concerns into the overall well-being of individuals. It is purposefully included in the assessment and plan portion of clinical notes so physicians may easily reference and update it and to prompt tailoring the plan to these individualized factors.

Our study was implemented at the Johns Hopkins Bayview Internal Medicine Residency, in the outpatient primary care clinic. Objective data were gathered on how many times the Smartphrase was used in our three-month study period by resident physicians. Residents were surveyed asking about their perception of ease and usefulness of the Smartphrase and asked items from the Work and Meaning Inventory Scale one month prior to and one month after the study period.

Results/Outcomes/improvements

The study period is ongoing at the time of this submission, so our data are preliminary. Data from the initial half of our study period (from October 1-November 15) showed that the Whole Person Care Smartphrase was utilized 18 times. Pre-surveys were also completed by 50 percent of all internal medicine residents.

Significance/Implications/Relevance

As our post-surveys are yet to be conducted, we are unable to draw conclusions from their results at this time. The good uptake of our "Whole Person Care" Smartphrase suggests that the EHR may be utilized to prompt the deep connections that drive physician well-being and improve patient care.

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Poster #70: Meet Your Surgical Team (MYST): Building the Trainee-Patient Relationship through Improved Recognition of the Resident

Authors: Savannah Smith, MD; Nicole Petcka, MD; Brendan Lovasik, MD; Lori Little, MMSc, PA-C, PT; Amanda Dunn, PA; Johann Hinman, MPH, MCHES; Jahnavi Srinivasan, MD

Team Institution: Emory University

Abstract Type: *Back to Bedside*

Background

A significant barrier to a healthy trainee-patient relationship is lack of patient understanding regarding the roles of resident physicians. Studies show that early discussion of resident education, roles, and responsibilities is important for patient satisfaction, and that patients who expect resident involvement in their care have improved attitudes toward almost all aspects of resident participation. ACGME literature highlights the importance of educating patients on the role of each individual provider on the care team; however, there are limited currently established protocols that are aimed to optimize patients' understanding of and relationships with resident physicians and their essential functions on the surgical team.

Objectives

We sought to create a platform that fosters a stronger relationship between surgical resident physicians and patients through enhanced understanding and identification of team members and their respective roles. We called this platform Meet Your Surgical Team (MYST). We hypothesize that MYST will (1) enhance patient understanding of residents' roles, and (2) cultivate relationships between residents and patients that may increase meaning and joy in work among general surgery residents. Ultimately, our goal is to create an online platform that can be generalized to all specialties and easily reproduced at other institutions.

Methods

For the MYST platform, we first developed patient-oriented informational materials explaining the path to becoming an attending surgeon, as well as surgical resident responsibilities delineated by post-graduate year (PGY). We also created medical team posters to be distributed in patient rooms. These posters include a photograph, name, and title of the attending provider, advanced practice providers (APPs), and all residents on the surgical team. Medical team posters and informational handouts are distributed to patients on post-operative day 1. On the day of discharge, patients complete a brief online survey about understanding the role of residents and their opinion of having residents participate in their care.

Results/Outcomes/improvements

The MYST platform is being piloted on a surgical oncology service with two primary surgeons, a full-time inpatient APP, and three resident members at a large quaternary referral academic institution. A similar surgical oncology service with three primary surgeons, a full-time APP, and three resident members is being used as a control group. In this pilot study, we are analyzing the feasibility of the study design and comparing patients' knowledge of the surgical training process and attitude towards having surgical trainees involved in their care. Additionally, we are comparing satisfaction ratings to determine if this project can improve the patient experience.

While data collection is ongoing, we will soon have data on the ability to recall team member names, patient opinion of resident involvement, and satisfaction scores. Early data trends show good patient compliance and positive ratings towards resident involvement in care.

Significance/Implications/Relevance

The MYST platform allows for improved interaction and relationship between surgical resident physicians and patients in the inpatient setting. Our goals are to demonstrate the feasibility of implementation – highlighting that the MYST platform does not require significant time-input from APPs or residents on the team – and to show that brief, patient-oriented educational materials enhance patient knowledge regarding the roles and responsibilities of each PGY level surgical resident and the overall path to becoming a board-certified attending surgeon. Future work will focus on understanding the impact of MYST on the residents' perceptions regarding patient interactions and relationships, transitioning the platform to a fully electronic version, and expanding the platform across all surgical specialties at our institution.

Poster #71: WE-CARE: Cultural Awareness in Residents' Education

Authors: Amogh Nadkarni, MBBS; Yousra Khalid, MBBS; Prabina Ghimire, MBBS; Rukhsaar Khanam, MBBS; Audrey Lam, MD; James Kumar, MD, MS, FACP

Team Institution: Carle Foundation Hospital

Abstract Type: *Back to Bedside*

Background

Champaign County boasts a vibrant immigrant population, a mosaic of cultures from more than 76 countries worldwide, constituting approximately 10 percent of its residents. Embracing this diversity is pivotal, especially within our residency programs, prompting the need for our trainees to recognize their own cultural biases and learn to identify cultural factors that can affect our patient's health and access to health care. To address this, we propose integrating comprehensive socio-cultural history questionnaires in our internal medicine residency program's outpatient clinic. These go beyond traditional inquiries, exploring patients' social stressors, cultural heritage, language nuances, and health beliefs. This initiative aims to provide residents with a deep understanding of patients' multifaceted backgrounds. Complementing this approach are three resident-led cultural competency workshops held throughout the year. These dynamic forums focus on refining interviewing skills, interpreting non-verbal cues, using appropriate language, and mastering motivational interviewing. The dual objective is to elevate patient-physician interactions' quality and mitigate inherent sociocultural biases. This endeavor transcends cultural competence; it seeks to cultivate genuine connections, nurture empathy, and ensure equitable health care.

Objectives

Our social history questionnaire and resident-led workshop aim to improve physician interviewing skills (e.g., non-verbal cues, appropriate language, motivational interviewing skills) and minimize inherent social biases. Our long-term goal is to educate our physicians to provide a well-meaning relationship with the patient that builds trust, engages in shared decision-making that improves compliance, and ensures continuity in health care in the outpatient setting.

Methods

This 20-month initiative at our outpatient continuity clinic targets enhanced cultural competency among the PGY-1 internal medicine residents through two Plan-Do-Study-Act (PDSA) cycles. A focused social history questionnaire, covering stressors, literacy, language, health beliefs, and rituals, was developed. Incoming residents underwent OSCE [objective structured clinical examination] training and participated in six two-hour, resident-led workshops. Residents self-reflected through distributed questionnaires at months 0, 4, 8, and 12, also completing the Clinical Cultural Competency Questionnaire (CCCQ) to assess competence across six domains. Long-term evaluation involves comparing patient satisfaction scores among groups. Considering potential quantitative data limitations, a qualitative analysis will be incorporated in the near future. Purposeful sampling, semi-structured interviews, and thematic analysis will provide rich insights into residents' experiences and perceptions. Transcribed data will be coded, categorized, and themed for a nuanced exploration of project impact.

Results/Outcomes/Improvements

For preliminary analysis, self-reported outcomes on CCCQ across 10 participants of the first PDSA cycle were analyzed on IBM SPSS Ver. 26 using paired sample t-tests without significant differences across groups. Data is limited by study size and may be confounded by participant bias.

Significance/Implications/Relevance

Our project's overarching goal is to enhance cultural awareness among providers, fostering meaningful connections with patients on a sociocultural level. This vision aims to establish trusting relationships, improve compliance, and ensure continuity in outpatient care, emphasizing shared decision-making—an integral aspect of medical management. We advocate for the active promotion of cultural competency curricula across graduate medical education programs. Early exposure allows residents to engage in evidence-based yet culturally sensitive care. Developing these skills during training instills cultural competence as a habit and, ultimately, second nature, integrating it seamlessly into everyday practice. In our proposed cultural competency curriculum, we prioritize delving beyond social habits to identify cultural backgrounds, social stressors, language, and health beliefs. Special emphasis is placed on cultivating the ability, especially for primary care physicians, to recognize nonverbal cues and employ motivational interviewing techniques for patient benefit. Acknowledging and actively mitigating inherent sociocultural biases are pivotal aspects of this transformative approach to medical education.

Poster #72: Lending Empathetic Ears at Bedside: Residents' Perceptions on Improving Communication with Sound Amplifiers

Authors: Kripa Rajak, MD; Anupam Halder, MD; Iulia Kovalenko, MD; Konstantin Golybykh, MD; Diana Gavilanes, MD; Rabbiyah Riaz, MD; Seema Sharma Gautam, MD; Rabia Riasat, MD; Yi-Ju Chen, MD; Cream Carlos, MD; Jessica Cunningham, MD

Team Institution: University of Pittsburgh Medical Center

Abstract Type: *Back to Bedside*

Background

In the United States, more than 28 million adults face hearing loss, a prevalent issue, particularly among the elderly. Its occurrence rises with age, impacting approximately 37 percent of those aged 61-70, 60 percent of those between 71 and 80, and over 80 percent for individuals over 85. Communication challenges, stemming from factors like time constraints, language barriers, and cognitive impairments, contribute to this issue. About 70 percent of adults over 60 experience undiagnosed hearing difficulties, often overlooked in routine assessments. Hearing impairment not only leads to patient dissatisfaction but also increases stress among health care providers (HCPs), including residents, physicians, nurses, and therapists. This can result in increased time spent on electronic chart reviews rather than direct patient interaction. Addressing these challenges is crucial.

Objectives

To enhance resident-patient interactions and foster inclusivity in elderly patient care, we introduced residents to the Super Ear, a cost-effective sound amplifier. This device, akin to a stethoscope, aimed to improve communication experiences for residents working with patients above age 60, regardless of hearing status. Our primary goal was to assess how residents perceived their communication experiences before and after incorporating the Super Ear into their practice. Additionally, we aimed to encourage adoption of this device among other HCPs.

Methods

This was a prospective, before-and-after study involving 48 internal medicine residents at a tertiary care teaching hospital conducted between November 2022 and November 2023. Super Ear devices were procured from a grant funded by the ACGME and distributed among residents. A validated self-efficacy questionnaire (SE-12) in a 10-point Likert scale was employed among residents to evaluate the quality of communication before and after the intervention. Residents received educational sessions and monthly reminders about the device. Informative posters featuring the Super Ear device were displayed throughout the hospital to encourage other HCPs.

Results/Outcomes/improvements

Forty out of 48 residents taking part in pre- and post-intervention surveys perceived their communication quality with patients significantly improved from a mean Likert scale score of 5.25 ± 0.125 to 7.22 ± 0.140 across 12 items. Pre-intervention, 82 percent rated overall communication between 4 and 6, and 85 percent rated it between 7-10 post-intervention. Factors influencing improvement ($p < 0.05$) included issue identification, plan formulation, listening, thought expression, empathy, shared decision-making, conversation closure, use of non-verbal behavior, structured conversation, and problem exploration. However, patients' understanding and residents' ability to assess patient knowledge showed no improvement. Hospital device procurement rose to 121 and 178 units in the first and second quarters, respectively, but declined to 92 units in the third quarter. This decrease may be linked to staff turnover, particularly among travel nurses unaware of device availability.

Significance/Implications/Relevance

Our study showed significant improvement in residents' perception of communication with older adults with the use of sound amplifiers. This strategy and its successful implementation can serve as a model for other residency programs. It also can positively impact Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) scores by improving patient satisfaction. We are in the process of coordinating an electronic order system for Super Ear in collaboration with hospital administration.

Poster #73: Every Body, Every Time: Recognizing Implicit Bias and Amplifying Patient Voices**Authors:** Tayler McMurtrey, MD; Ju Young Kim, MD**Team Institution:** University of North Carolina Family Medicine**Abstract Type:** *Back to Bedside***Background**

The American media has informed the public's ideal body type and weight for decades. It is no secret that this bias has crept into health care, impacting our patient interactions and ultimately, patient health. Unfortunately, weight-based discrimination is often accepted as a societal norm. Implicit weight bias in health care negatively impacts care by triggering stress response pathways and alienating this patient population from seeking health care. It is the primary care physician who has largely been tasked with addressing weight and its effects on health, however, physicians in general are rarely taught to critically examine their approach to weight management. Despite the ubiquity of weight bias, few health care personnel report awareness of their biases and how these can impact patient health. It is imperative that primary care physicians are equipped with evidence-based approaches for weight management with consideration of how biases contribute to health outcomes and patient experience.

Objectives

Our mission is to change the paradigm of weight management by redirecting the spotlight to patient narratives from Body Mass Index (BMI) alone. Prior interventions on racial biases have shown focusing on individual narratives identifies and challenges biases in a constructive manner. By facilitating brief, impactful conversations about a patient's goals and perception of weight and health, we hope to aid physicians in identifying how weight biases can affect care. Additionally, by introducing a structured model, we hope to show that redirecting our focus on patient narratives rather than isolated tools like BMI is feasible within the confines of a busy clinic day. Our objectives are as follows: 1. Evaluate residents' implicit bias and how bias changes after focused education on weight management. 2. Evaluate residents' attitudes toward weight management before and after engaging in patient narratives. 3. Provide a structured approach to weight management, including patient-focused narratives and basic weight management didactics and clinical skills.

Methods

Family medicine residents were given two surveys, the validated Harvard IAT tool¹² and a survey (Provider attitude survey) adapted from the work of Foster et al. (2003) to evaluate bias and attitude toward weight and medical weight management respectively. Each participant had a unique identifier that allowed us to compare results over time while maintaining anonymity. The surveys were administered before and after engaging with patient narratives. Residents were also provided patient-provider discussion guides, information on weight bias and medical weight management through a series of in person lectures and reference materials created through partnership with the University of North Carolina weight management group. Additionally, residents were asked to fill out a short worksheet before and after a patient visit to identify any changes in residents' perceived barriers to weight management and patient goals to achieve a healthier weight.

Results/Outcomes/improvements

From the pre-intervention data, there were 15 unique survey responses (Harvard IAT and Foster et al.) and seven patient surveys from five unique respondents. Twelve of the respondents' results showed a bias towards individuals who are thin, two had no bias, and one had a bias towards individuals who were obese. Most respondents viewed obesity as a disease but perceptions toward efficacy of medical weight management on improving patient health varied. Many reported

discomfort with prescribing treatments for obesity, and these treatments were viewed to be as or less effective than organic diseases (diabetes, CAD, osteoporosis, etc.) but as or more effective than psychiatric disease (drug addiction, alcoholism, tobacco use). Within the narrative patient encounter surveys, resident physicians reported improved patient-provider relationships after addressing patients' weights. Data from post-patient encounters have not yet been collected; collection is planned for January of 2024.

Significance/Implications/Relevance

Weight bias, both implicit and explicit, is pervasive in health care and negatively impacts patient physical health and engagement with health care. Although primary care physicians are at the forefront of addressing weight and its consequences on health, little to no training is provided on practical weight management, nor is there an evaluation of provider weight bias and effects on patient health. In our current obesity epidemic, it is paramount that we take a step back and re-imagine our approach to weight management. Our initiative brings the focus back to the patient narrative in order to facilitate perspective-changing exercises that aid health care providers to critically examine how their weight bias can affect patient care.

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Poster #74: Harmony in Healing: An Arts-Based Medical Curriculum to Improve Resident Well-being and Skills Fundamental to the Patient-Physician Relationship

Authors: Madeleine Ward, MD; Joshua Tanzer, PhD; Julia Langley, MA, MBA; Sybil Cineas, MD; Suzanne McLaughlin, MD

Team Institution: Brown University

Abstract Type: *Back to Bedside*

Background

Exposure to humanities in medical education offers unique opportunities for physicians to develop skills of critical analysis, observation, and communication. Medical students engaged in the humanities have fostered enhanced professionalism, increased humanistic view of patients, and reduced burnout/stress. To date, there does not appear to be a longitudinal medical residency arts-based curriculum that focuses both on engagement with patients and development of skills fundamental to the patient-physician relationship.

Objectives

This project created a two-year curriculum for medical residents that allows them to obtain new knowledge that will enhance their physician-patient relationship and personal growth in a low-stakes, and rejuvenating art-based environment. We hypothesized that the program would: 1. reduce burnout and improve resilience/happiness, 2. provide residents with time to interact with patients on a humanistic level, and 3. enhance skills of communication, observation, and bias as related to the patient-physician relationship.

Methods

A two-year curriculum was implemented for 15 Brown internal medicine (IM) residents consisting of: 1. didactic sessions using art to teach skills of observation, communication, and bias; and 2. patient-centered art sessions. We completed an assessment of inspiration using average scores on the Brief Resilience Scale and Subjective Happiness Scale. We compared scores to a control group consisting of IM residents on their general wards month. Generalized linear mixed effects modeling was used to estimate the rate of change in average inspiration scores for each group, standardized to be interpreted as a correlation coefficient (β).

Additionally, Cohen's $d(\Delta)$ was used to test the difference in differences from baseline (t_0 , August 2022) to two follow-up occasions (t_1 , February 2023; and t_2 , May 2023) between intervention and control groups. Also, participants completed open-ended survey questions asking 1. One thing learned, and 2. One thing we can apply to our careers.

Results/Outcomes/improvements

Internal consistency reliability was estimated for the combined score operationalizing inspiration and was within acceptable research limits ($\rho_{xx} = 0.82$, 95% CI [0.70, 0.91]). Inspiration scores decreased significantly for the waitlist control group over the school year ($\beta = -0.11$, 95% CI [-0.17, -0.05]), but not for the intervention group ($\beta = 0.03$ [-0.04, 0.10]). This resulted in difference in differences that were large and positive ($\Delta_{t1} = 0.92$, $\Delta_{t2} = 1.28$; both, $p = 0.004$), indicating a positive inspiration score for the intervention group and the role of the intervention in preventing burnout. Open-ended survey questions are undergoing qualitative analysis and have thus far noted themes, including: how to embrace ambiguity; recognizing/acknowledging our implicit biases; intentionality in word choice; and how to practice mindfulness.

Significance/Implications/Relevance

In conclusion, this track offers residents the opportunity to explore topics fundamental to their role as physicians and the humanistic side of medicine. It offers a safe, mindful space for residents to

promote professional growth. The data illustrates the role of the intervention in preventing burnout, and thematic data shows promise in the curriculum providing dedicated time for IM residents to pause and reflect on how they are interacting with their patients and learn about barriers to their communication. Overall, this project has created a new innovative curriculum with clear, pertinent learning objectives that will be developed into a curriculum portfolio to be shared with other residency programs. This curriculum is relevant to all fields of medicine and can be implemented feasibly at other residency programs.

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Poster #75: Shared Music Experiences during Bedside Neurosurgical Procedures: A Pilot Study on Fostering Patient-Clinician Alliance through Music

Authors: Collin M. Labak, MD; Michael D. Shost, BS; Michael J. Mann, BS; Mandy X. Wong, BS; Eric Z. Herring, MD; Martha Sajatovic, MD; S. Alan Hoffer, MD

Team Institution: University Hospitals Cleveland Medical Center

Abstract Type: *Back to Bedside*

Background

Bedside procedures represent a substantial proportion of the neurological surgery resident's responsibilities, with a minimum completion of 90 bedside procedures to graduate from residency. These procedures are generally completed in the neurologic intensive care unit, in the emergency department, or on the surgical ward, with local analgesia and conscious sedation being the primary anesthetic options available. Music therapy is an affordable and widely accessible intervention aimed at stress and pain reduction. Although this intervention has classically been employed for the benefit of the patient, there is evidence in support of its positive effects on health care workers as well. Given this, we aim to study a novel intervention, shared music experiences (SMEs), during neurosurgical bedside procedures, to assess how SMEs might better foster patient-clinician alliance and enhance the experience of patients undergoing neurosurgical bedside procedures.

Objectives

We aim to examine the impact of: 1. longitudinally-delivered SMEs' impact on resident perceptions of the strength of relationship residents feel with their patients; and 2. patients' perceptions of relationship with their provider before and after one SME. We also aim to explore association between the number of SME exposures on residents' sense of patient-clinician alliance and whether baseline demographic characteristics of residents and of patients might predict SME-related improvements in patient-clinician alliance.

Methods

This is a single-center prospective pilot study with nested design. First, neurological surgery residents from an academic tertiary care center were enrolled. Baseline demographic data and sense of patient-clinician relationship were collected as measured by the Scale to Assess Therapeutic Relationship-Clinician version (STAR-C). Then, patients undergoing non-emergent bedside procedures were enrolled to partake in an SME, which is a novel intervention that allows the resident and patient involved in the bedside procedure to discuss and select music to be played during the procedure. Primary endpoints include change in neurological surgery residents' sense of patient-clinician relationship between beginning and conclusion of patient enrollment, as well as patients' change in therapeutic alliance with their provider pre- and post-SME, as measured by the modified Agnew Relationship Measure. Secondary endpoints include narrative feedback from residents and patients regarding their attitudes toward the SME.

Results/Outcomes/improvements

Twelve out of 14 (85.7%) of eligible neurological surgery residents were enrolled, ranging from Post-Graduate Year-1 to Post-Graduate Year-5. Baseline number of bedside procedures performed ranged from <10 (8.3%) to >150 (41.7%). Five out of 12 (41.7%) residents enrolled play a musical instrument, while eight out of 12 residents (66.7%) view music as either somewhat or very important in their lives. Residents completed the baseline STAR-C. Mean total score was 39.1 out of a total of 48 possible points. Mean score in the "positive collaboration" domain was 19 out of 24; mean "emotional difficulties" score was 2.4 out of 12; and mean "positive clinician input" domain score was 10.5 out of 12. Patient enrollment is still active at this time.

Significance/Implications/Relevance

The SME is a novel intervention created and employed to further foster the patient-clinician relationship during bedside procedures. This intervention requires few resources and is applicable across various medical specialties that perform bedside procedures in the emergency department, on the medical wards, and in the intensive care settings.

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Poster #76: 3-Dimensional Printing to Create Personalized Lung Cancer Model for Patient Education Prior to Resection

Authors: Donald Chang, MD, PhD; Ikenna Okereke, MD

Team Institution: Henry Ford Hospital

Abstract Type: *Back to Bedside*

Background

Since the 1980s, 3-D printing has emerged as a promising platform to help patients understand their planned surgery. However, most 3-D printing studies in lung cancer have focused on the utilization of the models to assist in pre-operative planning. To-date, only one study exploring the patient experience of using customized 3-D models has been reported. This small study of 20 patients observed that Stage 1 lung cancer patients who were provided a 3-D model (n=10) scored higher on a questionnaire assessing their understanding of the informed consent process compared to those who did not receive a 3-D model (n=10). Despite these promising results, the uptake of 3-D printing within the clinical setting has been slow due to multiple reasons (e.g., labor-intensive process, software versus physician backgrounds). We propose creating customized 3-D printed models of a patient's lung anatomy and tumor to assist in pre-operative discussion, patient education, and facilitating informed consent.

Objectives

Our primary aim will be to assess patient satisfaction and understanding of their surgical procedure. We hypothesize that providing patients with a 3-D model will result in higher patient satisfaction and improved understanding of their surgical procedure compared to patients who do not receive a 3-D model.

Methods

We will use each patient's pre-operative computed tomography (CT) scan to create a detailed model of each patient's lung anatomy and tumor. Our proposed study is a prospective cohort study. Demographic information will include capture tumor characteristics including but not limited to anatomical location of the lesion cancer stage and final pathology. Pre-operative and post-operative informed consent understanding will be assessed through a questionnaire.

Results/Outcomes/improvements

We have demonstrated a significant difference in patient satisfaction, understanding, and self-reported improvement in overall consent and education with their surgical journey.

Significance/Implications/Relevance

Our project demonstrates the important value and meaningful utilization of personalized 3-D printed models in helping patients understand their surgical procedure and clinical journey. By demonstrating this in lung cancer, our project has implications in being applied to other surgical oncology pathologies or even being extrapolated to any complex disease process that involves deeper anatomy understanding.

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Poster #77: Decreasing Complications for Complex Appendicitis and Fostering Trainee-Patient Relationships: The Appy Buddy Quality Improvement Initiative

Authors: Kristine Griffin, MD; Wendy Jo Svetanoff, MD, MPH; Brian Kenney, MD, MPH

Team Institution: Nationwide Children's Hospital

Abstract Type: *Back to Bedside*

Background

At Nationwide Children's Hospital (NCH), we have an ongoing quality improvement project to decrease adverse events for patients with complex appendicitis. These patients are at increased risk of post-operative abscess, need for IR drainage procedures, readmission, and reoperation. Over the past 12 months, we have had 3.24 adverse events per 10 patients with complex appendicitis at NCH and we believe there is room for improvement. Our aim is to decrease the rate of adverse events for patients with complex appendicitis from 22.45 percent to 20 percent by July 31, 2024, and sustain for six months. We have various interventions underway to decrease our adverse events, including encouraging early ambulation to expedite return of bowel function and hopefully decrease overall adverse events. We developed the Appy Buddy initiative to improve the quality of these patients' care while hospitalized in an effort to decrease adverse events, and to involve busy surgical residents and fellows more intimately in their care.

Objectives

The Appy Buddy Initiative is an optional incentive program offered to post-operative patients admitted with complex appendicitis. Therapeutic pillows with a cartoon character with stars printed on them are given to participating patients, which can be colored in with provided markers. The pillows are used as an incentive program to highlight milestones in patients' post-operative care and reward early ambulation. Residents, fellows, and APNs discuss patients' milestones on AM rounds. Team members are also welcome to sign words of encouragement onto the pillows. Additionally, patients may use the pillows for bracing against their incisions when they cough or get out of bed.

Methods

Experience surveys are dispersed to patients and families at time of discharge to assess their experience with the program. Data are collected and reviewed on a monthly basis. Longitudinal analysis will be conducted to assess for changes in adverse events.

Results/Outcomes/improvements

No results are available for this project yet, as it is in the beginning stages of rollout.

Significance/Implications/Relevance

We hope this post-operative incentive program can be mirrored in other surgical populations in our hospital and for pediatric surgical groups at other institutions. In the future, it could be used as a part of ERAS protocols for special post-operative patient groups.