2021 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 was the country's best resident advocate. He is greatly missed.

As the ACGME developed its duty hours standards and moved to a competency-based method of evaluating residents, Dr. Dunn always kept the impact on the resident at the forefront.

He had a deep respect for the role of the Review Committees in strengthening the formation of residents, and kept the Review Committees and the ACGME on task to improve the quality of life for residents.

Colleagues and friends across the country contacted the ACGME with their own memories of Dr. Dunn. 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 ACGME's poster sessions 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 competencies and duty hours requirements. The ACGME is honored to name this poster hall in his memory.

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Poster# 1: Health Equity Certificate Program: A Pilot Curriculum

Team: Kimberly Montez, MD, MPH, Maya Angelou Center for Health Equity; Sarah Langdon, MPH, MCHES; Kristen Hairston, MD; Brenda Latham-Sadler, MD; Allison Caban-Holt, PhD; Allison Mathews, PhD; Nancy Denizard-Thompson, MD, Wake Forest School of Medicine

Background
Medical schools across the United States are increasingly interested in curricula incorporating the social determinants of health, including structural racism and implicit bias, to promote health equity. In the midst of protests and public conversations surrounding the effects of structural and institutional racism in the United States, the Wake Forest School of Medicine (WFSM) chapter of the Student National Medical Association expressed their concerns with support of the larger student body, that they felt, "underprepared to serve our future communities due to gaps in our medical education on race." Students from across WFSM educational programs have requested additional training around the social determinants of health and community engagement to better prepare them for future practice. While several curricula are described in the literature, few incorporate a multidisciplinary team of faculty and learners across departments and schools, spanning all training levels.

Objectives
The objectives of this ongoing pilot curriculum are to: (1) Improve knowledge regarding health disparities, health policy, social determinants of health, and the care of underserved and historically marginalized populations, and (2) Engage participants in the planning and development of effective solutions in conjunction with community partners to address health inequities presented in the curriculum. Participants will be prepared to integrate an understanding of the social, cultural, and other non-medical factors that influence health outcomes into their professional work.

Methods
The authors of the study obtained grant funding and developed a longitudinal Health Equity Certificate Program with eleven educational modules consisting of readings, activities, and an hour-long synchronous discussion session related to the module. The eleven modules include: (1) Community Plunge, (2) Social Determinants of Health, (3) Culturally Effective Care, (4) Special Populations, (5) Food Insecurity, (6) Housing/Built Environment, (7) Transportation, (8) Educational Disparities, (9) Social Isolation, (10) Health Equity in Research, (11) Advocacy and Leadership. The Health Equity Certificate program was offered for the first year in 2020-2021 to medical students, physician assistant students, biomedical and nursing graduate students, and medical residents and fellows who were part of the entire health system.

Results/Outcomes/Improvements
Ten participants were recruited for the pilot (2020-2021), including seven medical students, one physician assistant student, and two medical residents; one participant was male. Among the cohort, students identified as Asian (4), Black/African American (2), White Non-Hispanic/Latinx (2), Hispanic/Latinx (1), and Multiracial (1). To date one education module was started, the Community Plunge, consisting of a guided tour of the community, highlighting needs and assets. Feedback from that session indicated students gained a better understanding of assets and challenges in the community, particularly regarding food insecurity and housing conditions. The following measures will be tracked as the program is ongoing: attendance; satisfaction with

each module; change in knowledge, attitudes, skills, and practices; participant satisfaction via surveys for each module and qualitatively; durables, such as reflections, projects, and scholarly products; number of community partners engaged.

Significance/Implications/Relevance

We expect that the Health Equity Certificate Program will provide educational and professional opportunities and strategies for mitigating structural racism and systemic oppression in medicine and research to learners from a diverse variety of learners across the health system. It is also expected that the participants completing the program will be better prepared to competently provide care for, and conduct research in partnership with, a racially and ethnically diverse patient population. We look forward to promoting community-engaged approaches in conjunction with community partners to address health inequities. Ultimately, we anticipate that the Health Equity Certificate Program will engender an institutional culture change in dismantling racism and discrimination in healthcare and research, for which our students hunger, in order to promote health equity.

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Poster# 2: Improving Trainee Applicant Evaluations to Reduce Unconscious Bias

Team: Melissa Langhan, MD, MHS; Michael Goldman, MD; Gunjan Tiyyagura, MD, MHS, Yale University School of Medicine

Background
Medical trainees applying for residency or fellowship positions are often scored on a variety of traits by faculty members with information gleaned from both written applications and interviews. However, there are no universal evaluation tools for the assessment of applicants and traditional numeric rating scales may be influenced by unconscious biases. Since only a small number of faculty typically provide ratings for each individual applicant, rater effects such a leniency (consistently rating above the midpoint), severity (consistently rating well below the midpoint), halo effect (allowing general impressions to influence rating of specific qualities) and restriction of range (only using part of a scale) from one individual may significantly impact summative ratings and position on a rank list.

Objectives
Assessment of the numeric rating scale used in our fellowship applicant evaluation process demonstrated rater effects such as restriction of range and leniency bias. Our objective was to create a new tool with descriptive anchors to more objectively assess fellowship applicants and reduce rater effects.

Methods
The original assessment tool consisted of 10 simple categories (eg. leadership capacity, teaching ability), each of which was rated on a 9-point numeric scale. In year one, each category was evaluated, redundant categories were collapsed, and subjective categories where there would be little to no data in a standard application or interview with which to rate were removed. Seven categories remained. Each trait being evaluated was rewritten to include descriptions of the trait being assessed with a 6-point rating scale using descriptive anchors and qualifiers. Applicants were rated by 6 faculty members. Data from the original tool in 2018 was compared to the new tool used in 2019. Scores were evaluated for normality of distribution and skewness as an indication of rater effects, which may indicate potential bias.

Results/Outcomes/Improvements
There were 36 applicants evaluated in with the numeric scale in 2018 and 37 applicants evaluated with the anchored scale in 2019. Gender, primary resident program, and type of medical training were similar between the 2 groups. The median score on the numeric scale was 8 out of 9; scores <5 were used in less than 1% of all evaluations. On the anchored scale, the median score was 4 out of 6. For six of the 7 traits evaluated, all six scores on the rating scale were used. For the remaining trait, 5 out of 6 scores on the rating scale were used. Summative scores from 6 of the 10 categories in the original evaluation showed moderate skewness (range -.52 to -.98) and 3 categories were highly skewed (range -1.1 to -2.7). Only 1 of the 7 categories in the new evaluation showed mild skewness (-.52), and none were highly skewed.

Significance/Implications/Relevance

Despite a similar range of scores used in both scales, we were able to normalize the distribution of data, eliminate restriction of range effect, and reduce outliers in our evaluation tool by replacing a standard numeric scale with descriptive anchors. During year two, further modifications of the scales will be made to improve consistency between raters with hopes to further remove bias from the evaluation process.

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Poster# 3: Identifying and Prioritizing the Evidence that GME is an Asset to the Health Care System - System & GME Leaders Perceptions

Team: Deborah Simpson, MA, PhD, Advocate Aurora Health & MCW / UWSMPH; Jill Patton, DO, Advocate Lutheran General Hospital; Tricia La Fratta, MBA; David Hamel, MD, Aurora Health Care - AAH; Roxanne Smith, MD, MPH, Advocate Christ Medical Center - AAH; Colleen Nichols, MD; Wilhelm Lehmann, MD, Aurora Health Care - AAH; Joanna Lewis, MD, Advocate Children's Hospital - AAH; Leah Delfinado, MD, Advocate Illinois Masonic Medical Center - AAH; Michael Malone, MD, Aurora Sinai Medical Center - AAH; Mary Joyce Turner, RHIA, MJ; Thomas Hansen, MD, MBA, MS, Advocate Aurora Health; Jacob Bidwell, MD, Aurora Health Care - AAH

Background
Numerous sources from the ACGME (1) to the literature (2) highlight the need to align sponsoring institution's (SI) and GME's goals and strategic priorities. For example, the common program requirements (1) emphasize that "…the program is expected to define its specific program aims consistent with the overall mission of its Sponsoring Institution, the needs of the community it serves..." Yet there is limited guidance regarding how to identify those alignments and the supporting evidence to demonstrate GME's contribution/value to the SI's mission(s).

Objectives
To use a stepwise key stakeholder (SI & GME leaders) driven evaluation approach to identify the value GME programs to the SI and associated evidence of that value.

Methods
SI leaders (via structured interviews) and GME leaders (via GMEC meetings) identified perceived values and associated evidence in response to three questions: a) What do you highlight when advocating for the value of our GME Programs? b) What do you wish others knew re: GME's value? and c) What evidence supports GME's value? SI leaders included C-Suite (CEO, COO, CFO, DNO), clinical (CMOs), and administrative (legal, QI). GME Leaders included program directors (PDs) attending Winter 2020 GMECs who discussed then recorded their dyad/triad responses to the questions. Interviewer field notes and GME leaders recorded responses were analyzed iteratively to identify value themes and associated supporting evidence. A GME leaders workgroup reviewed the final themes (member check), then prioritized the evidence by theme as high impact and feasibility to track over time. (3)

Results/Outcomes/Improvements
Respondents: 93% of invited SI leaders (29/31) and GME leaders representing 22 programs. Strong agreement within and between all leader groups on how GME adds value and what wish others knew regarding GME's value to SI including: 1) Pipeline for physician workforce; 2) Promoting a culture of continuous learning = high reliability organization; 3) Enhancing reputation/prestige of the system; and 4) Community/professional expectations. Evidence includes quantitative metrics, benchmarked to a standard (eg, pipeline: retention relative to external recruitment; culture: teaching site engagement scores; GME related clinics engagement scores community: diversity of GME matriculates/graduates; QI projects = Community Needs Assessment) and qualitative data including 1-minute elevator-like exemplars (eg, culture: GME driven innovations, how learners "teach" their teams). Strategies to feasibly

obtain this qualitative data include updates during GMEC meetings and a shared repository by theme.

Significance/Implications/Relevance

Through a systematic key stakeholder driven evaluation process we identified what key stakeholders' values about GME and the associated measures to provide guideposts for clear messaging in all communications. Evidence of GME's value to our SI includes traditional metrics (pipeline). Identification of additional themes such as our role in promoting learning within our organization (essential for high reliability organizations) and our value in meeting community/professional expectations consistent with SI missions and the communities we serve provides new areas for GME locally and nationally to demonstrate our value.

(1) ACGME Common Program Requirements. Effective July 1, 2019. Accessed 9.29.2020. https://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/CPRResidency2019.pdf (2) Gupta R, Sehgal N, Arora VM. Aligning delivery system and training missions in academic medical centers to promote high-value care. Academic Medicine. 2019 Sep 1;94(9):1289-92. (3) Balmer DF, Riddle JM, Simpson D. Program Evaluation: Getting Started and Standards. J Grad Med Educ. 2020;12(3):345-6.

Poster# 4: Strategies for Optimizing Fit Testing for Residents and the Evolving Role of the Program Coordinator

Team: Vini Vijayan, MD, FAAP, FIDSA; Athena Gonzalez, AA; Deann Ramirez, MEd; Jolie Limon, MD, FAAP, Valley Children's Healthcare

Background

Under the Occupational Safety and Health Administration (OSHA) standard (29 CFR 1910.134), employers are required to provide protection for medical residents against respiratory hazards, within the educational and health care institution. The 2019 Novel Coronavirus (COVID-19) has caused shortages of personal protective equipment (PPE) and the affected the ability for timely respiratory fit testing of resident physicians.

Due to the lack of precedent regarding GME operations with respect to respiratory fit testing during a pandemic, it became incumbent on the program coordinators at our institution to develop procedures to ensure access and appropriate utilization of PPE for residents, especially considering the multiple changes in types/brands of PPE utilized by our institution as the pandemic evolved.

Objectives

The objective of this study was to report evolution of respiratory fit testing procedures for residents and visiting learners at our institution during the COVID-19 pandemic.

Methods

The study was conducted at Valley Children's Healthcare (VCH), a 330-bed children's hospital in Madera, California that serves as the main pediatric training facility for 19 residency programs across the Central Valley. Residents are required to have an annual fit test and are tested primarily with 3M brand 1860, 1860S and 1870 N95 respirators. All testing was in compliance with OSHA standards. Visiting learners are required to be fit tested at their home institution and had access to our institutional supply of PPE. We maintain a centralized record of compliance.

In July 2020, shortages in the type and brand of masks forced VCH to change PPE brands to maintain adequate resources and supply. This required all hospital employees and residents to undergo fit testing for the new brand of masks. Due to inordinate challenges on employee health, our institution hired outside vendors to perform just-in-time (JIT) fit testing. We worked with employee health to prioritize testing for learner

Results/Outcomes/Improvements

38 residents and 109 visiting learners required fit testing with the new N95 respirators. Male residents were advised to be clean shaven prior to testing. Prior to the pandemic, 92% residents passed fit testing with 3M brand respirators. Of the 3 males that failed fit testing; 2 passed upon shaving.

With the new brand of N95 respirators, only 89% residents passed JIT fit testing. The respirators provided a successful fit in 85% males and 88% females. Of the 11% that failed, all passed upon repeat testing with 3M respirators. Visitors were provided the new respirators to take to their home institutions to undergo fit testing and were required to produce results within 10 days. We encountered challenges in providing masks to home institutions and obtaining medical clearance for JIT for those learners who were unable to return home for testing.

Ultimately, 100% of our residents and 68% of visiting learners were tested within 2 weeks of change in inventory of masks.

Significance/Implications/Relevance

We created an operational plan to implement JIT fit testing for all residents and nearly 70% of visiting learners at our institution. 11% of residents failed fit testing with the change to a new brand of N95 masks, prompting coordinators to ensure a supply of 3M masks were available for these residents.

We met with multiple logistical challenges in optimizing JIT including obtaining medical clearance for visiting learners, communication with home institutions and provision of masks to visitors and their institutions. These challenges should be considered when implementing a respiratory protection program for learners especially considering changes in the N95 respirator supply chain. Establishment of clear protocols specific to program coordinators may help overcome operational challenges encountered during a public health emergency response. It is crucial that coordinators develop an understanding of protocols for fit testing to keep pace with the rapid changes during the pandemic

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Poster# 5: The Big Picture: Reaping the Benefits of a Combined Inter-Hospital Annual PGY1 Retreat

Team: Lay Kok Tan, MBBS, MRCOG, MMED (O&G), FRCOG; Swee Han Lim, MBBS, FRCSEd (A&E), FRCP Edin, FAMS; Joseph Li, BSc; Hak Koon Tan, MBBS, MRCOG, MMED (O&G), FRCOG, FAMS, SingHealth

Background

PGY1 (House Officer) year is the most crucial and challenging transition from being a student with no direct responsibility to a neophyte physician with full participation in patient care. PGY1s usually spend 4 months in any one clinical posting, in one hospital, before rotating to another clinical posting in a different hospital. Such a chequered sequence makes reviewing the PGY1 programme challenging and of limited utility.
This is particularly so in addressing the specific issues identified during a SWOT Analysis (Strength, Weakness, Opportunities and Threats) of the PGY1 Programme, following:
1.Duty hours
2.Difficulty applying knowledge to clinical practice
3.Wellness of PGY1s during training

Objectives

We organized the first combined PGY1 annual retreat day on a Saturday in 2019. We gathered 78 Faculty and PGY1 Representatives of 12 departments from the 4 hospitals under SingHealth Sponsoring Institute where we aimed to share good initiatives and practices to encourage departments to follow suit.
Even amid COVID pandemic in 2020, we organized our second combined PGY1 annual retreat day on a Saturday as a Zoom webinar. We had 77 Faculty, Nurse Representatives and PGY1 Representatives of 12 departments from the 4 hospitals under SingHealth Sponsoring Institute to come together again for the same objective of sharing good initiatives and practices to encourage departments to follow suit.

Methods

We developed a multi-pronged approach to address the above issues identified, allowing sharing, reflection, critique and debate among participants:
Highlights of the 2 retreats were:
1.General Surgery - implementations to improve duty hours
2.Internal Medicine – Implementation of a weekend course (Project HOPE) to orientate PGY1s in basic skills and difficult clinical scenarios
3.OBGYN – Using online audio-visual modules on common clinical conditions and procedures
4.Promotion of PGY1s' Wellness:
a. "Bear with Me" pin to identify new PGY1s and provide additional support during their 1st month of a new posting
b. TRACS (Trauma Recover and Corporate Services) to provide anonymous free-of-charge counselling service for PGY1s experiencing emotional difficulty
c.BLUES– a counselling service by near-peers for distressed PGY1s
5.Paediatrics – "One Text Away' Initiative – to increase reliance on text messages for relaying non-urgent clinical matters to improve PGY1s' PTT

Results/Outcomes/Improvements

Through sharing, some initiatives eg “Bear with Me” pin were adopted universally. Others were inspired to employ similar measures to improve communication skills and clinical knowledge. Feedback following the retreat was unanimously positive, with many constructive suggestions for future improvements and a strong demand for such retreats to be conducted annually.

Significance/Implications/Relevance

The annual retreat initiative demonstrated clearly the benefits of collaboration among PGY1 programmes through sharing of ideas and results, eschewing the previous structure which effectively allowed each hospital to work in silos.

1.Collaboration
2.Not working in silos
3.Culture of sharing

The collective positive benefits of coming together and the promotion of a culture of sharing is greater than the sum of individual programmes.

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Poster# 6: Female Representation Within Orthopedic Leadership: Where Are We Now?

Team: Andrew Bi, MD; Nina Fisher, MD; Kenneth Egol, MD; Mara Karamitopoulos, MD, NYU Langone

Background
While medical schools have gradually become more balanced with respect to gender, females remain significantly underrepresented within orthopedic surgery. Females compose 14% of orthopedic surgery residents, and there are currently only 5.8% practicing female orthopedic surgeons.

Objectives
The purpose of this study was to quantify female leadership within the orthopedic community, and determine what, if any, factors are prevalent within female leaders.

Methods
Orthopedic surgery residency programs were obtained from the Accreditation Council for Graduate Medical Education website and cross-referenced with the Electronic Residency Application Services, identifying 161 residency programs for the 2018-2019 cycle. All data was collected in January 2020 to best control for changes in leadership. Demographic and academic information were collected from public websites. For geographic analysis, the United States was divided into five regions according to the U.S. Census Bureau, and training locations were categorized as appropriate. Univariate analysis was performed using SPSS.

Results/Outcomes/Improvements
Among 161 orthopedic residency programs, 18 (11.2%) had female program directors. Females were relatively well-distributed by region, with the highest concentration in the Midwest (16.7%), and the most common sub-specialty was tumor (33.3%). Seven (39%) females stayed at the same institution as medical school, significantly more than the 20 (14%) male program directors. Eleven (61%) females remained at the same institution as residency compared to 60 (41%) of males. Females had less years in practice compared to males, but similar number of years in the current position. With respect to orthopedic chairs, three (2%) had female chairs. None of these females stayed at the same institution as medical school or residency, compared to 11% and 22% of males, respectively. While female chairs had been in practice for relatively similar length of time as their male counterparts, female chairs had been in the position for significantly shorter period of time.

Significance/Implications/Relevance
Female representation within orthopedic leadership remains overwhelmingly male dominated. While there is limited opportunity to increase female representation within these roles given slow turnover, it is nonetheless essential to work towards a more diverse leadership in the coming years.

Poster# 7: GME-Led Continuous Assessment of Burnout and Learning Environment to Improve Residents' Wellbeing

Team: Dotun Ogunyemi, MD; Ali Ghassan Darwish, MD; Gregory Young, MBA; Erica Cyr, C-TAGME; Carol Lee, MD, FACEP, FAAEM, FAME; Sarkis Arabian, DO; Kedar Challakere, MD; Tommy Lee, MD; Shirley Wong, DO; Niren Raval, DO, Arrowhead Regional Medical Center

Background
Promoting residents' wellbeing and decreasing burnout is a focus of Graduate Medical Education (GME). Studies on institutional assessments and outcomes are needed.

Objectives
We report on a longitudinal wellbeing assessment of all GME residents and associations with individual and institutional factors.

Methods
From November 2017 to December 2019, 271 GME residents were assessed at 5 points by Maslach Burnout Inventory (MBI); Connor Davidson Resilience Scale; program and demographic factors. Institutional initiatives included resilience training; administrative, recruitment and workflow interventions; personal health care support; wellness events, and curricular modifications.

Results/Outcomes/Improvements
MBI parameters improved over time in all GME but the trend was only statistically significant for emotional exhaustion (from 28.12 to 24.35 ($p=0.03$, Krusal-Wallis $=0.04$).One GME program had significantly desirable trends for all 3 MBI factors.Regression analysis showed that residents who perceived more autonomy had desirable MBI parameters, whereas residents who perceived impaired personal relations, self-defined burnout, and no back-up support had more undesirable MBI parameters.Resilience scores were independently significantly associated with decreasing depersonalization scores and emotional exhaustion but increasing personal accomplishment.Female compared to male residents had significantly higher emotional exhaustion scores (27.11 vs. 24.45, $p=0.002$).Married residents had more desirable MBI scores (emotional exhaustion: 24.29 vs. 27.93; $p<0.001$) and were more resilient (32.61 vs. 31.17, $p=0.017$).Parents compared to others were less emotionally exhausted (24.23 vs. 28.13, $p=0.016$).

Significance/Implications/Relevance
Learning environment factors and resilience were predictive of burnout and wellbeing. Residents that thrived best were married, had children with a suggestion of gender disparity.

Poster# 8: Lights, Camera, Action! Using Microscope Cameras and Videoconferencing for Graduate Medical Education: Virtual Microscopy and the COVID-19 Pandemic

Team: Robert Christian, MD, MS; Mandy VanSandt, DO, Oregon Health & Science University

Background
The COVID-19 pandemic has forced educational programs, including pathology, towards a physically distanced learning environment. For years the traditional light microscope has been a mainstay of pathology education for trainees, clinicians, and the broader GME community. Yet in the pre-COVID state the light microscope was not amenable to physical-distancing. However, the discipline of pathology is poised to quickly respond to the restrictions of the current pandemic by utilizing technology currently on hand in many academic pathology departments. In conjunction with videoconferencing software, a light-microscope-mounted digital camera offers a readily available, physically distanced, and cost-conscious platform that not only continues graduate medical education (GME) within the pathology department, but also extends pathology education offerings to the greater GME and hospital learning communities.

Objectives
The aim of this study is to share the experience of establishing a dynamic virtual microscopy platform utilizing readily available technology within the pathology department of a major academic medical center in response to the COVID-19 pandemic. The impact of using this virtual experience is compared and contrasted to the traditional light microscopy platform.

Methods
A virtual microscopy experience was created for 31 academic pathology faculty using a standard light microscope, a microscope-mounted digital camera, and video conferencing software. The slide image, captured by the camera, projects to the user's computer monitor using the associated camera software. The slide image displaying on the monitor is then virtually shared with the learner through a videoconferencing platform by employing the "share screen" feature. Pathology faculty converted to this virtual platform for GME teaching in the form of daily case review with pathology trainees, didactics, and consensus conferences. Furthermore, use of the virtual microscopy platform was extended for use in various departmental and interdepartmental conferences, including tumor boards, teaching conferences, pathology-radiology correlation conferences, and real-time clinicopathologic consultations.

Results/Outcomes/Improvements
Of the 31 academic pathology faculty in our group, 100% switched from traditional light microscopy to the virtual microscopy platform for one or more educational purposes. In total, thirty-two previously in-person conferences were replaced with virtual microscopy, including 12 tumor boards, 10 consensus conferences, 8 interdepartmental teaching conferences, and 3 intradepartmental teaching conferences. Attendance at many conferences has increased with use of this technology and the virtual platform has been found to offer additional educational benefits. These include the ability to annotate on screen in real-time, the ability to view clinical records simultaneously with the microscopy using two monitors, and a better learner experience when able to take notes during the educational session. Despite these benefits, technological

barriers to effective education exist in the form of lag time with image movement, problems focusing, image quality, and a narrow field of view.

Significance/Implications/Relevance

The field of pathology is a cornerstone of GME. Although little research exists on the use of such a system as an educational tool, the development of a virtual microscopy platform was critical for pathology education to continue in spite of the COVID-19 pandemic. An additional benefit is that the virtual platform eliminates the physical barrier separating clinicians and non-pathology learners from accessing and readily attending pathology conferences. Utilizing the virtual platform, the clinical trainees and faculty can more easily review slides with a pathologist which further enhances clinicopathologic correlations of their individual patients. Despite all of these benefits, the educational experience can be hindered if the system is not optimized for dynamic viewing or if the users are not amenable to transitioning away from the traditional light microscopy system.

Poster# 9: Physicians and Families' Perception Towards Hand Hygiene in Regards to Coronavirus Disease (COVID-19) Infection Prevention

Team: Manasik Hassan, MD, Hamad Medical Corporation (HMC)/SIDRA medicine; Samar Magboul, MD; Abeer Mohamed, MD; Mohammed Al-Nahar, MD; Ahmed Khalil, MD, Hamad Medical Corporation (HMC); Eman AL Maslamani, MD, SIDRA medicine

Background
Since Coronavirus Disease 2019 (COVID-19) infection has been considered as a pandemic by the World Health Organization (WHO) in February 2019[1], many health care organizations and facilities have extended their efforts to conduct studies about preventing its transmission among the general population and health care providers.

Objectives
Our aim is to study the perception of parents and doctor to hand hygiene in preventing the transmission of COVID-19 infection

Methods
A total of 209 participants were enrolled and were asked to fill a paper-based survey during April 2019 in hamad medical corporation , Qatar. The number of participants were 50 doctors, 40 nurses, 18 other health-allied staff and 50 of patients' parents. Different educational levels ranging from people not completing high school to others who finished high education and living status taken into consideration assessing the number of household living with each participant.

Results/Outcomes/Improvements
After assessing the general knowledge of the participants for hand hygiene, it found that 84% of the parents believe that they know what does that mean, compared to 100% of doctors (p value 0.002). Only 52% of the parents are doing hand hygiene according to the 5 moments of hand hygiene requirement, after handshakes and opening doors or touching any surface and after coming back home, compared to 72% of the participated doctors (0.036). 82% of the parents' beliefs that proper hand hygiene would prevent transmission of COVID-19 infection compared to 90% of doctors [p value 0.05]
78% of parents stated that they have learned about hand hygiene in prevention to CoVID-19 from circulating social media and awareness posts with less number in doctors of 38%.
The majority of the parents (58%) and the doctors (68%) believe that repeated hand washing with soap and water would be more effective in protecting hands from COVID-19 infection than using other methods.

Significance/Implications/Relevance
Significance: The study demonstrates the perception and attitudes among health-care workers and the general population towards hand hygiene in relation to COVID-19 infection.
In our survey we found the data contributes a clearer understanding of the impact of social media in spreading and enhancing the awareness among the general population about learning and implementing proper preventive measures, specifically the hand hygiene, towards the spread of COVID-19 infection.
Implication: Social media is having a great impact on the general population awareness towards preventing the spread of COVID-19 infection. Future plan is to ameliorate efforts in using social

media in order to ensure that the proper and correct measures are received by the general population towards the prevention of the spread of COVID-19 infection.

Kratzel A, Todt D, V'kovski P, Steiner S, Gultrom M, Thao TTN, et al. Inactivation of severe acute respiratory syndrome coronavirus 2 by WHO-recommended hand rub formulations and alcohols. Emerg Infect Dis. 2020 Jul [date cited]. https://doi.org/10.3201/eid2607.200915external icon Siddharta A, Pfaender S, Vielle NJ, Dijkman R, et al. Virucidal activity of World Health Organization recommended formulations against enveloped viruses include Zika, Ebola, and emerging Coronaviruses. J Infect Dis. 2017 CDC Core Practices for Infection Prevention in All Healthcare Settings (2017).

Poster# 10: Increasing Diversity and Inclusion in Graduate Medical Education through Mentorship

Team: Lorene Cudjoe, Marian University College of Osteopathic Medicine; Laurel Fick, MD, FACP, Ascension St Vincent Indianapolis

Background
Increased awareness of the effects of systemic racism in America has caused institutions to reflect on the ways their systems play a part in perpetuating racism. Medical education is, unfortunately, no exception. Physicians in the US do not represent the racial or ethnic makeup of the population, which can further worsen healthcare disparities. Studies show that patients who are racial/ethnic minorities who have a physician of the same background are less likely to delay seeking medical attention when needed and are overall more satisfied with their care (Traylor, Ana H., et al. 793). This further proves the need for initiatives designed to increase the number of physicians who identify as a racial/ethnic minority such as mentorship, which is lacking amongst minority medical students.

Objectives
In July 2020, Ascension St. Vincent Indianapolis partnered with Region Five (Indiana, Michigan, and Ohio) of the Student National Medical Association to mentor fourth year medical students, who identify as racial/ethnic minorities, with their residency application process. Through this initiative, mentors hoped to increase the number of racial/ethnic minority students who successfully match into chosen residency specialties.

Methods
This was a three-part program: virtual Match Q&A session with program directors, faculty, and chief residents, personalized application feedback, and individual virtual mock interviews. Twenty-two students signed up for participation in all or some of the offerings via an electronic link emailed by the regional SNMA leadership. After the virtual Match Q&A session took place, attending or resident volunteer mentors were paired with mentees based on specialty and/or personal requests to review and provide feedback on personal statements, CVs, and/or give 1:1 advising. Another pairing for virtual mock interviews was completed with different and non-program director volunteer mentors. After both the Q&A session and the mentorship program, a survey was sent out to assess the program's effectiveness.

Results/Outcomes/Improvements
All student respondents believed that the virtual Match Q&A session was both relevant and helpful (100%, n=5). When asked about the logistics of the virtual Match Q&A session, all students stated that overall, they were satisfied (100%, n=5). Regarding personalized application feedback from mentors, all students found the 1:1 advising to be beneficial (100%, n=2), and the majority of students also stated that it was beneficial having their CV and personal statements reviewed (80%, n=5; 83%, n=6). Regarding the virtual mock interviews, all students found it to be very beneficial (100%; n=4). Finally, when asked about having this program recur, all mentors indicated that they would return as a volunteer for next year's program (100%, n=6), and most students would recommend this program to future fourth year medical students (85.7%, n=7). Due to the ongoing nature of the project, survey responses are still being submitted.

Significance/Implications/Relevance

By providing intentional mentorship, we hope to increase the Match success rates for medical students who identify as a racial/ethnic minority. In doing so, we aim to help create a physician workforce that more closely resembles the community it serves. We plan to track the Match rates of those who participated and received mentorship to assess the success of our program. This initiative was purely voluntary for mentors and largely took place after normal business hours. As such, this program is free, sustainable and generalizable across all programs and regions.

Traylor, Ana H., et al. “The Predictors of Patient-Physician Race and Ethnic Concordance: A Medical Facility Fixed-Effects Approach.” Health Services Research, vol. 45, no. 3, 10 June 2010, pp. 792–805., doi:10.1111/j.1475-6773.2010.01086.x.

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Poster# 11: Interactive Near-Peer Teaching: Preliminary Results of Ongoing Curricular Changes in an Internal Medicine Residency Program

Team: Francisco Jose Reis Ferreira de Lima, MD; Lucas Battel, MD; Hafsa Gurdogan, MD; Regina Makdissi, MD; Alysia Kwiatkowski, DO, MS; Jennifer Meka, PhD, University at Buffalo

Background
Achieving competence in ambulatory topics is essential for internal medicine residents. Near-peer teaching improves learner satisfaction, knowledge acquisition and may be used in the development of residents as educators. The role of near-peer interactive learning models as a primary means of outpatient medicine curriculum implementation has not been well elucidated.

Objectives
The major aim of this study is to determine whether the use of supervised interactive near-peer teaching, shifting content delivery to the learner, will result in improved resident engagement, satisfaction, knowledge acquisition, comfort, and increased skill development as educators. In this preliminary study, we present early data on the implementation of a near-peer teaching model in our residency program.

Methods
After obtaining informed consent, residents were divided into fixed groups of 6, and assigned 2 high-yield topics. Data was de-identified. Residents are responsible for creating a case presentation (PGY-1), a content-based portion (PGY-2), and a literature review to answer questions derived from the case (PGY-3). Residents employ interactive teaching techniques and complete pre and post American Board of Internal Medicine-Certification Exam style questions and surveys assessing comfort with diagnosis and treatment on a Likert scale. Attendees assess quality, engagement, and effectiveness. Satisfaction, self-evaluation as an educator, and comfort with literature interpretation will be assessed every 4 months. Knowledge retention will be determined by in-training examination scores. Correlation between subjective and objective measures and content retention will be investigated. A paired t-test was used for mean comparison and chi-square analyses for comparison of categorical variables.

Results/Outcomes/Improvements
Preliminary analyses included 105 pre and 95 post responses for 1 topic presented. There was a significant difference in pre and post-test mean scores, out of 5 questions (pre-test 2.77, SD 0.94; post-test 3.51, SD 0.88, $p<0.001$). A total of 9.2% of residents felt very comfortable with treatment pre-session, while in the post group that proportion was 35.8%; reaching significance, χ^2 20.95, $p < 0.001$. Further, 7.4% felt initially uncomfortable with treatment while none did post session, χ^2 7.32, $p=0.007$. Regarding diagnosis, 14.8% of residents felt initially very comfortable versus 33.7% in the post group, χ^2 9.97, $p=0.002$. Additionally, 4.6% felt uncomfortable with diagnosis initially, while none did on the post-survey, χ^2 4.51, $p=0.034$. Professionalism, teamwork, relevance, and session delivery were perceived to be excellent by 79.1%, 76.9%, 75.8%, and 69.2%. Finally, 74.7% and 67% perceived excellent employment of evidence-based medicine and engaging strategies, respectively.

Significance/Implications/Relevance
The improvement in objective testing and comfort with topic diagnosis/treatment, as shown in the preliminary analyses, supports the use of supervised interactive near-peer teaching as a

novel primary model for outpatient curriculum delivery. We believe that the continued study of this model will further reveal improved resident engagement, satisfaction, knowledge acquisition, retention, comfort, and increased skills as educators.

de Menezes, S., & Premnath, D.(2016). Near-peer education: a novel teaching program. International Journal of Medical Education, 7, 160

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Poster# 12: Development and Implementation of a Novel Hybrid Virtual/Socially Distanced Professional Transition Course for Incoming Residents

Team: Hillary Chappo, MHA; Marygrace Elson, MD, MME; Brooks Obr, MD, MME; Gerald Wickham, MA, EdD; Mark Wilson, MD, MPH, University of Iowa Hospitals and Clinics

Background
Transitional Professional Development (TPD) is a one-day introduction for incoming resident physicians to the University of Iowa Hospitals and Clinics (UIHC) Graduate Medical Education culture, important clinical and educational resources, and life in Iowa City. TPD includes a mixed format of lectures, case scenarios, group discussions, and team exercises. In prior years we hosted approximately 150 residents across three days in the University of Iowa football stadium Press Box. Due to the COVID-19 pandemic, accommodating 50-60 residents in-person each day in one space was no longer an option. Based on our own experiences with shifting interactive clinical and educational seminars to a video conferencing platform like Zoom, and our anticipation that these incoming residents were likely fatigued from interacting in isolation, the GME Office launched an ambitious attempt to couple Zoom-based instructional techniques with in-person small group problem-solving challenges.

Objectives
1.Provide a transitional opportunity for ongoing professional growth and identity formation
2.Reinforce a foundational core of critical capabilities as a communicator, clinical educator, and reflective practitioner
3.Emphasize teaming, connectedness, and presence of multiple layers of support
4.Use authentic clinical challenges/opportunities to develop greater insights
5.Foster collegial connection through a hybridized instructional format

Methods
Residents were assigned to attend in-person one of three TPD dates. The GME Office reserved large conference rooms across UIHC and the Carver College of Medicine that had video conferencing technology. To comply with COVID-19 safety guidelines and maintain a small group atmosphere, no more than 9 residents across specialties were assigned to a conference room. Each room had a faculty facilitator who attended a preparation session beforehand. The Zoom meeting was hosted by Drs. Wilson and Wickham. This allowed content to be delivered to all participants and facilitated discussion across conference rooms. Content areas were driven by key intern transitions, including essential healthcare provider, team performance, tolerance for uncertainty, and humble curiosity. The delivery format included large group discussion across conference rooms, small group in-room discussion, contemporary and novel case scenarios, and reflective exercises.

Results/Outcomes/Improvements
155 of 156 incoming UIHC residents (99.4%) attended TPD. Topic areas included clinical educator development, teaming, patient-initiated identity-based harassment, well-being, and professional identity formation. Approximately 125 minutes (41.7%) of content was delivered via Zoom instruction and discussion, 140 minutes (47.7%) in small groups, and 30 minutes (10%) were breaks. Based on evaluation data, 77% of attendees would recommend the TPD experience as “Excellent” or “Very Good”, 22% percent rated it as “Satisfactory”. Top identified strengths of TPD included interactive small groups (36%), high-yield relevant topics (18%), and

case scenarios (6%). Top new insights included identity-based harassment (41%), clinical coaching (21%), teaming (9%), and growth mindset (8%). Personnel required to effectively conduct these sessions included 16 small-group faculty facilitators, 3 GME Office personnel to deliver Zoom content, 3 GME Office personnel to manage room logistics, and 2 IT experts.

Significance/Implications/Relevance

Agility and creativity in finding solutions to a hybridized approach to Transitional Professional Development is not only feasible, it is a highly motivational experience for the planners/instructors. Moreover, dedicating the personnel, resources, time, and effort to conducting TPD in a hybridized format was achievable and highly valued by the incoming residents. Small group interactive activities with engaging case scenarios fostered rich discussion and connection with their peers. Choosing topics to address by considering prioritized transitional behaviors helped us focus on maximizing impact of our limited time and permitted opportunities to tie into concurrent societal challenges. All participants completed a structured reflection exercise to identify professional capabilities for growth over the next six months. Residents appreciated the opportunity to safely interact and build relationships in-person rather than having the experience shifted completely to virtual communication.

Poster# 13: An Emic Approach to Wellbeing Curricular Development for GME Trainees

Team: Uma Anand, PhD, LP; Cynthia Stonnington, MD, Mayo Clinic

Background
Graduate medical education (GME) wellness programs typically utilize conventional strategies such as mindfulness rather than emic-based programming, i.e., based on an understanding of trainee needs within each program.

Objectives
Perceived challenges and coping tools used by trainees, as well as perceptions of wellbeing and stress were examined. Responses to prescheduled resiliency workshops were also examined simultaneously. The objective was to use this as a first step towards building future resiliency programming from an emic perspective.

Methods
From a cohort of trainees who signed up to participate in optional wellbeing workshops in GME programs at Mayo Clinic, anonymous responses to the following measures were obtained prior to the delivery of workshop content: World Health Organization–5 Well-being Index (WHO-5), 10-item Cohen Perceived Stress Scale (PSS-10), and Resident Perceptions Scale (open ended survey of challenges and coping)

Results/Outcomes/Improvements
Fifty seven trainees (out of a total of 76) participated. Seven programs were represented. On the Resident Perceptions scale, challenges that were more commonly reported by this sample were: work life integration, outside-work situational factors, and internal emotional factors. Reported coping styles fell into 5 themes: tactical solutions, social/leisure solutions, focus on physical health, introspective strategies, and inaction. The most commonly reported coping style was tactical solutions. The least reported was introspective/cognitive tools. Majority indicated a desire for more tools to cope with stress. Most rated the workshops as relevant and felt confident about using the tools.
On the WHO-5, the average score was 62.4. Scores of 50 or below are considered as being indicative of depression. 8.8 % of trainees were found to report scores suggestive of depression. On the PSS-10, 19 % of respondents reported scores of 20 or higher, which placed them in the high stress category.

Significance/Implications/Relevance
That the average reported perceptions of wellbeing and stress were not indicative of a group struggling with high stress, despite the reported perceived challenges is indicative a group that is really trying to face and meet the rigors of residency training. Given the variation in perceived levels of stress and wellbeing, using an emic approach to build programming may add value to current approaches. That few reported use of internal coping mechanisms, interventions drawing from cognitive therapy may enhance programming for this particular group of trainees. Future directions include validation of the resident perception scale for use in designing individualized wellness programming.

Poster# 14: Finding Meaning in Medicine: Pediatric Residents' Perspectives on Humanism in Medicine

Team: Helen Pu, MD, Santa Clara Valley Medical Center; Laura Bachrach, MD; Rebecca Blankenburg, MD, MPH, Stanford University

Background
Humanistic characteristics degrade over the course of medical education as physicians suffer from high rates of burnout and depression. Few studies have explored residents' perspectives on humanism, which could influence how humanism interventions are created, implemented, and evaluated.

Objectives
This study aims to explore residents' perspectives on the components of humanism and its role in graduate medical education. It also aims to describe a modified professional identity formation framework for a better understanding of humanism identity formation during residency.

Methods
We conducted an exploratory qualitative study from November 2018 to February 2019 with seven resident focus groups at Lucile Packard Children's Hospital. Data were collected and analyzed by two investigators using thematic analysis with the goal of developing a model for residents' perspectives on humanism. Content analysis was performed for one question which asked participants to rank the most important terms in their humanism definition. We performed member checks where participants reviewed and commented on the accuracy of the themes.

Results/Outcomes/Improvements
32 pediatric residents participated (18- PGY1, 12 -PGY2, 2 -PGY3). Five themes emerged:1) Residents feel that humanism is a central part of their practice and training. 2) Empathy, respect and compassion are core components of humanism. 3) Each resident has a unique definition of humanism derived from personal experience. 4) Residents felt that the terms excellence and resilience (Gold Foundation IECARES model) did not agree with their own definitions. 5) The work demands, structure, and culture of residency are often in direct conflict with promoting humanism in residents. We found that the professional identity formation and socialization conceptual model proposed by Cruess et al. 2015 describes the complexity of humanism identity formation. Based on residents' perspectives the model was altered to include increased emphasis on the impact of the healthcare system and unconscious acquisition on humanism formation in residency.

Significance/Implications/Relevance
Residents believe that humanism is an intrinsic part of practicing medicine and should be reinforced during residency training. Cruess' professional identity and socialization model acts as a tool for a better understanding of the complexity of humanism in residency. Through this framework we can create a more holistic humanism curriculum to address the continuing epidemic of physician burnout.

Cruess RL, Cruess SR, Boudreau JD, Snell L, Steinert Y. A schematic representation of the professional identity formation and socialization of medical students and residents: a guide for medical educators. Acad Med. 2015;90(6):718-725. doi:10.1097/ACM.0000000000000700

Poster# 15: Creation of a Pediatric Residency Research Program to Improve Resident Participation in Scholarship

Team: Adeline Yang, MD, University of Texas Southwestern Medical Center, Children's Medical Center Dallas; Cori Lewis, MD, Kids First Pediatrics; Mackenzie Frost, MD, Children's Hospital of Philadelphia

Background
Scholarly activity and education in residency is an ACGME requirement and AAP Committee on Pediatric Research recommendation, yet numerous barriers to resident scholarship are consistently reported in the literature. In the 2015 AAP Annual Survey of Graduating Residents, residents rated their perceived ability to meet ACGME requirements of locating, appraising, and assimilating scientific studies as among the lowest, and 60% reported feeling “least prepared” for using QI methods and implementing changes with the goal of practice improvement. Prior studies in internal medicine and Canada have noted the benefits of implementing a formal resident research program at their respective institutions. There remains substantial opportunity for improvement in US pediatric resident research programs and scholarly productivity.

Objectives
1. Conduct faculty and resident needs assessments to identify barriers for research in pediatric residency.
2. Prioritize and address areas of need.

Methods
The primary vehicles for data collection were online surveys. Both resident and faculty surveys were conducted in two parts: an initial pilot to test question validity and adequacy, followed by a systematic roll-out. The resident pilot included a series of focus groups; their feedback also drove the development of databases for past resident scholarly works and current open faculty projects. The faculty survey was subsequently refined to focus on mentorship commitments and mentors’ expectations of residents. Surveys occurred between 2019-2020.

Results/Outcomes/Improvements
Sixty four (59%) of 109 residents completed the survey. Among respondents, 46 (72%) reported research was an important part of residency, and 32 (50%) felt learning and doing research should receive greater emphasis in our curricula. Eleven (17%) had presented or published work done during residency. Barriers included navigating IRB (74%, n= 25 out of 34 who had attempted it), networking outside our hospital (74%, n= 23 of 31), finding funding (73%, n= 11 of 15), time management (69%, n= 37 of 54), inadequacy of research resources like guides or examples of prior residents’ works (69%, n= 22 of 32), and knowing faculty expectations (48%, n= 23 of 48).
Nineteen faculty from 15 pediatric divisions completed the survey. Faculty felt the following information was important when discussing research projects with residents: project description, IRB status, resident authorship level and scholarly product type, mentor time commitment, anticipated resident work hours, and learning goals.

Significance/Implications/Relevance
Scholarly activity is recognized as an important component of residency by both accrediting bodies and residents, though challenges remain in the details of implementation and achieving

desired outcomes. Results from our surveys contributed to the creation of a centralized website for all resident research activities, including: a directory of potential research mentors, resident-friendly journals and conferences, a database of prior residents' scholarly work (including mentors, citations and presentations) and a database of currently available research projects including mentor information and expectations.

Next steps include expanding the number of divisions participating in the projects database, developing guides to address common research process questions, expanding our research curricula, establishing timelines for key project milestones, and evaluating the impact of these new processes as well as any changes to the quantity and quality of resident scholarly works.

Pound, C. M., Moreau, K. A., Ward, N., Eady, K., & Writer, H. (2015). Enhancing pediatric residents' scholar role: the development of a scholarly activity guidance and evaluation program. Medical education online, 20(1), 27452.

Rothberg, M. B., Kleppel, R., Friderici, J. L., & Hinchey, K. (2014). Implementing a resident research program to overcome barriers to resident research. Academic Medicine, 89(8), 1133-1139.

Roth, D. E., Chan, M. K., & Vohra, S. (2006). Initial successes and challenges in the development of a pediatric resident research curriculum. The Journal of pediatrics, 149(2), 149-150.

Kupferman, F. E., & Rapaport, S. (2013). A model for improving scholarly activity for pediatrics residents. Journal of graduate medical education, 5(4), 708-708.

Vinci, R. J., Bauchner, H., Finkelstein, J., Newby, P. K., Muret-Wagstaff, S., & Lovejoy, F. H. (2009). Research during pediatric residency training: outcome of a senior resident block rotation. Pediatrics, 124(4), 1126-1134.

Schumacher, D. J., & Frintner, M. P. (2016). Graduating Resident Preparation for Select ACGME Reporting Competencies. Academic Pediatrics, 16(6), e3.

Poster# 16: The Role of Leadership, Meaning, Irrational Beliefs, and Psychological Capital in Resident Wellness: Results from the HCA Nationwide Resident Wellness Study

Team: Gregory Guldner, MD, MS, University of California Riverside; Jason Siegel, PhD; Brendon Ellis, MA; Anne Brafford, JD, MA; Gabriella Riazi, Claremont Graduate University

Background

Disclaimer: This research was supported (in whole or in part) by HCA Healthcare and/or an HCA Healthcare affiliated entity. The views expressed in this publication represent those of the authors and do not necessarily represent the official views of HCA Healthcare or any of its affiliated entities.

In our first HCA longitudinal study, we showed that positive psychology associated constructs of meaning, social support, leadership style, and psychological capital (hope, self-efficacy, resilience, and optimism) had strong relationships with resident burnout, engagement, and depression. If replicated these predictors could provide excellent targets for evidence-based interventions to improve the epidemic of workplace burnout and depression. Given the recent increased interest in the role that impostor syndrome and irrational beliefs play in resident well-being, we added these constructs as predictor variables.

Objectives

Our overall objective is to develop and assess evidence-based interventions for resident wellness that are applicable to all specialties and institutions. Prior to investing in large-scale potentially costly interventions, we sought to replicate the findings of our first longitudinal study to increase confidence in the pattern of relationships. We sought to examine the relationships between meaning, leadership style, psychological capital, and irrational beliefs with validated measures of well-being. To ensure the model was not vulnerable to different surveys of burnout, engagement, and depression, we chose different validated measures of these constructs for this replication study.

Methods

As part of a longitudinal nationwide well-being study residents at multiple institutions and in varied specialties completed previously validated measures of meaningful work (Work & Meaning Inventory), supervisor support for autonomy (PAS-Work Climate Inventory), psychological capital (PCQ), impostorism (Impostorism Scale), mindset (Growth Mindset Scale), and irrational beliefs (Belief Scale). Outcome measures included burnout (Professional Fulfillment Burnout Subscale), depression (PHQ-9), engagement (Professional Fulfillment Engagement Subscale), and expectations for help-seeking behavior. Participants anonymously completed three waves of surveys with self-created identifiers to link subjects across waves. Structural equation modeling and path analysis were used to explore the relationships between predictor and outcome variables.

Results/Outcomes/Improvements

579 residents completed wave one (July 2019), 398 completed wave two (October 2019), and 371 completed wave three (January 2020). 189 residents responded to at least two waves. Rates of burnout ranged from 19% at the beginning of residency to a height of 48% during PGY2. Approximately 1 in 5 residents scored in a depressed range with 7% of residents in the “moderately severe” to “severe” range. The degree of depression was inversely related to the

likelihood of seeking help, moderated by a belief that help-seeking would not lead to help. Supervisor support for autonomy moderated both burnout and depression over time; irrational beliefs moderated burnout and engagement, and meaningful work moderated engagement. Note that cross-sectional findings differed from our repeated measures, showing the importance of longitudinal research designs. Variables that correlate with simultaneously measured levels of outcome variables on cross-sectional studies may not predict changes over time.

Significance/Implications/Relevance

Meaning and a supportive-autonomy leadership style again predicted depression, burnout, and engagement in the cross-sectional models. PsyCap predicted engagement. In longitudinal modeling, supervisor support for autonomy was not only predictive but protective against the onset of burnout and depression. Impostorism predicted increased burnout and decreased engagement both cross-sectionally and over time. These results replicate the relationships we found in our first study and expand the role of impostor syndrome. This replicated multi-institutional model suggests several evidence-based interventions: 1) Teach faculty and senior residents supportive-autonomy leadership; 2) Deliberately emphasize and magnify meaning; 3) Build and support psychological capital; 4) Assess and Intervene early on imposter syndrome; 5) Lower barriers to help-seeking in depression by improving the expectations of help-seeking behavior - residents must believe help-seeking will result in actual help.

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Poster# 17: Adapting a GME Consultation and Handoff Communication Bootcamp for Tele-simulation Post Covid-19

Team: Keme Carter, MD; Jeremy Podczerwinski; Latassa Love, MS; Anita Blanchard, MD; Vineet Arora, MD, MAPP; Shannon Martin, MD, MS, University of Chicago Pritzker School of Medicine; Megham Twiss, MAT, MDIV, MA Social Service Administration, University of Chicago Medicine

Background
Communication breakdowns in healthcare pose a risk to patient safety. [1] Consultation and handoff communication occur commonly but training remains variable. [2] The ACGME asserts that residents must be prepared to communicate as members of an interprofessional team and practice structured care transitions to optimize patient safety. [3] We previously described the successful development and implementation of an in-person bootcamp that taught consultation and handoff best practices, and allowed incoming interns to practice and receive real-time feedback on these skills. [4] [2] The COVID-19 pandemic has influenced all areas of medical education, necessitating the shift from in-person to virtual educational formats. [5] Tele-simulation can be employed to mitigate gaps in education and ensure trainees still gain knowledge of and practice with consultation and handoff communication with rigorous evaluation of performance and opportunities for skills-based feedback.

Objectives
Our innovation aimed to 1) convert our in-person consultation and handoff bootcamp to a tele-simulation experience for incoming interns and 2) evaluate the effectiveness of the virtual vs. in-person format.

Methods
During the June 2020 institution-wide GME intern orientation, 130 interns from 12 residency programs at the University of Chicago participated in the consultation and handoff tele-simulation bootcamp. Similar to prior years, interns first received instruction from an online module on validated frameworks for consult and handoff communication, and reviewed 3 mock cases adapted for this training. Using Zoom, we created a 20-minute combined handoff/consultation experience to be observed and assessed by one faculty member. Due to this format, fewer faculty were required to be recruited. Faculty were trained to receive the handoff and consult, and to assess intern performance. GME staff served as proctors and provided virtual rooms in which interns called a consult for 1 of the 3 cases, completed a handoff for all 3 cases, and received performance feedback. Interns completed a post-bootcamp survey to assess experience quality and preparedness to practice consult and handoff communication.

Results/Outcomes/Improvements
After completion of the consultation tele-simulation, 97% of interns agreed or strongly agreed that they feel prepared to call consults compared to 92%-94% after in-person bootcamps in the four preceding years. After completion of the handoff tele-simulation, 97% agreed or strongly agreed that they feel prepared to conduct handoffs compared to 92%-96% in years prior. Interns maintained a high level of satisfaction with the performance feedback they received during the tele-simulation (99% satisfied or very satisfied) compared to prior years (98%-100% satisfied or very satisfied). After completing the tele-simulation, 98% of interns would recommend this

training for future interns (compared to 97%-98% in years prior) and 99% reported the technology ran smoothly. Z-scores were tabulated to send to program directors. There were no major differences in consultation and handoff performance compared to prior years. Performance in the exercises were moderately correlated $r=0.39$, $p<0.05$.

Significance/Implications/Relevance

Communication bootcamps have proven to be valuable strategies to provide large numbers of trainees with instruction and feedback on consultation and handoff communication. The COVID-19 pandemic has made the future of in-person training activities uncertain and prompted the development of a tele-simulation communication bootcamp experience that was well-received, effective, and comparable to the in-person experience of prior years. The tele-simulation format may have added benefits of providing more scheduling flexibility for GME orientation programming than the in-person training exercise. Future work will focus on long term knowledge retention and influence of consultation and handoff practice patterns during graduate medical education training.

[1] Sutcliffe KM, Lewton E, Rosenthal MM, "Communication failures: an insidious contributor to medical mishaps," Academic Medicine, vol. 79, no. 2, pp. 186-94, 2004 . [2] Martin S, Carter K, Hellerman N, Glick L, Ngooi S, Kachman M, Farnan J, Arora V, "The Consultation Observed Simulated Clinical Experience: Training, Assessment, and Feedback for Incoming Interns on Requesting Consultations," Academic Medicine, vol. 93, no. 12, pp. 1814-1820, 2018. [3] "ACGME Common Program Requirements (Residency)," February 2020. [Online]. Available: https://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/CPRResidency2020.pdf. [4] Gaffney S, Farnan J, Hirsch K, McGinty M, Arora V, "The Modified, Multi-patient Observed Simulated Handoff Experience (M-OSHE): Assessment and Feedback for Entering Residents on Handoff Performance," Journal of General Internal Medicine, vol. 31, no. 4, pp. 438-41, 2016. [5] Woolliscroft J, "Innovation in Response to the COVID-19 Pandemic Crisis," Academic Medicine, 2020.

Poster# 18: Family Medicine Urology Fellowship – Addressing the Needs of a Community

Team: Tochi Iroku-Malize, MD, MPH, MBA; Louis Kavoussi, MD, MBA, Northwell Health

Background
In 2014, the chairs of the departments of family medicine and urology for Northwell Health decided to create an innovative educational model to help fill the gap of needed urologic services. This model would emulate what had been done for orthopedics with the creation of a sports medicine fellowship.

Objectives
The objective was to create a fellowship training for family medicine graduates in advanced urology to allow them fill a clinical gap that had been observed within the system. The secondary objective was to allow a process for family medicine residents to partake in urology tracks.

Methods
We reviewed what the gap was for our health system and nationwide with the number of urologists available to provide this care to the population served. It was determined that there would be an advantage to having family medicine physicians participate in this training as they had been Curricula were reviewed from various sources:
- Accreditation Council for Graduate Medical Education (ACGME) Program requirements for graduate medical education in Urology
- American Academy of Family Medicine (AAFP) curriculum guidelines for Men's Health
- ZSOM Urology Residency curriculum
- ZSOM Family Medicine Department Urology rotation curriculum
- The University of North Carolina Andrology Fellowship curriculum
-Sexual Medicine Society of North America (SMSNA) Fellowship curriculum
and the final curriculum created for a 12 month period. Health system and academic resources were delineated and a formal application to the graduate medical education council (GMEC) was submitted and approve

Results/Outcomes/Improvements
The 2017-18 fellow completed his training and went on to practice in the at need region. The 2018-19 fellow secured a position out of state at a system that is looking to replicate this training program. The 2019-2020 fellow has a job in one of our region. For the 2020-2021 academic year we have taken in two fellows and a formal 12 week urology track for family medicine residents began in the 2018-2019 academic year resulting in applicants for the fellowship program.

Significance/Implications/Relevance
The 5 year journey to create a urology fellowship for family medicine residents has shown that we could address the need for someone with this special added training to help fill a gap within a certain region of our health system. It has also allowed for the family medicine residents currently in training to have a venue for added exposure to advanced urology with the hopes they can utilize these skills in their primary care practice or, should they desire, to obtain a fellowship in this new specialty.

This is a viable option for other sites to emulate in order to address their own workforce shortages and an option for family physicians to have an expanded scope of practice that helps care for communities in need.

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Poster# 19: Risk and Outcomes of COVID-19 in Patients with Asthma: A Meta-analysis

Team: Sharmi Biswas, MBBS, Weill Cornell Medicine; Azza Sarfraz, MBBS; Zouina Sarfraz; Freda Malanyaon, MD, MBA; Rupalakshmi Vijayan, MD; Ishita Gupta, MD; Uroosa Arif, MBBS; Marcos Sanchez-Gonzalez, MD, PhD; Tanya Roman, MD; Ivan Rodriguez, DO, PhD, Larkin Community Hospital

Background
In 2019, the outbreak of SARS-CoV-2 disease (COVID-19) emerged, and ultimately spread worldwide, being termed a pandemic by the World Health Organization on March 11, 2020. The respiratory disease related to COVID-19 can range from being asymptomatic to presenting as devastating ARDS and death. The elderly and individuals with comorbidities and immunocompromised states are at a higher risk. Asthma is an inflammatory spasm of the airways with ACE2 overexpression at the alveolar level. ACE2 and TMPRSS2 expression mediate SARS-CoV-2 infection of host lung cells and hence might increase disease susceptibility in asthmatics.

Objectives
While the current research focuses on finding a treatment option and developing a vaccine for the disease, we have yet to understand the natural history of COVID-19 completely. Various gaps lie in the outcomes of COVID-19, especially in relation to pre-existing chronic conditions like asthma, COPD, diabetes mellitus, hypertension, etc. We aim to study the outcomes of COVID-19 in patients of asthma in this systematic review and meta-analysis.

Methods
A literature review was done by searching databases Pubmed, WHO, clinicaltrials.gov, and Google Scholar, using keywords -COVID-19, SARS-CoV-2, coronavirus, asthma, and their combinations following the timeline of December 2019 to August 10, 2020. We included patients with asthma diagnosed with COVID-19 and excluded non-COVID-19 patients, pregnant patients, and patients with other diseases or comorbidities. Primary outcomes included mortality and ICU admissions of both groups. Additional outcomes included corticosteroid use, morbidity, need for ventilation, superimposed infection, lung function parameters. Based on the available data, we conducted a meta-analysis using RevMan 5.4 using a random-effects model and 95% confidence intervals.

Results/Outcomes/Improvements
Patients with and without asthma were compared for risk outcomes of mortality. For 677 COVID-19 patients with asthma and 3934 non-asthmatic COVID-19 patients we found that the risk of mortality would increase by 15% in the asthmatic group (RR=1.15, CI = 0.45 to 2.96). While there was limited heterogeneity among the studies (I^2 = 77%), we found an increased effect size of ICU admission among the asthmatic group (RR=1.59, CI= 0.69 to 3.63). Medications such as corticosteroid improve mortality and ICU admission rates. To assess for publication biases, a funnel plot was used and presented findings for select studies.

Significance/Implications/Relevance
Our results indicate that the number of COVID-19 cases in patients with asthma has been lower than those of the non-asthmatic group. COVID-19 patients with asthma were at increased risk of

mortality and ICU admission due to underlying factors or predisposition. Finally, corticosteroids are usually safe and may confer protection against the severity of COVID-19 infection.

Poster# 20: Diversity in the Resident Recruitment Process across Programs: A Longitudinal Analysis of Recruitment through Enrollment

Team: Susan Orrange, PhD; Bridget Forshee, MS; Alexandrea Bentham; Laurene Tumiel-Berhalter, PhD, University at Buffalo

Background
Minority representation across the medical profession has been historically low across the nation. Unfortunately, recent research indicates that the majority of the physician workforce still does not accurately represent the demographic composition of the United States population. To combat this discrepancy, additional effort has been placed on medical school minority recruitment, particularly within the last decade. In addition to medical school recruitment, enhancing diversity in the residency recruitment process is another key focus of medical schools around the country as schools work to attain a resident/fellow population that is similar to the racial and gender makeup of the United States.

Objectives
The research objectives of this project were twofold. The first objective was to assess institutional diversity efforts across race, ethnicity, and gender as related to stages of medical residency recruitment and final enrollment over time. An analysis of 2019 residency data was compared to an incomplete data set collected and analyzed in 2017 in an effort to ascertain changes in recruitment and acceptance rates for underrepresented minority (URM) groups. The second objective of this project was to compare local results to findings from state and national data in order to enhance future recruitment efforts and strategies.

Methods
Data was collected from the 49 residency and fellowship programs who participate in ERAS at a single institution. Data from the ERAS contained self-selected personal information for each applicant, including demographic information and application status, based on residency program. Supplemental enrollment information was supplied by each residency program, and aligned with respective cases from the ERAS database. The 2019 data analysis yielded a 100% rate from programs. All data was de-identified, and categorized into aggregate information about individuals who applied, were selected to interview, interviewed, were ranked by the program, and ultimately enrolled into residency and fellowship programs after the Match. Rates were compared by gender, race, underrepresented minority status, and rurality. Results were compared to state data as well as national data from the AAMC and ACGME.

Results/Outcomes/Improvements
In the analysis of the 2019 recruitment data, there were 24,882 de-identified applicants, 2,707 of these individuals were selected to interview, 2,097 were actually interviewed, 1,843 were ranked, and 228 were ultimately enrolled after matching to the institution. In 2017, the limited dataset suggested that there were a lower number of underrepresented minorities being invited to interview than had applied to programs at the institution. In 2019, the percentages across application stages were more consistent. This study found that over 10% of each application stage were underrepresented minorities. Interestingly, the institution also had higher percentages of white residents and fellows compared to national data. Additionally, an analysis of gender revealed that there were slightly fewer female applicants and enrollees at the

institution compared to the current national statistics, with a greater difference seen in the previous data set from 2017.

Significance/Implications/Relevance

Compared to other medical schools in the United States, this institution is slightly above average at recruiting and enrolling URM students. However, if the goal is to have a physician population that is similar to the racial makeup of the nation, a greater effort should be placed on recruiting and enrolling female and Black/African American applicants in all residency programs. The institution should also explore the finding that school as a whole enrolls a greater percentage of White residents when compared to the number of White applicants. Additional work is still needed to see more equitable representation for Black/African American and Hispanic/Latino populations, as well as for the additional underrepresented groups of American Indian-Alaskan Natives and Native Hawaiians. The goal of a more equitable medical workforce benefits all parties involved, including new and current residents and fellows, faculty, staff and patients.

Poster# 21: Leading Well: Anesthesiology Program Directors as Servant Leaders and Their Development of Resident Wellness Programs

Team: Amy DiLorenzo, PhD, University of Kentucky

Background
Anesthesiology residents are at significant risk of developing serious issues during training including burnout, depression, and substance abuse. Recent accreditation requirements mandate that these well-being issues be addressed by residency training programs. Program directors, as the leaders of residency programs, are charged with protecting the wellness of residents and leading wellness initiatives. The program director role can be well-described in a servant leadership construct because they are charged with caring for the individual needs of their residents.

Objectives
The purpose of this study was to explore the current state of emerging initiatives aimed at enhancing and supporting the wellness of anesthesiology residents and to investigate how anesthesiology program directors perceive themselves as servant leaders in the context of supporting these wellness initiatives. The overarching research question this study sought to answer is, How do program directors perceive themselves as servant leaders in the context of supporting anesthesiology resident wellness initiatives? Three supporting research questions guided the study: (1) What are the top five challenges to wellness faced by anesthesiology residents as reported by their program directors? (2) What common components of wellness initiatives in anesthesiology residencies currently exist? (3) What barriers to current wellness initiatives do anesthesiology program directors identify?

Methods
The study utilized the mixed-methods sequential explanatory design model. The first phase of the research gathered quantitative data via a survey administered to all anesthesiology program directors in the USA. The survey included questions related to program directors' perception of anesthesiology resident wellness issues, wellness initiatives present at their own institution, barriers that program directors perceive in being able to provide wellness initiatives, and self-perceptions of their own servant leadership characteristics informed by the 62-item Servant Leadership Profile-Revised (SLP-R). The second phase of the research involved collection of qualitative data through phone interviews with anesthesiology program directors. The qualitative data were used to clarify and enhance the results of the quantitative data analysis.

Results/Outcomes/Improvements
Of 151 surveys distributed, 72 were returned, representing a 48% response rate. Fifteen program directors completed a semi-structured phone interview. The most frequent response to the survey question regarding challenges to resident wellness (n = 20) concerned issues related to unrealistic expectations by residents. Additional barriers included clinical responsibilities coupled with other professional demands (n = 18), long hours and a demanding call schedule (n = 18), lack of resources to support mental, emotional, and physical health (n = 8), and systems issues (n = 6).
The most frequently cited wellness initiatives were lectures provided to residents on wellness topics (n = 28), modifications to resident schedules to allow wellness or academic days (n = 26),

resident social events to support wellness (n = 24), wellness courses (n = 20), and supportive faculty mentors (n = 20).
Respondents strongly identified with all aspects of servant leadership as measured by the SLP-R.

Significance/Implications/Relevance
Anesthesiology residency program directors identify intensely with servant leadership characteristics and also utilize servant leadership principles in their work with residents. Program directors draw upon these characteristics in order to inspire learners and faculty, persevere in the face of systems and culture issues, and move the needle of wellness by developing and empowering the residents.

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Poster# 22: The Evaluation of Synchronous Online Interactive Learning as a Means to Enhance Acquisition and Retention of Musculoskeletal Knowledge Among Medicine Residents During a Global Pandemic

Team: Dawid Czarny, MD; Aakanksha Khanna, MD; Gregory Gudleski, PhD; Brian Quigley, PhD; Alysia Kwiatkowski, DO MS, University at Buffalo

Background
Amid the COVID-19 pandemic, the Internal Medicine (IM) residents at the University at Buffalo had their in-classroom didactics transitioned to an online format. The program utilized a synchronous interactive online learning approach using the Zoom© platform to ensure continuity in education.

Objectives
The primary aim of this study is to determine whether utilizing a synchronous interactive online learning approach with the Zoom© platform can enhance training for IM residents, specifically in diagnosing and treating musculoskeletal (MSK) conditions.

Methods
Informed consent was obtained. Pre-session surveys assessed comfort with treating and diagnosing MSK conditions and attitudes towards in-classroom vs. online learning. Pre-tests consisted of 5 American Board of Internal Medicine-Certification Examination© (ABIM-CE) style questions. Residents joined the synchronous interactive online session, which consisted of an attending rheumatologist using the Zoom© platform. Live question polls, text-chats, and audio/video features were utilized. A post-session survey re-assessing comfort and attitudes was administered, as was a similar 5 question post-test. Comfort was measured on a 5-point Likert scale (1: not comfortable to 5: very comfortable). Satisfaction with the session, ease of attendance and participation were also measured. For data analysis, independent samples t-tests and chi-square analyses were used for pre and post comparisons.

Results/Outcomes/Improvements
A group of 37 and 22 residents completed the pre and post-survey/test, respectively. Post-intervention residents felt more comfortable than pre-intervention residents at diagnosing ($M = 3.77 \pm 1.02$ vs 2.81 ± 0.97, respectively; $p < .001$) and treating ($M = 3.64 \pm 0.90$ vs 2.76 ± 1.09, respectively; $p = .002$) MSK conditions. Although post-intervention residents performed better on the post-test than pre-intervention residents (71.0% vs 67.1%), the difference was not statistically significant ($p = .614$). The post-intervention survey showed that 100% of residents liked the session and felt it increased MSK knowledge; 81.8% reported that it was easier to attend, and 68.2% reported that it was easier to participate than in-person. Also, 81.8% reported that polling and chat functions contributed positively to their learning.

Significance/Implications/Relevance
This study showed that the synchronous online session significantly increased confidence in diagnosing and treating MSK conditions. Residents found it easier to participate and attend the online-based learning model. Overall attitudes of synchronous online interactive learning were positive. The residents also performed better on the post-test; however, this was not statistically significant likely as a result of Type II error. Future plans include evaluation of comfort and

knowledge retention at 3, 6, 9, and 12-month intervals, direct comparison with in-person sessions and permanent incorporation of online learning into the curriculum.

Poster# 23: Pediatric Residents Lecture Series in Hematology-Oncology

Team: Linda Murphy, MD; Manoja Gullapalli, MBBS; Joanna Mack, MD, University of Arkansas for Medical Sciences/Arkansas Children's Hospital

Background
Pediatric Hematology-Oncology (Hem-Onc) encompasses complex and unique patients that may be overwhelming for new and experienced pediatric residents. The clinical rotation on this service and educational opportunities can help mitigate low levels of confidence and knowledge. It is this study's aim to show that dedicated educational activities are another component in residency that helps residents gain competence in their current and future practice when taking care of hem-onc related diseases.

Objectives
The goal of this ongoing study is to determine the self-perceived competence of residents prior to and after completion of a required Hem-Onc rotation during pediatric residency. The interventions during this rotation include the experience gained though caring for the patients and a dedicated lecture series (case-based, chalk talks, PowerPoint presentations) called PEdiAtric Residents Lectures Series (PEARLS) covering Hem-Onc diseases along with their diagnoses, treatments, and associated emergencies.

Methods
During the required month-long rotation, residents in this program care for hospital admitted Hem-Onc patients. An objective knowledge-based quiz and an anonymous self-perceived competence survey were administered prior to starting and after completion of the Hem-Onc rotation. The quiz consisted of five pre-rotational survey questions that asked about self-perceived competence with regards to working-up patients for potential Hem-Onc disease, referring patients when appropriate, and discussing Hem-Onc diseases with patients and their families. The post-rotation survey asks those same five questions, along with questions specific to the quality of the lecture series. The survey asked residents to rank competence using a Likert scale of 1-5 which asked participants whether they strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree with statements of competence.

Results/Outcomes/Improvements
This study is ongoing with currently reviewed data from July 2019 through September 2020. Twenty pre-rotational and 10 post-rotational quizzes were completed. Twenty-six pre-rotational and 14 post-rotational surveys were completed. The quizzes were mandatory while the survey was optional. Overall, self-perceived competence increased from pre- to post-rotation survey in every area. When all questions are combined, overall competence improved from 2.9 to 4.5 out of 5 when comparing pre-rotational to post-rotational surveys. Pre- and post-rotation quizzes showed an objective increase in gained knowledge. There were 10 paired pre- and post-rotational quizzes which revealed an increase of mean quiz scores from 13.6 to 16.4 out of 20 points.

Significance/Implications/Relevance
This study demonstrates that both experience and dedicated lectures help residents gain knowledge and confidence in caring for Hem-Onc patients. Rotating through specialties can feel overwhelming for residents. This study helps to show that the rotation itself can benefit

residents. This study further shows the importance of didactics in addition to hands-on learning. In the future, we hope to analyze and compare in-training exam scores in the Hem-Onc section between residents who have participated in PEARLS and those who have not.

Poster# 24: Transforming Medical Training Using Appreciative Inquiry

Team: Archana Mishra, MD, MS, FACP, FCCP; Kim Marie McKernan, MS, MBA; Navpreet Rana, MD; Chanel Fernandez, MD; Aakanksha Khanna, MD, University at Buffalo

Background
Burnout is a syndrome of emotional exhaustion, depersonalization, and a sense of low personal accomplishment that leads to decreased effectiveness at work. Extensive evidence illustrates that it is one of the most prevalent and insidious problems common among physicians, residents, and medical students. Studies have multiple outcomes of burnout, including increased rates of medical errors, higher malpractice rate, lower quality of patient care and satisfaction, addiction, depression, suicidal thoughts, and overall decreased wellness. Over half of the providers and trainees in the healthcare field reported experiencing burnout, even before the COVID-19 pandemic. Hence, it is crucial to address this problem with an aim to promote well-being and thrive beyond mere absence of burnout. Appreciative Inquiry (AI) is a collaborative approach to generating solutions that identify and enhance what works instead of focusing on barriers and pitfalls.

Objectives
Our Appreciative Inquiry (AI) sessions had a myriad of goals: 1) Explore how to achieve new thinking by approaching change as an opportunity rather than a problem; 2) Encourage advocacy by exploring ways to achieve new strength based thinking; 3) Promote wellbeing by setting concrete, positive vision and goals that went beyond simply reducing provider burnout; 4) Focus on factors that bring joy, gratitude, awe, satisfaction and pride while deciding on choosing the future specialty and career; 5) Learn ways that AI can improve collaboration and communication in the organization; 6) Rehearse how to engage patients and other healthcare professionals in a positive manner and contribute to the success of the organization; 7) Practice positive, strengths-based tools in their professional and personal life.

Methods
Over the last year, we have held multiple experiential sessions and workshops where medical students, residents and faculty learned how to reframe a problem to become an opportunity. These 60 to 180 minutes sessions were conducted at the Jacobs School of Medicine and Biomedical Sciences, University at Buffalo, State University of New York, with over 200 participants. The sessions started with an overview of the AI methodology and then participants learned how to reframe a problem into an opportunity. They worked in teams and using the AI methodology worked on a problem based on a real-life healthcare related topic. Each team then shared results and were debriefed on the experience. Each participant developed a personal action plan to use a positive approach in their professional and personal lives.

Results/Outcomes/Improvements
All our sessions were well received based on the feedback. We are thrilled to report that we were surely successful in generating the energy and enthusiasm that is needed for effective change. As a direct result of the goals set at the end of our sessions many initiatives were launched. Our session during COVID-19 pandemic led to increased volunteering and charity work among medical residents. One of the goals achieved was to provide resources to help incoming interns transition smoothly into residency and assist them in acclimating to the city of Buffalo. Another problem that was turned into an opportunity was difficulty transitioning into a

resident from first to second year that was creatively dealt with by holding a Boot camp, Mentorship with the Big Sib Little Sib and a resident recognition newsletter. These were some of the initiatives that were started following our reframing a problem to become opportunity sessions.

Significance/Implications/Relevance

We are encouraged by the results so far and feel we have been successful during our AI sessions in defining well-being challenges and developing learner driven interventions. Using the simple AI process that focuses on the discovery of what is possible, what is desired and what gives life to any system when it is at its very best, we noticed a profound shift of attention and action from deficit-based thinking. We are encouraged by the results so far, especially the impact on individuals, and our future goals of incorporating AI as a consistent component of medical training. We look forward to determining if interventions generated from this process will transform the medical culture within our institution, increase advocacy and improve well-being outcomes among medical trainees.

Poster# 25: Use of Lean Management to Increase Efficiency and Osteopathic Manipulative Treatment in a Family Medicine Residency

Team: Ryan Jay, OMS3, Ohio University Heritage College of Osteopathic Medicine; Charles Fisher, DO, OhioHealth/O'Bleness Hospital; Andrew Eilerman, DO; Jill Porter, DO; Tejal Patel, DO; Chelsey Smith, PharmD; Jennifer Reynolds, LSW, OhioHealth/Doctors Hospital

Background
Lean Management has been documented to improve time, cost, and safety in many hospital domains of the health care sector; however, few studies have explored its effectiveness in ambulatory settings. Though it began in the industrial field, Lean has been gradually applied to the health care sector. Reviews support the trend of successful Lean utilization within larger health care institutions that serve urban populations. One such large health care organization of a Midwestern city described in this study has utilized Lean through the use of Key Performance Indicator (KPI) Boards. Review of literature indicates less insight of Lean Management in medical education residency clinics in the outpatient setting. Improvement in time efficiency could be useful in an osteopathic-recognized residency clinic where residents are learning to optimize patient care and integrate Osteopathic Manipulative Therapy (OMT) into visits.

Objectives
This project reports a review of data on the effects of Lean Management on patient wait times and utilization of OMT over several months at an Osteopathic Recognized (OR) central Ohio family medicine residency clinic. Due to its reported successes in many areas important to patient care, Lean Management was hypothesized to potentially help achieve goals of decreased wait times and increased utilization of OMT in patient visits. This study had three aims: 1. to compare the percentage of visits with prolonged wait times before and after implementing Lean techniques for time efficiency (the 5 “S” of efficiency, as described in methods), 2. compile data regarding the reasons for each failed occurrence in meeting the wait time goal, and 3. compare the percentage of OMT performed before and after implementation of Lean Management.

Methods
The authors developed a retrospective review of patient visits from August 2018 through May 2019, obtained after implementation KPI board huddles in a Family Medicine Residency. Resident efficiency was chosen for the KPI indicator of “Quality” (Q) and patient wait time was selected as its index. Over time, the KPI board identified that “organizing complex patient problems” during a visit was the most common reason misses occurred in wait time goals. The faculty created the “Five ‘S’ of Efficiency” method, or list of tips residents could use to improve efficiency for complex patients. This 5-step method had the resident organize appointments by: 1) Starting the visit, 2) Setting the agenda, 3) Sticking to the plan, 4) Succinctly summarizing, and 5) Serving the patients/staff well. A comparison of the wait goal met and percentage of OMT performed before and after the initiation of the 5 “S” method was analyzed with the chi-squared test for independence.

Results/Outcomes/Improvements
The months after Lean Management initiation revealed a significantly lower percentage of days failing the wait time goal in comparison to months before the intervention—the average

percentage of failure decreased from 43.1% to 10.4% ($X^2 = 19.95$, $p = 0.00001$). A trend line of monthly averages demonstrated how application of the “Five ‘S’ of Efficiency” method in October immediately led to a sharp decrease in percentage of failures (from 52.9% in September to 17.4% in October), and subsequent months showed a continued declination of the failure rate (getting as low as 4.8% in April). The most common reasons reported for failed wait time goals were “doctor/medical student behind” (44%) and “complicated patient” (40%). Enacting Lean Management also resulted in a significantly greater percentage of billed OMT CPT codes (6.8% vs 5.3%, $X^2 = 4.53$, $p = 0.03$).

Significance/Implications/Relevance

This study is rather timely. As family medicine residency programs work to achieve Osteopathic Recognition, programs will have to find methods to engage residents to ensure continual practice of osteopathic treatment skills. Our study suggests that the use of Lean, and particularly the 5's' method described here may help to provide the additional time residents in training needed to improve satisfaction of patients (by decreasing wait times) and use OMT more seamlessly. Challenges in implementation of Lean included creating buy-in among staff and residents, the time commitment to implementation, and the ongoing challenge of creating standard of work to ensure future success. Nonetheless, the study indicates a method that may help osteopathic programs focus on efficiency and increase the use of OMT throughout training.

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Poster# 26: A Pilot Project in Faculty Development: Convenient, Express, and A La Carte

Team: Christopher McMains, MD, San Antonio Uniformed Services Health Education Consortium; Rebecca Tapia, MD; Monica Verduzco Gutierrez, MD; Daniel Lawrence Dent, MD; Donald McGeary, PhD; Derrick Allred, MD; Philip Luber, MD; Sylvia Botros-Brey, MD, MSCI, UT Health San Antonio

Background
Faculty development is a core component of academic programs and accrediting bodies; however, examining what format, duration, topics, or frequency works best for any given department can be challenging while balancing time constraints and outcomes to maximize skills development. The Department of Medical Education (DME) partnered with a specialty academic department at the same institution to pilot a customized faculty development intervention over the course of one year.

Objectives
The goal of this pilot program is to align departmental teaching goals with faculty development efforts. We hypothesize that a sustained and tailored faculty development intervention would perpetuate faculty satisfaction with departmental faculty development efforts as well as increase the quality and frequency of resident teaching while increasing faculty confidence in teaching skills.

Methods
We developed a pilot faculty development program led by DME based on an initial needs assessment covering the topics of feedback, the 5 microskills of teaching, and working with a “challenging” learner. Several sessions were devoted to skill development. The approach aimed to engage faculty through live, active didactic sessions (in-person and virtual) dynamically tailored by faculty input and guided by data indicating opportunities for additional interventional development. Outcome measures include an item from the ACGME Faculty Survey regarding faculty development, an internal annual department survey regarding faculty development and an evaluation we developed to assess change in confidence levels related to skill development at the completion of the faculty development session as well as satisfaction with the structure of the faculty development sessions.

Results/Outcomes/Improvements
Ten 15 minute faculty development sessions were completed over 12-months in 2019-20 academic year. The ACGME Faculty Survey item demonstrated improvement from 3.5 to 3.9 (program mean, scale 1-5). The internal annual department survey improved from 84% to 100% favorability after the pilot program. The evaluation survey (n=13, 93%) demonstrated “moderate and noticeable improvement”, “substantial improvement”, or “complete improvement” in on-the-spot feedback (53.9%), meaningful feedback in 1-3 minutes (53.9%), approach the challenging learner (61.6%), encouraging learner self-assessment (61.6%), focusing on objective behaviors (61.6%), observing and documenting learner deficits (53.9%), considering multiple factors for underperformance (77%), and raising concerns to Program Leadership (53.9%), 84% of respondents use knowledge and skills presented sometimes or often. Faculty preferred development during faculty meetings (69%) and found the virtual platform conducive to learning (77%).

Significance/Implications/Relevance

The Faculty surveys demonstrate a consistent increase in favorability regarding perception of faculty development and confidence in teaching/feedback skills after a year-long faculty development intervention. This approach could have the potential to produce local synergies in combining the teaching expertise of a Department of Medical Education to address areas of faculty-identified and/or data-driven gaps in Resident teaching.

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Poster# 27: Virtual Morning Report in the COVID Era: Feasibility and Value to Learners

Team: Helen Waterman, DO, Children's Healthcare Associates; Emily Ruedinger, MD, MEd; Kristen Marten, DO; Kathleen A De Santes, MD; Andrea Jones, MD; John Frohna, MD MPH; Daniel Sklansky, MD, University of Wisconsin

Background
COVID-related social distancing necessitated transitioning our morning report (MR), a nearly ubiquitous educational tool(1), to a virtual format. The feasibility and value of an entirely online MR have not been described.

Objectives
This study was conducted to guide improvements in virtual MR by identifying benefits and barriers to resident participation in, and acceptability of, virtual MR.

Methods
We implemented a web-based visual conferencing system for MR employing a virtual whiteboard, group chat (typed), and live audio. Sessions were facilitated by chiefs, with cases presented by residents. Attendance at virtual sessions was compared to live sessions from the same period in the previous academic year using Wilcoxon Rank Sum analysis. The quantity and themes of chat content were captured once we established a recording system. Residents (n=25, 54% response rate) completed a multiple-choice and free-text survey addressing participation and preferences.

Results/Outcomes/Improvements
Over 14 sessions, mean resident-per-session attendance increased significantly from 16.9 to 24.1 ($p<0.001$) compared to the prior year. Among the six residents (24%) who reported increased attendance in the virtual format, the most commonly selected reasons were: no transportation required (n=5, 83%), change in clinical demands (n=3, 50%), and better ability to multi-task (n=3, 50%). A greater number of residents reported being more likely to comment during live MR (n=9, 37%) than virtual MR (n=5, 21%). Eight (32%) respondents commented on a preference for live discussion, citing the importance of nonverbal cues and the social value of live interaction with peers. Detailed review of three sessions revealed an average of 101 total text comments per session: 44 questions about case details, 15 suggestions for next steps, 23 suggested diagnoses, and 21 other comments. Sixteen residents per session commented at least once.

Significance/Implications/Relevance
Transition to virtual MR correlated with improved attendance. This format has generally been acceptable to residents, offers accessibility benefits, and is preferred by some. However, the value of virtual discussion is lower to a meaningful number of residents. Diminished nonverbal cues were an unsurprising contributing factor; studies show the majority of communication occurs nonverbally(2). Likewise, decreased social interaction with peers was another disappointing, but predictable, disadvantage. Based on this feedback, we have supplied video-capable tablet devices to residents and advocate for participant video sharing; implemented a hybrid in-person/virtual format that follows public health social distancing guidelines; and sought information on nonverbal communication best practices for virtual facilitation.

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Poster# 28: Virtual Recruiting in Graduate Medical Education During COVID-19

Team: Bree Bower; Erica Sivak, MD; Stephani Kim, PhD, MPH; Marco Corridore, MD, Nationwide Children's Hospital

Background
COVID-19 created a difficult environment to interview and recruit candidates in Graduate Medical Education in the traditional method of in-person interviews. The escalation of response to the COVID-19 pandemic coincided with our fellowship interviews. Video conferencing technology provided the opportunity to adapt program interviews to a way that was remote, informative, and personable.

Objectives
Virtual interviews needed to deliver the same outcomes that in-person interviews delivered. They needed to provide the candidate with enough information about the program and culture that they could decide if the fellowship program was a good fit for them. For the faculty, virtual interviews needed to be efficient and timely enough to fit into their daily schedule with ease, while also allowing them to fully assess the candidate's knowledge, personality, and goals for the future. Interviews needed to be of high enough quality that both candidates and programs felt confident in creating their Rank List for the 2020 National Resident Match Program Match.

Methods
Our fellowship program interviewed 37 applicants over 9 Zoom sessions. Each session lasted 2.5 hours and had 5 interviewers and approximately 5 candidates. The Program Coordinator acted as the host of the meeting and directed the course of the interview day. Interview sessions were designed to be a condensed version of the interview experience candidates would typically receive in-person. The interview day consisted of a PowerPoint introduction (30m), 5 1-on-1 interviews (1h 15m), a meet and greet with current fellows (30m), and a final Q&A session (15m). Interviewers for the day were invited to remain post-interview to debrief (1h). At the end of the season, interviewers (n=11) were sent a survey to measure how the efficiency, connection, and depth of virtual interviews compared to in-person interviews.

Results/Outcomes/Improvements
There were 11 total interviewers for the interview season. Each interviewer completed the survey and it was found that 9 had previously conducted in-person interviews. These 9 reported that virtual interviews were more efficient (8), took less time (8), and required less effort (8). All 11 reported having meaningful interactions. Interviewers also reported that they were able to convey all the information that they wished to candidates (8) and candidates appeared equally or more engaged (8). Some (5) reported that they were unsure if candidates were able to get a true sense of the fellowship program. Interviewers were split as to how they would prefer to interview moving forward with only 5 preferring virtual interviews, 2 feeling neutral, and 4 preferring in-person.

Significance/Implications/Relevance
In response to the pandemic, we quickly implemented the virtual interview, and found it to be an effective and efficient method. The benefits to virtual interviews were strong enough to consider adaptions to the traditional in-person method of interviewing, even post-COVID-19.

Poster# 29: Implementing an Anti-racism Workshop at an Academic University in the Deep South for Graduate Medical Education

Team: Tina Simpson, MD, MPH; Justin Evans; Alice Goepfert, MD; Latesha Elopre, MD, MSPH, University of Alabama at Birmingham

Background
Coronavirus Disease 2019 (COVID-19) and the social justice movement in early 2020 awakened many Americans to the health disparities and health care inequities affecting communities of color in the United States, particularly Black communities. This heightened awareness has strengthened the call to address the social determinants of health that place people of color at risk for adverse health outcomes. Racism has a profound impact on living as well as working conditions and significantly disadvantages Black Americans, making racism a critically important social determinant of health. Physicians can play an important role in efforts to dismantle racism and advance the health of populations of color. As such, leaders within Graduate Medical Education (GME) developed an anti-racism workshop to raise awareness on the impact on racism in healthcare and provide tools that individuals can utilize to dismantle racism.

Objectives
The purpose of this project was to develop an anti-racism workshop for GME that provided essential knowledge on the different facets of modern racism, impact of racism on health and opportunities for dismantling racism.

Methods
Two discussants led 1.5-hour workshops for up to 60 participants. Thirty-minute didactics were separated by two breakout sessions. Content was developed by: 1) piloting with 13 workshop facilitators, representing various GME leadership roles and 2) adaptation after initial workshop attendee feedback. Content covered microagressions, colorblindness, tokenism, stereotypes, levels of racism (i.e. internalized, personally-mediated, institutionalized), the impact of racism on health, and concepts of anti-racism. Facilitators led two 15-minute breakout sessions for discussants to provide examples of witnessed racism and then determine how anti-racism tools like “calling-in” could be applied in those settings. Race, gender, and position title were collected for attendees. Initially, workshops were limited to the GME community but were expanded to medical students due to demand. Following the workshops, participants were asked to complete a 16-item survey to evaluate effectiveness.

Results/Outcomes/Improvements
Between July and August 2020, four workshops were delivered to 131 attendees (demographic data were available for 125). The majority of attendees were White (69%) and female (66%). Faculty represented 50%. Sixty attendees completed post workshop surveys. Most survey respondents were White (75%), female (63%), and aged 31-40 (29%). Over half were faculty; 24% were residents, 8% fellows, and 10% medical students. The majority agreed they could apply knowledge to their work (95%) and found the workshop useful (95%). After the workshop, 76% thought differently about the healthcare impact of institutionalized racism. Over two-thirds reported being able to better identify disparities and better identify and communicate about racism. In open-ended questions, respondents overwhelmingly felt the breakout sessions and

overview of concepts around racism were the most helpful. Additionally, many participants requested an interactive longitudinal curriculum to build momentum around culture change.

Significance/Implications/Relevance

In the current climate, a global pandemic and social justice movement have shed a brighter light on the role racism plays in health. The graduate medical education community is striving to gain a better understanding of how to dismantle racist systems and thereby improve the health outcomes for communities of color. By developing an antiracism workshop for an academic medical center located in the Deep South, more insight was obtained on tangible next steps to foster an institutional culture centered on antiracism.

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Poster# 30: Factors Associated with Lower Burnout in Resident Physicians

Team: Jeffrey Norvell, MD, MBA; Shane Giannetti, DO; John Horky, DO; Bardia Behravesh, EdD; Andrea McMillin; Niaman Nazir, MD, MPH; Greg Unruh, MD, University of Kansas Medical Center

Background
Research studies show a high burnout level among resident physicians. Many different wellness activities have been recommended to decrease burnout rates. Researchers also describe the importance of culture and work efficiency in employee wellness. This study aims to evaluate the correlation between resident burnout and various wellness activities across a large academic medical center.

Objectives
This study aims to identify factors that may be protective in preventing burnout. Individual and program/hospital factors were examined.

Methods
Each year, the University of Kansas Medical Center GME Wellness Subcommittee administers a wellness survey to all 568 residents and fellows. The 70-question, electronic survey was originally developed at Stanford University Medical Center. Burnout was measured using the single-item burnout measure from the Mini Z. IRB approval was obtained.

Results/Outcomes/Improvements
354 of 568 residents and fellows from multiple specialties completed the survey (62%), including 229 males (65%), 117 females (33%), 4 other (1%), 3 genderqueer (1%), and 0 transgender. The overall burnout rate was 18.9%. In our study, the following wellness activities correlated with lower resident and fellow burnout: getting 7 or more hours of sleep per night ($p=0.002$), being engaged in a regular spiritual practice ($p=0.002$), regularly engaging in hobbies outside of work ($p<0.0001$), exercising 1 or more times per week ($p=0.02$), regularly scheduling or protecting time with partner/family/friends ($p=0.02$). Program/Hospital level factors correlating with lower burnout included: my program is engaged in initiatives aimed at improving the efficiency of my medical care ($P<0.0001$), we have a strong sense of teamwork ($p<0.0001$), my residency program has a supportive culture with respect to personal wellness ($p<0.0001$), program director/administration values my clinical work ($p<0.0001$).

Significance/Implications/Relevance
Our study highlights some of the factors that are shown to be protective in lowering burnout. A variety of individual as well as program/hospital factors are correlated with reduced burnout. Residency programs should keep these factors in mind when considering the wellness of their residents/fellows. Creating schedules to allow for ample amounts of sleep, establishing a supportive overall culture, and creating initiatives that allow for increased efficiency are all ways to protect residents/fellows from burnout.

Poster# 31: Patients as a Source of Harm: Results of the Safer Workplace Collaborative Survey

Team: Lawrence Wolf, MD, Maimonides Medical Center; Ronda Mourad, MD, UH Cleveland Medical Center; Janae Heath, MD, MSCE; Todd Barton, MD, University of Pennsylvania; Andrew Varney, MD; Albert Botchway, PhD, Southern Illinois University School of Medicine; Paul Foster, MD, Greater Baltimore Medical Center; Shorabh Sharma, MD, St. Barnabas Health

Background
Recent evidence suggests the majority of practicing physicians have experienced mistreatment by their patients, specifically discriminatory language around race, gender, religion, or weight. Anecdotes regarding these types of interactions are widespread, but little is known about the true prevalence of these experiences among residents. This is of great importance, as such interactions may contribute to moral distress and burnout. Understanding the scope of trainee mistreatment by patients is imperative to guide potential interventions, such as administrative policy as well as curricular and faculty development on responding.

Objectives
The Safer Workplace Collaborative (SWC) set out to ascertain the prevalence of harmful interactions instigated by patients and their families toward internal medicine (IM) trainees, to understand the impact on those residents, and to assess residents' perceptions of responses by their supervisors.

Methods
A survey was developed by SWC members assessing trainee experience of discriminatory patient encounters, contribution to burnout, and role of their supervisors. The survey was disseminated in the spring of 2019 to all IM residents at seven geographically diverse IM residency programs via an anonymous, voluntary online platform. The survey distinguished between resident experiences in the inpatient and outpatient settings. A sample question was "In the last 6 months in clinic, have you experienced offensive remarks or name calling by a patient because of your gender, sexual orientation, or gender identity," with response options based on frequency (never, once, 2-3x, 4-5x, >5x). Summary statistics were used to analyze responses, with pre-specified subgroup analyses (genders, races, and ethnicities).

Results/Outcomes/Improvements
255 of 759 residents completed the survey (34%). Overall, demeaning patient behavior was experienced by more than 38% of survey respondents, depending on the venue. Roughly 41% felt demeaned based on their gender, sexual orientation, or gender identity, while 39% felt so related to their race, ethnicity, or religion. The majority (73%) of residents reported witnessing the targeting of colleagues. Only 22% of residents reported that they had never experienced nor witnessed this type of behavior. Additionally, 24% of residents stated they had been threatened with physical harm by a patient. Residents stated that these experiences contributed, to some degree, to their emotional exhaustion (84%), depersonalization (82%), and feelings of shame (88%). Despite this, 76% of affected residents did not report these events to supervisors (faculty or administration). When they did report it to a supervisor, 45% of residents felt that supervisors rarely or never responded appropriately.

Significance/Implications/Relevance

Our survey provides a window into patient-triggered harm to IM residents, demonstrating that it occurs frequently and has subsequent negative impacts on resident well-being. The majority of cases remain underreported, and there is a perception of failure to respond appropriately even when faculty become involved. Institutional and departmental curricula and policy development are warranted to improve resident support and faculty responsiveness regarding these issues.

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Poster# 32: Perceptions on Virtual Interviewing for Internal Medicine Fellowships

Team: Kevin Huang, MD; Sharmeel Wasan, MD; Craig Noronha, MD; Lindsay Demers, MS, PhD, Boston University School of Medicine

Background
Transitioning to virtual platforms for internal medicine fellowship recruitment has been arguably the most prominent and disruptive change to trainee recruitment due to the COVID-19 pandemic. Although virtual interviews have previously been proposed as a way to reduce the time burden and financial costs of in-person interviewing, this format has not been adopted as standard practice. The time and cost savings may be outweighed by concerns over a lack of opportunities to interact candidly with current trainees and to experience the program's physical campus and surrounding location. It is unclear how applicants perceive these pros and cons to virtual interviewing.

Objectives
This study reports data on internal medicine fellowship applicants' perceptions on the prospect of virtual interviews during the COVID-19 pandemic.

Methods
From June 11, 2020 to July 14, 2020, internal medicine residents applying for fellowship and career positions were invited to complete an online survey looking into their plans and perceptions for the upcoming interview cycle in the context of COVID-19. Participants were asked a variety of questions regarding virtual interviews, including their preferences for virtual interviews vs in-person interviews and their comfort with assessing a program's culture virtually and candidly speaking with current trainees. Participants were also asked where they derive their information about programs, and thoughts on what they would miss the most about in-person interviewing.

Results/Outcomes/Improvements
Out of 138 surveyed applicants, 106 (76.8%) responded to questions regarding virtual interviews. Fifty respondents (48.1%) preferred in-person interviews compared to six (5.8%) who preferred virtual interviews. The remainder reported their preference would depend on local travel restrictions. Respondents were split over preferences for future cycles with 58 (55.2%) favoring a full return to in-person, and 43 (41.0%) favoring virtual with optional in-person visits. Most respondents felt they could not get a good sense of a program without visiting (n = 84, 79.2%), and would not trust programs to evaluate them fairly against local applicants who already know program faculty (n = 75, 70.7%). Respondents were mixed about whether they felt comfortable having candid conversations with fellows (mean 3.08, SD 1.06 on 5-pt Likert scale). The most cited aspects of in-person that applicants would miss were witnessing interactions amongst fellows (86.8%) and between fellows and faculty (75.5%).

Significance/Implications/Relevance
Internal medicine fellowship applicants shared concerns about virtual interviews, specifically regarding their ability to assess the fit of a program, to speak candidly with current fellows, and to be evaluated fairly against their peers. Despite these concerns, many applicants feel that virtual interviews may be viable for future cycles if there are optional in-person sessions to gain a better feel for the program. Program directors should focus recruitment efforts on optimizing

opportunities for applicants to candidly speak with current trainees and showcase the program's culture. Because this survey was conducted before interviews began, further studies can examine if and how these perceptions on virtual interviews change after this season, and if there are any best practices for adapting to virtual recruitment.

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Poster# 33: Duty Hours Tracking – Is There an App for That?

Team: Alexis Jorgensen, MD; Nastassia Savage, PhD; Xixin Sun, VCU School of Medicine

Background
Duty hour regulations were implemented by the ACGME in 2003 to affect change in resident education and well-being. To monitor duty hour compliance residency programs have used mostly self-report methods which can be skewed by recall bias and falsification of data. We have yet to identify an accurate and well-received method for monitoring duty hours. As the digital revolution continues to shape the world today smartphones have become an integral part of residents' daily lives. This creates a unique opportunity for duty hours monitoring not yet explored. At our program, duty hours are recorded with a self-report method called New Innovations (NI) which requires residents to log one-hour blocks of work hours, categorize the type of work being performed, and justify any violations. Hours Tracker (HT) is a free iOs smartphone application which automatically logs work hours by enabling the user to set work sites through GPS coordinates.

Objectives
The purpose of this study was to compare the accuracy of and resident attitudes towards two duty hours tracking tools over a four-week period within our Orthopedic surgery residency program. The primary outcome measures were number of duty hour violations and survey results on resident perceptions. We hypothesized an automated method of duty tracking such as HT would: 1. Provide more accurate duty hour monitoring 2. Be better received by residents compared to NI.

Methods
The participants in this longitudinal study were 24 residents of a five-year, 25 resident Orthopedic Surgery program in an academic medical center in the Southeastern United States. Over four weeks, residents tracked duty hours through the standard, self-report method (NI) and simultaneously through the automated app, HT. Residents also completed an anonymous electronic survey at the end of the four-week period related to perceptions of the methods. The HT raw hours app data was then used to generate identical measures as NI output including: hours worked over the four week period, number of violations per residents, and type of violation incurred. McNemar's, Wilcoxon exact rank sum, and Fisher's exact tests were utilized to assess differences in number of violations between the two methods. A paired samples t-test was used to test for differences between the reactions and beliefs about each tool in the resident survey data.

Results/Outcomes/Improvements
Although the total number of violations between methods was not significantly different, there was a trend for HT to detect more violations (HT=20, NI=12, p=0.12). HT detected more violations of the 8 hours off requirement in comparison to NI (12 vs 5, p=0.03). Survey data revealed residents found HT significantly easier to use ($t(18) = -3.26$, $p=.004$) and less burdensome ($t(18)=4.43$, $p<.001$). Residents reported they were more likely to falsify their hours when using the NI method ($t(18)=3.37$, $p=.002$). Additionally, there was a higher perception that the results of NI would be used against them ($t(18)=2.20$, $p=.042$). Residents found the HT application to violate privacy more so than NI ($t(18)=-3.83$, $p=.001$) due to its automatic nature. There were marginally significant interactions when the survey data compared findings by lower

vs upper class training years. Junior residents indicated HT was less likely to be used against them and overall easier to use than upper level residents.

Significance/Implications/Relevance

Until we begin accurately tracking duty hours and engaging residents with an easy to use, well-received interface to which report hours, effective developmental program changes will be difficult to achieve. Our four-week study directly comparing our institution's self-report duty hours tracking system with an automated app-based approach is a starting point for re-thinking duty hours tracking method within this digital age while prioritizing resident perceptions. Our analysis showed no significant difference between NI and HT in overall number of violations captured, except for the "short break" rule where HT captured more violations. Thus, we conclude NI and HT are at least equivalent in accuracy for duty hours tracking. Most importantly, HT was overall better perceived by residents, especially junior residents. We plan to repeat our comparative study year to year to continue to explore the accuracy and reliability of an app-based approach to duty hours tracking.

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Poster# 34: A Retrospective Review: Appropriate Procalcitonin Usage in Sepsis and Septic Shock at a Community Hospital

Team: Joshua Sugino, DO, MA; Daisy Trimor, DO; Gloria Cheng, PharmD, BCPS, APh, College Medical Center

Background
Sepsis is a life-threatening disease state of dysregulated host response to an infection. Appropriate treatment includes early identification and initiation of empiric antibiotic therapy. In the last decade, inappropriate use of antibiotics has become a pressing concern to our global health due to increased development of antibiotic resistance and C. Difficile infections. Procalcitonin (PCT) is a sensitive biomarker that has been shown to provide prognostic information about patients with bacterial infection. Recent research has demonstrated PCT testing as a simple and cost-effective way to reduce the risk of developing antibiotic resistance and C. Difficile infection during sepsis management.

Objectives
The goal of this study was to evaluate use of PCT in patients with sepsis and septic shock at College Medical Center. The objective was to determine if PCT was being trended and utilized appropriately in the discontinuation of antibiotics in patients with sepsis and septic shock. This was necessary to study in order to identify if there was a need to improve PCT usage as a clinical tool for physicians.

Methods
This was a retrospective study conducted at a community- based teaching hospital. Patients were identified that were diagnosed with sepsis and septic shock between January 1, 2018 and January 31, 2019 who were > 18 with at least one procalcitonin assay ordered. Patients were excluded if hospitalized < 2 days. The primary endpoint of this study was to determine appropriate PCT utilization. This was defined as using appropriate PCT measurement series and appropriate antibiotic discontinuation. Appropriate antibiotic discontinuation was defined as antibiotic discontinuation in those who had a PCT ≤0.50ng/mL or if the ∆PCT>80%. PCT should be trended every 24-48h. If the PCT did not meet criteria for antibiotic discontinuation, PCT should continue to be trended every 24-48h. Secondary outcomes included comparing the differences in antibiotic treatment duration, hospital length of stay and mortality in patients with appropriate PCT utilization vs inappropriate PCT utilization.

Results/Outcomes/Improvements
Retrospective analysis identified 298 utilizing ICD 10 codes for sepsis and those in which procalcitonin was obtained. There were 145 Males and 153 females identified. The average age of all identified patients (pts) was 65.05. 273 pts were on the medical floor and 25 patients were in the ICU. There were 147 pts categorized as baseline with an initial PCT <0.5. 144 pts were categorized as inappropriate PCT utilization. PCT was trended appropriately in 54 pts. Appropriate PCT usage was identified in 7 pts. The average PCT trended for appropriate PCT utilization was 4.86. The average PCT trended for inappropriate PCT utilization was 2.49. The average antibiotic days for appropriate PCT utilization was 10 days and 10.74 days for inappropriate PCT utilization. The average length of stay for appropriate PCT utilization was 7.14 days and 11.28 in those with inappropriate PCT utilization. There was 0 morality for the appropriate PCT group and 18 deaths in the inappropriate PCT group

Significance/Implications/Relevance

Analysis of our primary endpoints clearly demonstrate that the use of PCT in patients diagnosed with sepsis and septic shock has not been utilized appropriately at our institution. The data shows that PCT not appropriately trended in a large majority of patients. PCT was not appropriately utilized in to discontinue antibiotics in these patients as well. There are likely numerous reasons that PCT has not been trended properly. One possibility is a lack of understanding of how PCT should be trended. There was no standardized protocol at our institution on when and how to trend PCT. Another possibility is that PCT is ultimately a tool to help in clinical decision making. Antibiotic discontinuation is ultimately at physician discretion and not based on PCT data alone. Improvement in utilization of PCT can be accomplished through the implementation of education, protocols and creation of order sets. Future studies can test the efficacy of these changes.

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Poster# 35: Residency Application Requirements Under Pass-Fail Grading in Canada: A Cross-sectional Analysis

Team: Sean Nurmsoo, MSc; Mohamad Ourfal; Michael Bezuhly, MD, Dalhousie University

Background
Canadian medical school graduates are matched with residency programs through the Canadian Residency Matching System (CaRMS). Students apply to programs of interest through an online system at carms.ca, and upload required materials. These materials typically include a Medical School Performance Record (MSPR), Curriculum Vitae, letters of recommendation, and medical school transcripts.
In recent years, some Canadian medical students have reported that Canadian residency programs have begun requiring undergraduate transcripts from residency applicants. To the best of our knowledge, the prevalence of this practice among all residency programs in Canada has not been investigated. This requirement may be in response to a shift in Canadian medical education toward pass/fail grading systems and away from letter grades, making differentiation between applicants on the basis of academic performance more difficult. Most applicants do not take the licensing exam until after matching.

Objectives
Our objective was to quantify the prevalence of known and lesser-known application requirements at all Canadian residency programs.

Methods
We built a database of residency program application requirements using data retrieved from the CaRMS website (Data was retrieved between May 1st and July 15, 2017). Requirements for residency programs with multiple sites were recorded separately. Residency programs were organized by specialty. We recorded the specific requirements of each residency program using Microsoft Excel. We then analyzed the proportion of residency programs that request transcripts in each specialty. We also considered the differences in program size by using total quota of positions available to compare institutions and specialties with differently-sized residency programs by weighting transcript requirements by the number of positions available in each residency program and institution. From this we calculated both the proportion of residency programs and the proportion of residency positions that require submission of an undergraduate transcript in order to apply.

Results/Outcomes/Improvements
13 of 15 ophthalmology programs required results of a comprehensive eye exam conducted by an ophthalmologist. Among otolaryngology programs, 2 required or strongly recommended inclusion of an ophthalmological report with the application. After weighting by the number of available positions in each residency program, we found that 31% of Canadian residency positions required submission of an undergraduate transcript in order to apply. Of the 514 CaRMS-rankable residency programs we identified in Canada in 2017, 28% of programs required undergraduate transcripts from applicants. This requirement varied widely by specialty and institution. A majority of positions in public health, radiology, nuclear medicine and dermatology had required the undergraduate transcript, while it was not required anywhere for applications in neurosurgery, pathology and medical microbiology. 9% of programs did not require a medical school transcript. 1 residency program required applicants' MCAT score.

Significance/Implications/Relevance

The undergraduate transcript requirement may be an unintended consequence of the widespread shift in Canadian medical education away from numerical and letter grades, in favor of a pass/fail system. This may also be related to 9% of residency programs not requiring medical school transcripts. The requirement for submission of a comprehensive eye exam in order to apply to residency programs in ophthalmology and otolaryngology may not be known to many medical students considering career options in the earlier years of their medical education.

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Poster# 36: Finding Meaning in Medicine: A Storytelling Pilot Project

Team: Elizabeth Cusick, MD; Jeanette Zambito, MD, University of Rochester

Background
Monthly group-process meetings among the residents and a selected faculty mentor were held to encourage trainees to support each other, build community, connect with the meaningful parts of their day, and rediscover the joy in their work. This model was first implemented by Dr. Rachel Remen several years ago at USCF within the Department of Family Medicine and has since been implemented around the country in other residencies and programs. A similar model is used around the world through the UNESCO foundation to build intercultural competencies due to the importance and power of storytelling in many cultures around the world.

Objectives
These sessions were designed as a tool for developing resilience and meaning by focusing on respect, listening, curiosity, self and other awareness, reflection, sharing, empathy, and relationship building.
The key objectives of this project were to help physicians recover a greater sense of meaning and satisfaction in their work by creating a sense of community with like-minded physicians, which is particularly important at a time during this current worldwide pandemic.
Participants were asked to respect and maintain the confidentiality of the group. The intent of the gatherings is to be respectfully attentive to what others have brought, rather than to fix a problem, offer advice, or jump in to tell our own story. We were there to offer support, to share insights that arise, to reflect on what touched us. There was no requirement to speak (although encouraged), only to listen attentively.

Methods
Small group-process meetings among the residents and a selected faculty mentor were held in monthly intervals. All dermatology residents, NPs, fellows were encouraged to join. Group size ranged between 6-15 individuals. Each session (total of 6) is centered around a dedicated pre-selected topic. Each month a different faculty member will lead the conversation and each person who comes to a meeting brings a story to tell drawn from their professional life, or a poem, work of literature that touches on this topic. Topics chosen will include topics such as joy, empathy, failure, grief, boundaries, fear, anger, forgiveness, honesty, humility, and loss. The pilot session included the following prompt: "Say 3 words or phrases about your background and why those words or phrases are important to you . Tell about a memorable experience you had with someone from a different background from you and what you learned about yourself and/or the other person in that experience."

Results/Outcomes/Improvements
Narrative feedback was collected after the sessions to measure qualitative data from the sessions. Themes were drawn from the collected feedback. The following were consistent themes voiced by the attendees:
1. Small group sessions helped trainees to recognize the importance of faculty mentorship for personal and professional development
2. An opportunity to talk about experiences not usually shared among colleagues in busy clinic day.

3. Receive support, understanding and new insights into daily work, values, and a renewed satisfaction and meaning.

Significance/Implications/Relevance

Finding meaning in one's work is an ever-evolving process throughout one's career, and is often unique to each individual. Being attentive to what parts of our day bring us joy and what we enjoy most in our work is key to having a good day and fulfilling career.

Furthermore, mentorship is critical part of becoming a physician. Mentors provide invaluable teaching and advice, and act as role models. The guidance provided by mentors in professional and personal development can be monumental in shaping our career and future growth.

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Poster# 37: Humanizing the Head and Neck Cancer Patient

Team: C. Alessandra Colaianni, MD, MPhil; Ashley Miller, MD; Suresh Mohan, MD; Krupa Patel, MD; Ciersten Burks, MD; Tara Mokhtari, MD; Jenny Chen, MD; Stacey Gray, MD; Mark Varvares, MD, Massachusetts Eye and Ear

Background
Patients with head & neck cancer (HNC) often undergo extensive ablative and reconstructive surgeries as part of their oncologic treatment. HNC surgery often impairs communication, alters fundamental aspects of appearance, and prevents eating by mouth. Patients' experience of HNC and its concomitant treatment can be dehumanizing; HNC patients more likely to suffer from depression and are at markedly increased risk for suicide.
Surgical subspecialty residencies are notoriously grueling, time-intensive, and often involve painful surgical procedures on patients who may be already be dehumanized by their disease. In the immediate postoperative period, patients are often asked to learn to take care of tracheotomies, gastrostomy tubes, and laryngectomy stomas – a daunting task. Too often, getting to know our patients as people is supplanted by other time-sensitive obligations. Inability to connect with patients on a human level may lead to moral distress which is associated with burnout.

Objectives
With our proposal, we seek to explicitly humanize patients under our care through a multi-pronged quality improvement effort aimed at getting to know our patients and being intentional about seeing them as people.
Our secondary objective is to assess pre- and post-intervention levels of burnout among surgical residents

Methods
Preoperative interventions:
- Patients encouraged to bring photos of families, pets, or other meaningful aspects of life and complete a "get-to-know me" worksheet for their hospital room
- Team members will introduce themselves to the patient in the preoperative area before surgery. Each patient will receive a laminated card depicting current team members.
Postoperative Interventions:
- All post-operative team communications will include non-medical aspect about the patients (e.g. "45 yo French chef now s/p partial glossectomy…") in addition to the surgical plan.
- Before rounds each morning, the chief resident (PGY-5) will lead the team in a 30-60 second mindfulness exercise aimed at engaging the team in the day's events.
Scales and Measures:
Patients: Preoperative and postoperative satisfaction surveys (modeled after Medicare's Hospital Consumer Assessment of Healthcare Providers and Systems survey)
Providers: Maslach Burnout Inventory: Human Services Survey for Medical Personnel

Results/Outcomes/Improvements
Academic year divided into 5 x 10-week blocks.
Control
First 2 blocks (6/2019-11/2019) control group (no intervention)
Intervention

Final 3 blocks (11/2019-6/2020) designated as intervention blocks.
Interventions occurred as planned from 11/2019 to 2/2020
COVID19 pandemic and resulting restrictions on surgical scheduling and team size halted interventions and data collection from 3/2020 until 12/2020
Maslach Burnout Inventory Results with significant confounding due to pandemic
Given new protocols for preoperative testing, we plan to resume intervention and data collection 2/2021, with 11/2020-2/2021 group serving as control

Significance/Implications/Relevance
We hypothesized that these relatively straightforward interventions will help residents feel more engaged in their work, help patients feel more seen and known by the team, and we believe it may motivate patients to engage more readily with their own care.
Qualitative data suggests increased engagement and decreased level of burnout among index group of residents participating as intervention group.
We are grateful to the Back to Bedside Team at Mount Sinai Hospital for sharing their “Get to Know Me” Questionnaire with our team.

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Poster# 38: Using Infographic-Based Teaching Techniques to Improve ACGME Trainee Satisfaction Through Improved Patient Comprehension

Team: Rafiullah Khan MD, MBA; Eric Vick, MD, PhD; Punita Grover, MD, Muhammad Kashif Riaz, MD; Mahmoud Charif, MD

Background
Patient education in oncology plays a crucial role in patient engagement. Research has shown that improved patient engagement improves patient outcomes & adherence1-3.
We hypothesize that by using infographic-based teaching techniques, we will maximize patient comprehension, assist patients in their decision making and encourage patients to be involved in their care.
We further hypothesize that by increasing engagement through these mechanisms, we will increase trainee satisfaction.

Objectives
1)Improve trainee satisfaction by using infographic-based teaching techniques for educating patients with newly-diagnosed cancer.
2) Improve trainee satisfaction and patient comprehension by a mean of 25% over a period of 24 months.

Methods
Trainees were asked to educate patients with a new Dx of lung, prostate, colon or breast cancer using either infographic-based education templates or the physician's choice of education (excluding ASCO methods, Figure A).
Lung Cancer – "My Lung Cancer Care Plan" by the Lung Cancer Research Foundation
Breast Cancer – ASCO Answers "Guide to Breast Cancer"
Colorectal Cancer – ASCO Answers "Guide to Colorectal Cancer"
Prostate Cancer – ASCO Answers "Guide to Prostate Cancer"
Trainees and patients filled out surveys evaluating their experiences using either our 1-5 scale "Trainee Satisfaction Survey" or the "Patient Comprehension and Satisfaction Survey".
Unpaired t-tests were used to compare the satisfaction scores with and without the use of education templates. Paired t-tests were used to determine significance of surveys pre-ASCO education materials and post-ASCO education materials.

Results/Outcomes/Improvements
27 Patient Satisfaction Surveys and 21 Trainee Satisfaction Surveys have been completed. There was significant ($p<0.0001$, $p<0.0021$, p,0.001) improvement in disease education, diagnostic education, and treatment education between those that did and did not use the infographic approach (Figure B).N=3 Fellows successfully completed both pre-intervention and post intervention surveys (Figure C). Of the categories, fellows felt that patient education satisfaction was improved post-intervention, though there was a trend toward improvement in each category.

Significance/Implications/Relevance
1) Despite a small sample size, our preliminary analysis suggests that providing trainees in oncology with a template for patient education improves both patient & trainee satisfaction. Differences in sample sizes may bias toward significance in the patient cohorts.

Accrual was slower than anticipated due to the widespread adoption of tele-visits during the COVID-19 pandemic.
2) This intervention can help trainees educate patients increase patient engagement, & decrease trainee burn-out.
3) This intervention can be adopted to specialties other than oncology & improve ACGME training programs & quality of patient care.

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Poster# 39: Short-Term Peer Wellness Groups: Effective in Reducing Burnout and Fostering Connectivity in Residents & Fellows

Team: Joshua Wortzel, MD, MPhil; Elizabeth Wielgus, MD, MSc; Jennifer Ward, MS; Laurence Guttmacher, MD, University of Rochester

Background
Burnout, a work-related syndrome involving emotional exhaustion, depersonalization, and a sense of reduced personal accomplishment, is a widespread problem among medical trainees (1). Between 15 - 41% of residents meet criteria for burnout, differing by specialty (2). In addition to worse patient outcomes, burnout is associated with increased risk of physician substance use and suicide (3). A growing body of literature suggests that small-group programs to promote community, connectedness, and meaning, can reduce burnout in physicians (3). In this pilot study we tested the impact of a shot-term peer wellness group on the burnout and connectivity of medical residents and fellows.

Objectives
1) For participants to practice putting their thoughts and feelings into words and sharing emotionally salient experiences from their lives. 2) To assess for changes in participants' burnout and connectivity before and after taking part in this 8-week activity.

Methods
Funding: ACGME Back to Bedside Grant ($10k). Recruitment: Emails/fliers distributed through the Strong Memorial Hospital GME Office, University of Rochester, Rochester, NY (>800 residents/fellows eligible). 15 responded; 13 enrolled. Study design: Participants assigned to fall (Oct-Dec 2020) or waitlist (Jan-Mar 2021) groups based on participants' availability. Intervention: 8 weekly, free 1-hour Zoom sessions facilitated by a peer group leader. Data Collection: Participants completed deidentified, online Maslach Burnout Inventories (MBI) before and after the fall group (Oct 2020 & Dec 2020), and further data will be collected after the waitlist group (Mar 2021 & May 2021). Fall group participants completed qualitative research interviews after group completion. This will occur for the waitlist group in Mar 2021. Analysis: MBI subscale comparisons (Intragroup: paired t-tests; Intergroup: independent t-tests) and qualitative analysis of interview transcripts coded for themes.

Results/Outcomes/Improvements
Group participants showed decreased burnout in two of three MBI dimensions (↓ depersonalization, p-value=0.014; and ↑ personal accomplishment, p-value=0.027) after group. Waitlist controls showed no change in these dimensions over this time period. Based on reference data, group participants had, on average, high levels of emotional exhaustion and depersonalization and moderate levels of personal accomplishment at baseline (1). After the group, participants achieved, on average, moderate emotional exhaustion and depersonalization and high levels of personal accomplishment. Qualitative analysis of interview data reveals that participants perceived increased connectivity with peers, authentic reflections on positive and negative experiences in training, and improved emotional processing/awareness all contributed to decreased burnout. Participants provided feedback that the Zoom format facilitated participation, and they would have liked more than 8 sessions of longer duration (1.5hrs).

Significance/Implications/Relevance

These data suggest that short-term peer wellness groups may be effective interventions to help medical trainees reduce burnout. We will continue collecting burnout data from all participants to assess for sustained benefits after group completion and whether waitlist participants show comparable improvements in burnout after their group. It is unclear why emotional exhaustion was less impacted by group participation than the other MBI dimensions. Our sample may be insufficiently powered to observe a significant effect. Alternatively, emotional exhaustion, defined as emotional depletion due to work-related stress, may be extrinsic to what is addressable in group. Depersonalization (impersonal responses towards patients and peers) and personal accomplishment (perceived achievement and satisfaction with work) may be more directly altered through improved connectivity with peers and emotion-centered reflection in group. A larger follow-up study could help answer this question.

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Poster# 40: Bedside Chats: A Scalable Tool to Enhance the Physician-Patient Relationship

Team: Andrew Nashed, MD; Hera Kamdar, MD; Jasneet Devgun, DO; Nadav Klein, MD; Michelle Gillespie, MD; Serena Hua, MD; Patrick Schnell, PhD; Lisa Kearns, MD, MS, Ohio State University

Background
The physician-patient relationship has been compromised by many competing factors [1, 2]. Our novel solution utilizes a deck of cards, with each card containing a different question encouraging patients and providers to engage in clear and effective communication.

Objectives
To enhance bedside doctor-patient communication skills, increase fulfillment of resident physicians, and improve patient satisfaction.

Methods
This was an IRB approved prospective study conducted between August and November 2020 within the Internal Medicine, Neurology, Psychiatry, and Emergency Medicine departments at The Ohio State University Wexner Medical Center. Residents conducted 2-4 card driven patient interactions during their rotation. The Self Efficacy Questionnaire (SE-12) and Professional Fulfillment Index (PFI) were used to assess clinical communication skills and physician fulfillment, respectively, at day 0, 15, and 30 [3, 4]. Patient experience was evaluated through a one-page survey. Linear mixed effects regression was performed to identify an association with card deck utilization with an improvement in aforementioned scales.

Results/Outcomes/Improvements
A total of 9 residents and 37 patients participated in the study. For the SE-12, regression revealed higher scores for days 15 and 30 compared with day 0, identifying an improvement in resident perceived communication skills. No significant change was seen in PFI scores. Patient experience surveys revealed an average score of 4.9 out of 5 with positive sentiments in qualitative assessment.

Significance/Implications/Relevance
This study demonstrated that the card deck intervention was successful in improving resident communication skills and enhancing patient experience through promoting patient and provider engagement and facilitating shared decision-making. Further study is important to address physician fulfillment factors.

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Poster# 41: "Follow-up Cards": Returning to the Virtual Bedside

Team: Paul Peng, MD, MS, PhD, Cambridge Health Alliance; Cailey Simmons, MD; Melissa Villars, MD; Elaine Rabin, MD, Icahn School of Medicine at Mount Sinai

Background
The practice of emergency medicine (EM) provides intensely meaningful interactions with patients when they are treated at unexpected, stressful, and even life-changing moments. There is no expected, recommended, or easy mechanism for EM residents to follow up on a patient's recovery. We have created 'Follow-up Cards' (dynamic-QR code embedded business cards) for residents in an EM Residency Program. Patients who receive a follow-up card not only know who cared for them, but also have a means to send a secure email message to the resident to share their clinical course. As EM residents carry some of the highest risks of burnout, we hypothesize that residents could potentially learn via feedback and/or derive greater personal accomplishment and meaning from their work with this means of "returning to the virtual bedside".

Objectives
We aim to survey EM Residents' perceptions on patient follow-up and contact outside of the Emergency Department (ED) visit and to assess the baseline level of burnout before our 'Follow-up Card' intervention. The primary objectives of this pilot study are to measure the level of burnout after the intervention, quantify the utility of cards via QR code sever statistics, and to survey residents' feedback on our intervention.

Methods
This is a prospective cohort observational study measuring the effect of 'Follow-up Cards' on 86 EM residents. We assess burnout via the Copenhagen Burnout Inventory (CBI), which evaluates burnout over three domains: patient- (6 items), work- (7 items) and personal-related (6 items) burnout. Residents received 50 'Follow-up cards' that included a photo and a personalized dynamic QR code linked to a HIPAA-compliant hospital e-mail. A post-intervention survey was administered after 5 months to quantify the change in the CBI in each post-graduate year.

Results/Outcomes/Improvements
There was a 92% response rate to the pre-intervention survey and high internal consistency (α coefficient = 0.70—0.79) for the three domains of the CBI. Among these residents, 58.2% perceived follow-up as at least moderately important, 41.8% felt at least positively with regards to patient contact after an ED visit. However, 75.8% cited lack of time and increased workload as being the primary barriers to follow-up. The post-intervention survey had a lower 37% response rate due to the deployment of residents to COVID wards. Among those who responded, average patient-related burnout was lower (32.6 vs 36.1, $p = 0.18$), personal-related burnout was higher (36.3 vs 31.1, $p = 0.11$), and work-related burnout was essentially unchanged (36.0 vs 36.9, $p = 0.75$). Within the PGY1 subgroup, patient-related burnout trended lower after the intervention (27.1 vs 39.3, $p = 0.06$) whereas work-related burnout was significantly higher ($p < 0.05$) for the PGY4 subgroup.

Significance/Implications/Relevance

‘Follow-up Cards’ were demonstrated as a proof-of-concept, novel, and feasible means of potentially enriching the physician and patient encounter in the ED. QR codes offer an objective means of data collection, but could be a technological barrier to some patients. On average, 1-3 cards were distributed by each resident in a 5-month period, yet feedback was overwhelmingly positive and no adverse effects were reported. The study was carried out 12/2019–4/2020, unfortunately at the height of the COVID pandemic in NYC, which likely negatively impacted the results and utility of the intervention. Overall, patient contact after ED discharge remains a relatively rare occurrence (69% never or few times ever follow-up). This finding is perhaps not surprising, as Emergency Medicine is, by definition, episodic care. As such, 37.9% of residents did not gain additional value from the cards. Interestingly, however, 51.7% indicated that they would likely or very likely use the cards in the future.

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Poster# 42: The Virtual Shared Medical Appointment: Increasing Patient, Family, and Physician Engagement in Management of Cerebrovascular Disease

Team: Xiaofei Zhou, MD; James Wright MD; Berje Shammassian MD, MPH; Martha Sajatovic MD; Alan Hoffer MD; Christina H Wright MD, MPH, University Hospitals Cleveland Medical Center; Uma Mahajan; Neha Sharma; Lei Kang; Marquis Maynard, Case Western Reserve School of Medicine

Background

A subset of patients admitted to a neurosurgical service or intensive care unit are patients who, along with family members, are grappling with the challenges of managing a cerebrovascular diagnosis such as aneurysmal subarachnoid hemorrhage or stroke.
The time available for surgical resident-trainees to interact with patients and families is limited. Virtual shared medical appointments (vSMA) are group visits facilitated by a provider and enable safe, resource-efficient clinician patient interaction.
SMAs can improve the patient, caregiver, and provider experience. SMAs facilitate time and resource-efficient clinician-patient communication and are associated with improved physiologic health, self-efficacy, and patient education. (Dickman, Gutierrez). A systematic review of important elements of SMAs included group exposure to combat isolation, learning about disease self-management from others, and group dynamics that develop an equitable patient and provider relationship (Kirsh).

Objectives

To conduct a vSMA that will improve resident understanding of patient and caregiver concerns and help residents to engage with patients and families in a collaborative patient-centered manner.
To conduct a vSMA that will improve patient/caregiver self-efficacy.
To conduct a vSMA that will reduce provider burnout.

Methods

This project implemented virtual facilitated group meetings (SMA) on a weekly basis facilitated by a care provider. The 1-hour SMA began with a short semi-scripted basic level presentation of cerebrovascular diseases and an outline of the session followed by caregiver and patient directed discussion on topics most meaningful to them. Participants and facilitators took a brief pre and post survey.

Results/Outcomes/Improvements

175 patients were screened, 31 (caregiver and/or patients) participated in at least one vSMA.
There were no differences in mean time to readmission between participants and non-participants (mean 6.48 days vs 8.31 days in non-participants, $p = 0.5625$)
On univariable analysis there was no difference in odds of ED visit (within 30 days) in participants versus non-participants (OR: 1.066, 95% CI: 0.311- 3.21, $p=0.999$)
There was no difference in odds of clinic visit attendence (within 90 days) in participants versus non-participants (OR: 2.088, 95% CI: 0.837- 5.51, $p=0.1001$)
Burnout data is still being collected on resident outcome.

Significance/Implications/Relevance

Implementation of virtual technology may be challenging for the stroke/cerebrovascular disease population especially given both physical and mental challenges face by this population as well as the age of patients and their ability to adopt new technology.

While many residents voiced the overall positive effect of engaging with families and patients in the vSMA when they did participate, participation remained low secondary to scheduling difficulties and interest.

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Poster# 43: Increasing Comfort of Resident Physicians Treating Patients with Intellectual and Developmental Disabilities by Facilitating Meaningful Interactions

Team: Hannah Johnson, MD; David Urion, MD, Boston Children's Hospital; Jessica Solomon Sanders, MD, University of Colorado

Background
Many physicians feel uncomfortable with caring for patients with IDD. One strategy for improving comfort with individuals with disabilities is “contact theory:” increasing interactions with “dissimilar” people can lead to decreased negative attitudes toward that population.

Objectives
To describe resident physicians’ discomfort with patients with intellectual and developmental disabilities (IDD) and evaluate the impact of an interactive conference session on resident physicians’ comfort with people with IDD.

Methods
Using a prospective pre-post intervention design, the study used surveys, including the validated Interaction with Disabled Persons Scale (IDP), to evaluate residents’ comfort with patients with IDD before and after a one-hour interactive session. Small groups of resident physicians and adult artists with IDD engaged in facilitated conversations while working collaboratively on art projects.

Results/Outcomes/Improvements
53 residents completed pre- and post-conference surveys. 98% of residents reported they had treated an individual with IDD. Prior to the conference, 87% reported they had no formal education about IDD. The mean level of comfort interacting with individuals with IDD increased from 3.6 (CI 3.3, 4.0), before the intervention, to 4.4 (CI 4.0, 4.7), after the intervention ($p<0.001$). The mean level of comfort treating individuals with IDD increased from 3.5 (3.2, 3.9), before the intervention, to 4.1 (CI 3.7, 4.5) after the intervention ($p<0.01$). Mean Interaction with Disabled Persons scores decreased from 78.7 (CI 75.3, 82.1) to 75.8 (CI 72.8, 78.8) ($p<0.001$), indicating increasing comfort after the sessions. After the sessions, residents reported understanding and communication with persons with IDD were less of a barrier to treating this population.

Significance/Implications/Relevance
Our results illustrate the high frequency in which resident physicians care for patients with IDD while highlighting resident’s discomfort in caring for this population. Facilitating meaningful interactions between individuals with IDD and trainees improved physician comfort interacting with, and treating, this vulnerable population. These sessions decreased physician perceived treatment barriers in understanding and communicating with patients with IDD. This pilot study suggests that incorporating experiences interacting with people with IDD into residency curricula could have substantial impacts on future doctors’ comfort and willingness to treat patients with IDD, potentially improving patients with IDD’s access to high quality health care.

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Poster# 44: Synapses: Making Connections Through A Medical Humanities Magazine

Team: Jessica Frey, MD; Faraze Niazi, MD; Maria Moreno-Escobar, MD; Eric Seachrist, MD; Gauri Pawar, MD, West Virginia University

Background
Residents deal with burnout, stressful situations, and emotionally draining experiences, often without an outlet to express these experiences. Likewise, the patient experience in the hospital or living with a chronic, debilitating neurologic illness can be frightening and intimidating. This project will provide both patients and residents time to interact with each other in a more meaningful way as well as reflect on their experiences through creative expression.

Objectives
-To reduce clinician levels of burnout and improve professional fulfillment
-To reduce patient levels of anxiety and depression
-To promote meaningful conversations between patients and providers
-To publish a medical humanities magazine showcasing the creative talents of participants

Methods
The project consists of three parts:
1. Extended patient interview: providers will host an unscripted conversation which can range from common interests to experiences with illness
2. Artistic Creation: painting, poetry, photography, musical composition, woodwork, and more will be inspired by the patient-provider interview
3. Magazine Launch and Reception: A magazine showcasing the creative abilities of the participants is published annually, with a launch day reception is planned in the post-COVID era in which both patients and providers come together to celebrate their work
Before and after participation in the artistic creation:
-patients are surveyed with the PHQ-9 and GAD7 to assess levels of depression and anxiety
-providers are surveyed with the Stanford Professional Fulfillment and Oldenburg Burnout Survey
-both are surveyed about how their participation has impacted their experiences in healthcare

Results/Outcomes/Improvements
Select examples of the published magazine will be displayed here. To view the complete 2019-2020 Synapses magazine in it's entirety, please visit:
1. https://medicine.hsc.wvu.edu/neurology/synapses-magazine/
2. https://wvusynapses.wixsite.com/wvusynapses

Significance/Implications/Relevance
The 2019-2020 Synapses magazine was successfully published online and will be published in print this year. As the name “Synapses” suggests, we have been able to promote connections between patients and providers in a more meaningful way. Neurology faculty, internal medicine faculty, neurology residents, nurse practitioners, and medical students all contributed art, poetry, prose, and photography to the first edition of this magazine. Having navigated the logistical challenges of launching the first edition of our medical humanities magazine in the middle of a global pandemic, we have prepared alternative ways to gather objective data about participation

in this project for future editions of this magazine. We plan to launch a new edition of the Synapses magazine annually and hope for its influence to continue to grow and to inspire medical providers, patients, and more to connect through conversation, art, and creativity.

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Poster# 45: Fertility Passport Program: Development of a Fertility Program in a Low-Resource Setting

Team: Denise Monti; Rachel Ruderman, MD, MPH; Mary Tate, MD; Stephanie Cai, MD; Emily Lin, MD; Bahar Yilmaz, MD; Luce Kassi, MD; Jaqueline Lee, MD; Christina Boots, MD, MSCI, Northwestern University

Background
More than 10% of patients who desire to become pregnant worldwide are affected by infertility. In the United States, those with lower socioeconomic resources are at increased risk of infertility due to factors such as poverty, low levels of education, and sexually transmitted infections. However, barriers in access to care for this patient population often result in fragmented and limited infertility care. Residents in an urban safety-net hospital developed the Fertility Passport Program to combat patient and provider frustrations surrounding fertility care in this setting.

Objectives
There are two primary objectives to the study. First, to increase low-resourced patients' knowledge of infertility definitions, management, and treatment in order to improve their ownership over their infertility treatment process. Second, to provide infertility resources and references to physicians in order to streamline the evaluation of these patients, with the aim to increase time for counseling and shared decision making, and to decrease burnout.

Methods
Prior to implementation of the program, a cross sectional survey was administered to residents to assess their confidence in providing infertility care in the low-resource setting, adequacy of clinic time, confidence in patient knowledge, and understanding and ability to complete their workup. For the patient education component of the program, an educational video was created in both English and Spanish about infertility. Patients are provided with a printed "Fertility Passport" to follow their infertility labs and procedures. Evaluation of patients' understanding of infertility is assessed through pre- and post-video surveys. Both patients and providers are offered tailored supplemental information on the infertility evaluation, treatment, and resources.

Results/Outcomes/Improvements
Results from the preliminary surveys demonstrated that over half of residents felt comfortable in infertility counseling, but 70% noted a perceived lack of time in clinic to adequately address these issues. Most residents were not confident in the ability of their patients to complete an infertility workup or understand the reasons for the tests ordered. The program is currently enrolling patients with infertility at a public safety net hospital in Chicago, Illinois, though enrollment was delayed by the COVID-19 pandemic and closures of outpatient clinics. Upon completion, our team intends to publish a guide for implementation of this program at other institutions as well as data on whether this implementation increased patient knowledge of their reproductive lifecycle.

Significance/Implications/Relevance
Access to infertility treatment remains inadequate for patients who receive their care in low-resource settings. In addition, while obstetrics and gynecology residents consider themselves knowledgeable about infertility care, their perceived ability to communicate this knowledge to patients in the low-resource setting is low. Implementation of programs such as the Fertility

Passport Program may increase patients' knowledge about and ownership over their infertility treatment, as well as simplify the outpatient workup for providers, creating a space for improved shared decision making.

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Poster# 46: Teaching Residents How to Break Bad News: Piloting a Resident-Led Curriculum and Feedback Task Force

Team: Joseph Sleiman, MD, Cleveland Clinic; David Savage, MD, PhD, UC San Diego Health; Benjamin Switzer, DO, University of Buffalo; Colleen Colbert, PhD; Cory Chevalier, MD, David Harris, MD, Cleveland Clinic Lerner College of Medicine of Case Western Reserve University School of Medicine

Background
Breaking bad news (BBN) is a critically important skill set for residents.
Limited formal supervision and unpredictable timing of bad news delivery serve as barriers to the exchange of meaningful feedback.
Moving training to real-time bedside observation and feedback via a formally trained “task force” may enhance training efficiency and resident self-reported communication skills.

Objectives
The goal of this educational innovation was to improve internal medicine residents’ communication skills during challenging BBN encounters.
A formal BBN training program and innovative on-demand task force were part of this two-phase project.

Methods
Internal medicine residents at a large academic medical center participated in an interactive workshop focused on BBN.
Workshop survey results served as a needs assessment for the development of a novel resident-led BBN task force.
The task force was created to provide observations at the bedside and feedback after BBN encounters.
A modified, previously published checklist was used for objective assessments of residents, and a subjective supplemental survey was added for qualitative data capture.
Training of task force members incorporated video triggers and a feedback checklist.
Interrater reliability was analyzed prior to field testing, which provided data on real-world implementation challenges (Table 1).
A quality assurance assessment of task force initiation (i.e., field testing) for a bedside observation was carried out in February 2020, prior to COVID-19 social distancing.

Results/Outcomes/Improvements
148 residents were trained during the 2-hour communications skills workshop.
Based upon survey results, 73% (108/148) of residents indicated enhanced confidence in BBN after participation (Figure 1).
During BBN task force training, seven of nine volunteers completed the six hour training. There was poor interrater reliability among raters in both videos, with a trend towards improvement with the second (Tables 2 and 3).
Field testing of the task force on a hospital floor revealed potential workflow barriers for residents requesting observations and prompted troubleshooting (Table 1).
Solutions were implemented based upon field testing results.

Significance/Implications/Relevance

A trainee-led BBN task force and communication skills workshop offers an innovative model for improving resident's interpersonal and communication skills in BBN.

An initial resident curriculum on BBN may serve as a primer for residents to be more prone for observation by a task force member while BBN to their real patients.

A longer training for task force members is needed to achieve more reliable data capture before moving on with complete bedside observation.

This model appears both sustainable and reproducible. Lessons learned are offered to aid in implementation in other settings.

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Poster# 47: Engaging Physician Trainees through Bedside ICU Narratives

Team: Christine Nguyen, DO; Alexander Davidovich, DO; Jonathan Stoever, MD
Deep Patadia, MD, MPH; Tal Shachi, DO; Jessica Montanaro, MSN, RN; Beverly Smith; Janet Shapiro, MD; E. Mirna Mohanraj, MD, Mount Sinai Morningside Hospital - ICAHN School of Medicine

Background
Physicians in the ICU treat patients with complex diseases in a stressful environment. Recent attention has focused on improving patient- and family-centered care1, but ICUs remain loci for dehumanization2. The marked increase in patient isolation and physician stress due the covid-19 pandemic dramatically increase the dehumanizing effect. A key guardian against the dehumanization of patients is the empathic physician. However, there are many barriers to providing humanistic care including high workload, non-communicative patients, and physician burnout3 which can result in empathy erosion and decreased sense of fulfillment. Narrative medicine interventions have been proposed as models to improve humane medical practice. We have implemented a novel narrative medicine intervention designed to reinvigorate the physician-patient relationship, improve the practice of humanistic care, increase the sense of meaning derived from work, and bring physician trainees 'Back to the Bedside'.

Objectives
The objectives were fourfold. The study authors aimed to (1) institute a standardized narrative medicine practice to better understand critically ill patients on a personal level. In doing so, the authors endeavored to (2) humanize the ICU patient experience and to (3) foster a deeper sense of meaning and fulfillment for physician trainees in the ICU. The authors planned to (4) assess the impact of sharing patient biographies on the attitudes and experiences of physician trainees in the ICU.

Methods
IRB approval was obtained. We designed a biographical questionnaire and poster (Image 1) to elicit and share patient biographic and social background information including: relationships, accomplishments, values, interests, and personal traits. Patients in the Mount Sinai Morningside ICU (NY, NY) with anticipated stay greater than 48 hours were enrolled. Patients or a surrogate provided questionnaire responses and patient photographs, which were shared on daily inter-professional rounds and posted in the patient's room. To study intervention impact on physicians, residents in the ICU were consented for enrollment. After 2 to 4 weeks of exposure to the intervention, semi-structured interviews were conducted and residents completed an internally validated questionnaire addressing their demographics, attitudes, and experiences. Study authors performed an iterative qualitative analysis of interview transcriptions and generated five thematic categories of responses.

Results/Outcomes/Improvements
The study was conducted in a NYC academic hospital during the second surge of covid-19. Over 8 weeks 20 patient biographies were completed (Img. 2). 19 resident physicians were enrolled: 13 internal medicine (IM); 6 emergency medicine (EM); 63% were male, 37% were PGY1, 11% were PGY2, and 53% were PGY3 (Fig. 1). Post-intervention, residents agreed or strongly agreed with the following: 53% spent more time eliciting personal information; 68% spent additional time at the bedside; 95% reported improved rapport with surrogate; 63% felt

more enthusiasm for ICU care; 79% reported increased meaning from work (Fig. 2). Residents reported increased sense of responsibility for patient welfare (37%), additional time spent with surrogate (42%) and a desire to monitor patient progress beyond routine duties (47%). The five thematic categories with representative comments are in Table 1. The majority of residents indicated the intervention was beneficial with only minimal interruption to ICU rounds.

Significance/Implications/Relevance

Sharing patient biographies helps overcome barriers limiting humanistic care in the ICU. Post-intervention residents spent more time with patients, developed rapport with surrogates and derived more meaning from work. Residents perceived the intervention as humanizing and that learning patient biographies may positively impact delivery of care. Emotional responses were perceived as helpful and challenging, which may mitigate physician burnout, improve ICU moral climate and enhance fulfillment from work. Humanizing the ICU had a more profound impact given patient isolation and physician stressors due to covid-19. Sample size limits statistical and subgroup analyses. Results may be skewed by recall bias, self-report bias and resident eagerness to provide positive feedback. The intervention is feasible and reproducible. This novel narrative medicine approach rejuvenates opportunities for humanistic medical care, facilitates rapport-building and increases the meaning derived from work.

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Poster# 48: Using Guided Reflection to Improve Resident Wellbeing

Team: Camilla Yu, MD; Linda Pan, MD; Katerina Hoyt, MD, Johns Hopkins University

Background
With ever-increasing administrative demands and new challenges raised by the age of pandemic medicine, residents are experiencing record levels of burnout and moral injury (1,2). Within residency, multi-disciplinary teams often debrief poor patient outcomes with a focus on systems-wide issues and actions that may have contributed. However, there is seldom time or space for emotional processing and reflection following challenging cases. These skills, however, are both important components of professional and personal development for physicians in training (3).

Objectives
-Development and implementation of a durable self-reflection curriculum for residents to process difficult patient encounters and outcomes
-Establish opportunities and protected time for guided individual and team-based reflection
-Encourage a multi-disciplinary approach to reflection drawing from tools used by Social Work, Chaplaincy, Palliative Care and Psychiatry
-Equip residents with a toolkit for meaningful emotional processing and reflection as a method of self-care and mutual care
-Normalize a culture of self-care and help-seeking when dealing with emotionally challenging events

Methods
-Development of Residency Houses, comprised of 8-9 residents of varying years to promote vertical integration amongst residents
-Longitudinal reflection curriculum consisting of 4 individual sessions during weekly Resident School from multi-disciplinary lecturers (Psychiatry, Chaplaincy, SW, Palliative Care)
-Residents will be encouraged to journal throughout the year and if desired bring their journal entries to share in small group reflections
-Engagement of the Resilience in Stressful Events (RISE) Team at Hopkins to help lead sessions
-An emotional peer support structure which supports second victims who were emotionally impacted by a stressful patient-related event or unanticipated adverse outcome.

Results/Outcomes/Improvements
-Pre-intervention survey to measure burnout
-A post-intervention survey will be administered following Session #4
-Residents have opportunities to submit ongoing anonymous online feedback regarding the reflection curriculum

Significance/Implications/Relevance
-Reflection curriculum will be piloted within the GYN/OB Residency Program and Johns Hopkins
-Several other specialties have expressed interest in potentially adopting this curriculum for their residents as well
-Our hope is that this model will be something that can easily be adopted and implemented across multiple specialties and across multiple disciplines within the Hopkins system

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Poster# 49: Mitigating Moral Distress in Surgical Trainees During COVID-19

Team: Michele Fiorentino, MD; Carma Goldstein, MD; Anastasia Kunac, MD, Rutgers New Jersey Medical School; Anne Mosenthal, MD, Lahey Hospital Medical Center

Background
Moral distress occurs when professionals cannot carry out what they believe to be ethically appropriate actions because of constraints or barriers. Moral distress is prevalent among healthcare workers with the greatest sources of distress surrounding end-of-life and futile care. This has not been studied in surgical trainees. Surgical residents care for patients in situations commonly associated with high levels of moral distress. In an effort to mitigate moral distress we developed a curriculum to improve communication skills among surgical residents consisting of a simulation session, direct feedback following goals of care discussions, and multidisciplinary rounds. During the spring of 2020, our hospital admitted many COVID-19 patients necessitating the creation of additional ICUs and redeployment of surgical residents. Due to this surge, we were unable to implement all aspects of our curriculum.

Objectives
The objective of our study was to evaluate moral distress among surgical residents before and after the spring of 2020 COVID-19 surge. We hypothesized that the challenges faced by the trainees due to COVID-19 would increase moral distress in surgical residents.

Methods
We utilized a before and after cross sectional study design at a single academic institution. Our initial study design included the intervention. This model had to be altered due to the COVID-19 pandemic and was changed to be before and after the initial surge without a structured intervention. Surgical residents were given a moral distress for healthcare professionals survey (MMD-HP) at the start of the academic year in July 2019 (Timepoint 1). Following the spring COVID-19 peak, residents were re-administered the MMD-HP in June 2020 (Timepoint 2). Additionally, all redeployed ICU residents were invited to attend a counselor led debriefing session. We quantitatively analyzed the MMD-HP data and qualitatively analyzed the debriefing sessions.

Results/Outcomes/Improvements
Thirty-nine residents completed the survey at Timepoint 1 and 34 at Timepoint 2. There was no significant difference in MMD-HP scores between the two timepoints (109 versus 106, p value=0.49), in the proportion of those who had thought about leaving their position (23% vs 21%, p value=0.40), or in those classified as having moderate to severe distress (21% vs 21%, p value=0.50). The most distressing situation identified at both timepoints was following the family's insistence to continue aggressive treatment even though they did not believe it was in the best interest of the patient. In the debriefing session, residents indicated that the most distressing situations were those involving futile care, no visitation, and a lack of appropriate staff. The residents cited education from faculty and emotional support from faculty and peers as sources of assistance during the pandemic.

Significance/Implications/Relevance
Surgical residents experience moral distress. There was no significant difference in moral distress in surgical trainees before and after the COVID-19 surge. This lack of significant

change in moral distress may be attributed to the support residents received from their peers and faculty. Identifying mitigating factors for moral distress should be a focus of further research.

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Poster# 50: Implementation of a Trauma-Informed Care Curriculum in General Surgery Residency

Team: Jamal McFarlane, MD; Stephanie Bonnie, MD; Kurun Oberoi, MD; Anastasia Kunac, MD, Rutgers New Jersey Medical School; Kelly Moore, PsyD, Rutgers University Biomedical Health Care

Background
Adults who have experienced prior traumatic experiences are common in our general population. These experiences can have dramatic effects on behavior and mood. General surgery residents who rotate regularly on trauma services are on the front lines of delivering care to patients who are at risk of re-traumatization if we are not attuned to our bedside interactions. Trauma-Informed-Care (TIC) is a method of delivering care that takes traumatic experiences into account and strives to restore safety, individual power, and a patients' sense of self-worth.

Objectives
Although there have been many studies assessing baseline attitudes regarding TIC and the effect of subsequent interventions in several populations, there is a lack of data on surgical trainees. We sought to understand if there is a need for a TIC curriculum in general surgery residency.

Methods
The Attitudes Related to Trauma-Informed Care Scale (ARTIC) is a validated tool for organizations to use to facilitate and implement trauma-informed care and provides information on 5 core subscales: underlying causes of problem behavior and symptoms, responses to problem behavior and symptoms, on-the-job behavior, self-efficacy at work, and reactions to the work. There are 6 versions of the ARTIC with 45, 35, and 10-item options based on the needs of the organization. The ARTIC-35 was administered to 50 general surgery residents who train at an urban, academic, ACS verified level I trauma center. ARTIC-35 was administered to all program year levels at the start of the academic year prior to any formal training in TIC. Mean scores of residents were evaluated by program year level as well as by core subscale. Mean comparisons were analyzed by ANOVA.

Results/Outcomes/Improvements
Residents had completed 0-6 months of rotations on the Trauma Surgery Service and an additional 0-5 months of rotations in the Trauma Intensive Care Unit. Analysis of resident mean scores revealed no statistical difference between groups based on program year level. Additionally, mean scores of all residents on the core subscale "responses to problem behaviors and symptoms" scored the lowest among the 5 subscales indicating that respondents, on average, emphasized rules, consequences, and accountability as being the agent for changes in patient symptoms and behaviors, as opposed to flexibility, kindness, and safety.

Significance/Implications/Relevance
Despite formal instruction in trauma surgery and yearly exposure to patients with prior traumatic history, attitudes toward TIC among residents are uniform throughout all levels of training. This suggests that with increased resident seniority, one doesn't necessarily have increased sensitivity to their bedside interactions and how those interactions might negatively impact

patients. We propose a formal curriculum that educates our surgical residents on the pillars of TIC and provides opportunities to implement these pillars in their practice.

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Poster# 51: Waging War Against Physician Burnout: Overcoming the Barriers of Military Medicine with Personalized Patient Care Boards

Team: Jessika Weber, DO; Jean Bennett, MD; Liezl Zeeman, MD; Mary Pelszynski, MD; Candace Percival, MD, San Antonio Uniformed Services Health Education Consortium

Background
Burnout remains pervasive among resident physicians, despite a national focus (1). Trainees are faced with the ambitious task of creating a balance between daily duties, clinical knowledge acquisition, high-quality patient care, and developing an identity as a provider that is most reflective of one's own personal values. Time constraints and work-related stressors may contribute to burnout; however, meaningful direct clinical care can help to improve satisfaction in the workplace and decrease risk for burnout (1). Individuals who identify their work as meaningful or as serving a greater communal good report better psychological adjustment and report overall greater well-being (4). The implementation of Personalized Patient Care Boards (PPCB) in a pediatric ward setting is predicted to enhance the quality of patient care through increasing meaning in work and patient connection and improve patient/family satisfaction.

Objectives
Implement PPCBs on the pediatric ward to (1) determine the degree to which pediatric residents experience positive meaning in work and perceive work to have a greater purpose, (2) examine the association between meaningful patient interactions and positive meaning in work and, (3) explore the relationship between patient satisfaction attitudes and the use of PPBCs.

Methods
Baseline surveys were obtained from pediatric residents with a modified Work and Meaning Inventory (WAMI, 3 questions) and Patient Connection (2 questions) prior to implementation of the PPBCs (7). Patient/family satisfactions surveys (6 questions) were also obtained randomly over 12-months from inpatient pediatric patients. Customizable, PPCBs were designed and will be placed in all pediatric ward patient rooms for use during patient-centered rounds and daily encounters. The medical team will be trained to use the PPCBs with admitted patients in an interactive way to improve personal connection and medical communication with the patient and family. Post-implementation surveys will be obtained intermittently following implementation and during continued use of the PPCBs at 3, 6, 12, and 15 months to detect changes from baseline. Pre- and post-surveys will also be given at the start and end of ward rotations during the intervention.

Results/Outcomes/Improvements
A total of 35 pediatric resident respondents (postgraduate year: 11 PGY-1, 31.4%, 10 PGY-2, 35%, and 14 PGY-3, 40%), endorsed meaning in their work (Q1-94.3%, Q2-89%, Q3-91%) and connection to their patients (Q-4 82.8%, 85.7%) based on pre-implementation surveys. Additionally, most patients/families can identify their physician (87.8%), nurse (100%), and report clear communication from the inpatient care team (96.5%).

Significance/Implications/Relevance
Increasing internal and external pressures have created barriers that limit direct interaction with patients (6). As tasks accumulate, residents are missing crucial opportunities for enrichment of their patient relationships leading to a generation of providers progressively lacking personal

connections and failing to find meaningfulness in their work. Time-motion studies have shown from 2:1 to 5:1 ratio of time spent on documentation compared to direct patient care. These studies suggest that physicians spend only 10% of time caring for patients (7). These feelings of disconnectedness lead to suboptimal patient care and attitudes as well (8). PPCBs provide a promising new strategy to lessen physician burnout by promoting a sense of meaning in daily work through systematic changes in the clinical learning environment.

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Poster# 52: Teaching Effective Communication: Engaging our Colleagues, Staff, and Patients

Team: Krishna Suri, DO; Rosa Guedez, MD; Gabriel Lora, MD; Anoop Pasupuleti, MD; Chelsea Chang, MD

Background
We proposed an ACGME Back to the Bedside initiative on communication essentials to help residents engage on a deeper level with coworkers and patients, fostering joy in our community. We implemented an interactive and structured communication skills curriculum for our work relationships in order to start a low-cost initiative that can be replicated in other residency programs nation-wide.

Objectives
Our project aims to enhance the relationships and interactions within 3 key partnerships:
(1) Physician-Physician (between interns, residents, fellows, and attendings)
(2) Physician-Staff (including nursing, social workers, therapists, and technicians) and
(3) Physician-Patient (and patient's family)
We suspect that this initiative will increase work satisfaction, especially as we move towards patient-centered, team-based approaches.

Methods
An educational intervention at DHR in UTRGV's IM residency program was implemented in the spring of 2020 from April – June 2020. Pre and post surveys on core competencies in "The Language of Caring Guide for Physicians: Communication Essentials for Patient-Centered Care" was implemented to explore the treatment effect of the intervention on physicians self-reported scoring profile on a series of 35 questions used to establish their perception of their ability to connect and interact with patients throughout their treatment process. A brief demographic survey was also implemented to explore if the effect was different across demographic characteristics.
The 35 Questions can be grouped by competency. The competencies can be classified as shown on figure 1.

Results/Outcomes/Improvements
We found is that there is a statistical difference between the median score between the pre and post surveys for competencies of communicating with empathy, effective explanations and engaging patients and families as partners, with increases in median score post intervention. Of the three competencies that showed statistical difference with our sample size of 43 residents completing both pre and post-test surveys, the competency that had the largest difference in the pre and post-test was engaging patients and families as partners.
Physicians are reporting answer choices asserting an increased confidence within those respective communication competencies. This educational intervention has limited generalizability as the total number of cases analyzed were small and from a single institution. The COVID-19 pandemic affected our implementation of our curriculum was curtailed, this also affected our ability to transition a standardized curriculum across training levels.

Significance/Implications/Relevance

In conclusion, we developed an interactive workshop based educational curriculum to teach physicians the skills vital to conducting effective patient communication. The resulting curriculum significantly increased self reported resident physician confidence and satisfaction in several communication competencies. The most statistically powerful was in engaging patients and families as partners. Based on this assertion, the next phase of the project will hope to involve a multi-center intervention to increase power and provide insight into additional variables affecting compassionate care.

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Poster# 53: Getting Real About 'The Talk'

Team: Jeffrey Eugene, MD; Sarah Capponi, MD; Nicole Jaffe, MD; George Dalembert, MD, MSHP, Children's Hospital of Philadelphia

Background
The killing of young Black men by police officers is a public health crisis. Black men are disproportionally killed by police compared to white men, with estimates suggesting that Black men are up to 21 times more likely to be fatally shot by police than white men. Physicians can play an important role in preparing young Black men to safely navigate police encounters in their anticipatory guidance to youth and families.

Objectives
We seek to: 1) elicit key messages from youth and their caregivers about safely navigating police encounters and the acceptability of physicians discussing this topic in the primary care setting; 2) elicit, from physicians, the acceptability and key barriers and facilitators for incorporating discussion of safely navigating police encounters into clinical practice.

Methods
Qualitative study employing focus groups and semi-structured interviews. Participants include: Black males (ages 13-18) and their caregivers; pediatric attending physicians; and pediatric resident physicians. Using a modified grounded theory approach, we will perform inductive analysis to generate primary themes.

Results/Outcomes/Improvements
We will use the data collected to design an intervention that incorporates the insights from study participants into an acceptable medium of anticipatory guidance for safely navigating police encounters, empowering providers to engage in antiracist practice and allowing families to receive the support they identify they need from their pediatricians.

Significance/Implications/Relevance
Racial anxiety and lack of self-efficacy can serve as disincentives to engaging in important conversations. A patient, family, and colleague-informed approach to supporting Black males and their caregivers in navigation of police encounters offers an opportunity for increasing support of Black males and their caregivers, as well as increasing their connectedness with their providers.

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Poster# 54: Piloting and Expanding "The GIMboree Experience": Enhancing Joy in Outpatient Medicine

Team: Deborah Freeland, MD, UT Southwestern Medical School; Maria Bellantoni, MD; Madeline Rodriguez, MD; Mfon Umoh, MD, PhD; Paul O'Rourke, MD, MPH, Johns Hopkins University School of Medicine

Background
While longitudinal primary care is associated with improved health outcomes and lower health costs, there remains a shortage of primary care physicians in the United States (5). Residency ambulatory training has historically been minimal or under-resourced compared to inpatient experiences (1,2). In order to address the primary care shortage, residencies must find ways to underscore the importance of primary care and support residents who are interested in the fields of general internal medicine (GIM) and geriatrics. Focusing on humanism and sense of meaning, building a strong community, and fostering reflection are three techniques that promote physician joy and resilience (4). With this knowledge, we developed "GIMboree," a monthly event for residents and faculty to promote community-building and interest in primary care (3).

Objectives
The purpose of GIMboree is to provide unique community events specifically for primary care residents and faculty through a tripartite model: 1) exposure to role models; 2) strengthening medical knowledge related to outpatient medicine through journal club; and 3) fostering a sense of community in which residents feel supported in their outpatient interests and reminded of their sense of meaning in their work. GIMboree events are held monthly, and include a two hour off-campus gathering with dinner, a journal article review, a faculty member's career story, and time for reflection about clinic experiences. A resident volunteer leads the group through analysis of a recently published research article that pertains to outpatient medicine. A faculty member shares their career story and advice. Clinic reflection allows residents to obtain feedback about an encounter or to discuss joys and challenges specific to outpatient medicine.

Methods
We piloted GIMboree by inviting Johns Hopkins Bayview Medical Center primary care residents and GIM/Geriatrics faculty to monthly GIMboree events. After each meeting, residents were surveyed with Likert scale and open-ended reflection questions. The short-answer responses were assessed for common themes across meetings. Feasibility and acceptability data were collected. In 2019, GIMboree received an ACGME Back to Bedside grant to expand the program to include urban health and medicine-pediatrics residents from two other programs. Residents were given a pre-test survey to assess sense of community, sense of meaning, likelihood of pursuing a primary care career, and burn out (6,7). After 6 months, a similar mid-test survey assessed suggestions for improvement, identifying the most satisfying aspects, and barriers for attendance. With the limitations imposed by the COVID-19 pandemic, GIMboree events were transitioned to a virtual platform in April 2020.

Results/Outcomes/Improvements
GIMboree was piloted from July 2018 to September 2019 with 14 events. During the pilot, resident attendance averaged 7 per evening (range 4-9), and 19 of 21 (90%) residents attended at least one event. In October 2019, GIMboree expanded to two other residency programs with

9 events held from October 2019 to June 2020. After expansion, resident attendance averaged 9 per evening (range 4-15). After expansion, 18 of 20 (90%) eligible residents from Bayview and 5 of 24 (21%) eligible residents from Johns Hopkins attended at least one event. Transition to a virtual platform in April 2020 did not alter attendance. Preliminary results of reflective data reveal 3 main themes: excitement about a career in primary care medicine, a growing sense of community, and goals for self-improvement. Data collection and analysis remains ongoing with plans for a third survey at 18 months to assess for change in sense of community, sense of meaning, likelihood of pursuing a primary care career, and burn out.

Significance/Implications/Relevance

Surveys of participants reflect that GIMboree is popular amongst residents. Expansion to two additional residencies was successful and the events continue. GIMboree was transitioned to a virtual platform during the pandemic without losing attendance. GIMboree is a unique combination of community-building, evidence-based medicine, and reflection on outpatient medicine that shows promise for enhancing joy in medicine and reducing burn out. It has helped foster community within several Johns Hopkins primary care residencies and may be translated to other programs as a mechanism to encourage professional community growth, increase primary care career interest, and highlight fulfilling aspects of medicine.

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Poster# 55: The Postpartum Polaroid Project

Team: Abigail Garbarino, MD; Kelly Zafman, MD, MSCR; Catherine Salva, MD

Background
Ob/Gyn residents are at high risk of burnout (1). Although the delivery of a child is a coveted opportunity to cultivate wonder and professional satisfaction, it is threatened by volume and documentation demands, especially in a high acuity academic center. The Stanford Professional Fulfillment Index is a 16-item, validated survey that assesses burnout (work exhaustion and interpersonal disengagement) and professional fulfillment (2).

Objectives
To create an intervention for obstetrics residents that cultivates mindfulness, meaning, and connection with patients on labor and delivery through a physical memento.

Methods
28 out of 30 residents from all PGY levels consented to participate from 9/2019 - 6/2020. Inclusion criterion was the completion of at least one prior labor floor block. Pre and post-surveys were administered via RedCAP to assess the impact on burnout through the administration of the validated Stanford Professional Fulfillment Index Provider. The pre-survey was timed just prior to each resident's labor floor block, and the post shortly after the end of their labor floor block was completed.
For the intervention, residents were encouraged to return to the patient's bedside after delivery to gather for a group polaroid photo. Patients, residents, and RNs were then provided with a copy as a keepsake. Resident's copies were collected and curated into a photo book that was gifted to them at graduation.
RN and MD education and recruitment was performed by education at daily huddles and provision of lanyard pins. Incentive gift cards were provided to top performers.

Results/Outcomes/Improvements
17 of 28 consented residents participated fully in the intervention with an average of 8.4 polaroids taken over their labor block (range 1-32). Worker exhaustion was on average higher in residents that did not participate, approaching significance ($p = .08$). After the intervention, there was a significant improvement in scores indicating personal fulfillment ($p=0.02$) and personal disengagement ($p<0.001$); no difference was found in worker exhaustion scores. Logistic regression showed no dose-dependent relationship between these outcomes and the number of polaroids, although residents with more polaroids were more likely to report that patients would remember their names, approaching significance ($beta=0.05$, $p=0.07$).
We hope that this data will be bolstered as we continue to implement the intervention with each year of interns. We plan to expan the data set to family medicine residents on the labor floor, as well as pursuing qualitative analysis.

Significance/Implications/Relevance
Our pilot data suggests that this is a simple, feasible intervention to increase professional satisfaction as measured by the Stanford Professional Fulfillment Index. Qualitative feedback from residents, RNs, and attendings suggest that the physical polaroid photo creates emotional salience and meaning both in the moment it is taken and in months to come. In our pilot study, an unexpected benefit was the perceived increase in warmth between both resident and RN,

and provider and patient. Patient's too appreciated the gesture, with no patient to date declining a polaroid. This is a simple and affordable intervention that can be applied broadly on labor floors across the country to increase physician resiliency and meaning.

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Poster# 56: Back to Bedside: Internal Medicine Wellness Study

Team: Alheli Arce Gastelum, MD; Anusha Pinjala, MBBS; Sonia Gupta, MD; Muazzam Mirza, MBBS; Raahat Bansal, MBBS; Saber Khan, MD; Ryan Walters, PhD; Kevin Embach, MD; Joseph Nahas, MD; Mohsin Mirza, MBBS

Background

Burnout is prevalent at all levels of medical training and has a significant impact on physician's wellbeing.1 In 2015, Shanafelt et al. found an increased prevalence of burnout among U.S. physicians.2 Burnout also result in lower-quality care and increased incidence of medical errors.3

A couple of years later, the Accreditation Council for Graduate Medical Education (ACGME) emphasized the need for a physician wellbeing program.4 Following the lead of ACGME, our institution conducted a pilot survey assessing physician wellbeing, which showed that 45% of the residents felt burnt out. Only 33% of residents reported being satisfied with the support system, and 59% reported rarely reaching out to their support system. Herein, we designed a prospective cohort study to bring back meaning in the clinical learning environment.

Objectives

Primary outcomes:

1. Improvement in resident satisfaction with time spent at the patient's bedside
2. Improvement in residents' sense of autonomy
3. Improvement in resident's wellness as measured by Mayo Clinic Resident/Fellow Well-Being Index score (MCWI).

Secondary outcomes:

1. Improvement in resiliency
2. Improvement in ease of interprofessional communication
3. Improvement in satisfaction with availability of support system
4. Improvement in the frequency of reaching out to support system

Methods

We are conducting an ongoing prospective study from July 2019 to June 2021. All four levels of Internal Medicine residents are enrolled. A Pre-intervention Pilot study survey was obtained in February 2019.

Our intervention is three-pronged. The study's three arms consist of wellness rounds, return testimony visits with the patients, and support network group activities.

Four surveys with 25 questions will be administered during the study. We obtained data on August 2019, March 2020, and September of 2020; we plan the last data collection for February of 2021. We analyzed the surveys utilizing Chi-square test or Fisher exact test.

Questions 7-13 on the survey represent the Mayo Clinic Wellbeing Index. We calculated the weighted average of the number of responses endorsed across participants based on the rate of endorsing "Yes" for each question.

Results/Outcomes/Improvements

Fifty-nine residents participated in survey 1, forty-three residents in survey 2, and forty-nine residents in survey 3. Between Survey 1 and 2, there was a significant improvement in time spent at the patient's bedside (20% vs. 39.53%), the meaningfulness of residency (54.24% vs. 62.79%), coping with stressful times (15.25% vs. 39.53%) and satisfaction with a support

system at work (23.73% vs. 30.23%). Between Survey 1 and 3, there was a significant improvement in satisfaction with time spent at the patient's bedside (20.34% vs. 24.49%), coping with stressful times (15.25% vs. 42.86%), the support system at work (10.17% vs. 32.65%). Between Survey 2 and 3, there was a significant improvement in satisfaction with support systems at work (0% vs 24.49%) and reduced resident satisfaction with time spent at the patient bedside (39.53% vs 24.49%).
A weighted average of 2.7 for Survey 1 vs 2.1 for Survey 2 vs 2.2 for Survey 3 was obtained, the MCWI was unable to obtain.

Significance/Implications/Relevance
Significance/implications/relevance
The Internal Medicine Wellness study facilitated creating a resident-led wellness committee, strengthening the support system. The wellness interventions were reflected in the survey results by a statistically significant improvement in resident satisfaction with the support system.
Challenges during the study
1. Utilizing protected time during inpatient internal medicine rotations.
2. Bedside time restriction due to the COVID-19 pandemic.
3. Abandoning the patient testimony visits due to logistic difficulties.
Limitations
1. A survey-based study that focuses on the participant's opinions.
2. Small sample size with new residents enrolling and leaving every year.
3. The results may vary based on each resident's schedule and lifestyle.
4. Lack of unique identifier number per participant leading to the inability to obtain the Mayo Clinic Wellbeing Score.
5. Potential for confounding bias after the study was affected by the COVID-19 pandemic.

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Poster# 57: Improving Patient-Doctor Relationship Using a Structured Encounter Card

Team: Claire Isabelle Verret; Duretti Fufa, MD, Weill Cornell Medical College, Hospital for Special Surgery; Jona Kerluku; Jennifer Bido, MD, Hospital for Special Surgery; Lauren Wessel, MD, Washington University in St. Louis

Background
Patients seldom recall or fully understand the medical information discussed during a medical encounter(1). Studies have shown that 40 to 80% of the medical knowledge provided by healthcare professionals is forgotten immediately after a medical visit and almost half of what is remembered is incorrect(1). Improving patient-doctor communication and patient engagement during medical visits is thus crucial in empowering patients to make more informed decisions about their care. Effective patient-doctor communication has been linked to improved patient health, functional and physiological status as well as better adherence to physician recommendations and increased patient satisfaction(2). Success in communication leads to a shared understanding between patients and physicians, alignment of goals, search for mutual satisfaction, all of which contribute to a healthy patient-doctor relationship(3,4).

Objectives
“My Ortho Visit” is a patient encounter card (Figure 1) designed to help orthopaedic surgery residents/fellows and patients in: (1) building rapport; (2) setting a collaborative visit agenda upfront; and (3) co-creating a plan of care. The purpose of this quality improvement project was to improve: (1) patient engagement; (2) patient-doctor communication; and (3) patient-doctor relationship. We hypothesized that patients who use the patient encounter card will report a better connection with their physician and higher satisfaction with their clinic visits.

Methods
All new patients attending the clinic of a single fellowship-trained orthopaedic hand and upper extremity surgeon were recruited for this study. Patients were split into two groups depending on presenting date: pre- or post-intervention. Pre-intervention data was collected on patients who presented prior to use of the encounter card, while post-intervention patient data was collected after the encounter card rollout. All data was collected within an 8-month timeframe. Participating patients filled out surveys during their check-out process. Data collected included a 5-point Likert-type survey to assess patient engagement and patient-doctor communication. The 5-item Perceived Efficacy in Patient-Physician Interaction(2) questionnaire was utilized to assess patient-doctor interaction. Feedback was collected from all trainees at the end of each clinic day. Pearson Chi-Square Tests were used to compare patient pre- and post-intervention data. P values ≤ 0.05 were considered significant.

Results/Outcomes/Improvements
287 patients were enrolled in the pre-intervention (145) and post-intervention (142) arms of this study. Patient demographics are reported in Table 1. There was a significant increase in patient engagement, improving from 74% to 88%(p=0.015) as more patients strongly agreed to being involved in decisions about their treatment (Table 2). In both phases, 98% of patients felt physicians listened well or very well during conversation (p=0.958). Patients using the card felt physicians better addressed their main concerns (p=0.534) and explained recommendations for treatment in a more understandable way (p=0.279). Patient confidence in getting their doctor to

do something about their primary health concern improved from 72% to 79% (p=0.449). Patient-doctor connection (p=0.690) and overall patient satisfaction (p=0.501) both improved from pre- (96%) to post- (98%) intervention. 82% of trainee responses indicated that card use across orthopaedic services was feasible (Table 3).

Significance/Implications/Relevance

While all study patients equally agreed their doctors listened carefully, patients using the encounter card reported a 14% statistically significant (p=0.015) improvement in feeling more involved in their treatment plan. Additionally, though not statistically significant, card use allowed for patient main concerns to be better addressed and treatment recommendations better explained. Patients also felt more confident in interacting with their doctor, visits felt more collaborative, and patients felt a sense of agency in getting their doctor to do something about their chief health concern. Our results are promising in showing a significant increase in patient engagement, and improved patient-doctor communication, interaction, connection, and overall patient satisfaction. All of which are clinically important for building a healthy patient-doctor relationship.

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Poster# 58: Inform: INvolving patients in Fellow education and cOntRibutions to academic Medicine

Team: Anum Minhas; Daniel Ambinder; Nino Isakadze; Pranoti Hiremath; Marc Engels; Steven Schulman

Background
In today's medicine, patient care and academic learning mostly occurs removed from the heart of medicine, the patient's bedside. Within our Cardiology division, fellows participate in weekly case conferences, which provide high-yield learning through the opportunity to highlight a particularly stimulating case selected by the trainee. Often, all participants leave with renewed vigor for patient care.
While the instructive nature of these conferences is central to fellows, it is unknown if fellows explicitly express their appreciation and understanding of patient involvement.
We propose an innovative process for fostering the trainee-patient relationship: recognizing patient contribution to fellow education.

Objectives
Prior to the COVID-19, we had proposed to require fellows to discuss with patients use of deidentified information for weekly case conference. We had also aimed to share with patients the comments received regarding the value of their care to trainee education.
However, due to COVID-19 restrictions limiting the time fellows are able to spend with patients and the requirement of universal masking which can make it challenging to recognize team members, we have changed our aims to the following:
Survey all fellows at baseline
Primary fellow shares during case conference what he/she learned by taking care of this patient
Poll the audience on what they have learned from the patient's care
Fellow wellbeing and interaction with each other

Methods
These methods are included as a flow chart in the poster

Results/Outcomes/Improvements
Results are included as bar graphs in the poster

Significance/Implications/Relevance
Potential Future Obstacles:
Lack of involvement of all fellows
Strategies for Improving Project Success:
Individually contacting fellows for engagement
Updating fellows and the team with regular meetings

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