Frederick Health

Meritus School of Osteopathic Medicine
Meritus
Maryland

Meritus Medical Center

Scholar-Con 2026
"Breaking Barriers to Empower Change"
Abstracts

SCHOLAR-CON
Advancing research, scholarly pursuits, and outreach together

MSOM.ORG

BIOMEDICAL AND TRANSLATIONAL SCIENCES

BTS.302 | LEVERAGING NQO1 BIOACTIVATABLE DRUGS FOR TUMOR-SELECTIVE USE OF POLY (ADPRIBOSE) POLYMERASE INHIBITORS

NAVEEN SINGH, PHD

BACKGROUND | Therapeutic drugs that block DNA repair, including poly (ADP-ribose) polymerase (PARP) inhibitors fail because of a lack of tumor-selectivity. When PARP inhibitors and NQO1 bioactivatable drugs (ß-lapachone or isobutyldeoxynyboquinone (IB-DNQ)) are combined, synergistic antitumor activity results from sustained NAD(P)H levels that refuel NQO1-dependent futile redox drug recycling. **METHODS** | Breast and lung cell lines from ATCC were used. IB-DNQ and ß-lapachone were used for treatments. Seahorse XF bioanalyzer was used for Oxygen Consumption Rate assumptions. ATP, NAD/NADH and H2O2 Quantification were done using commercially available kits from Promega. **RESULTS**| Significant oxygen consumption-rate/reactive oxygen species cause dramatic DNA lesion increases that are not repaired due to PARP inhibition. In NQO1+ cancers, such as non-small-cell lung (NSCLC), pancreatic or breast cancers, the cell death mechanism switches from PARP1 hyperactivation-mediated programmed necrosis with NQO1 bioactivatable monotherapy to synergistic tumor-selective, caspase-dependent apoptosis with PARP inhibitors and NQO1 bioactivatable drugs. **CONCLUSION** | Synergistic antitumor efficacy and prolonged survival were noted in human orthotopic pancreatic and non-small-cell lung xenograft models, expanding use and efficacy of PARP inhibitors for human cancer therapy.

BTS.303 | NON-THERMAL PLASMA-MEDIATED IRREVERSIBLE ELECTROPORATION FOR TARGETED ELIMINATION OF RESIDUAL BREAST CANCER CELLS AT SURGICAL MARGINS

SARAVANA R. K. MURTHY, PHD; TAISEN ZHUANG, MS; OLIVIA Z. JONES, BS; YASMINE S. DAKAK; MICHAEL KEIDAR, PHD; AVIRAM NISSAN, MD; JEROME CANADY, MD, FACS

BACKGROUND | Residual tumor cells at surgical margins are a major contributor to local recurrence in breast cancer. Non-thermal plasma technologies offer a potential intraoperative strategy to selectively eliminate malignant cells while preserving surrounding tissue. The Canady Helios Cold Plasma (CHCP) system generates brief electric fields and reactive species capable of disrupting cancer cell membranes. This study evaluated whether CHCP induces voltage-dependent irreversible electroporation across biologically distinct breast cancer subtypes. **METHODS** | Four human breast cancer cell lines were examined, including two triple-negative lines (MDA-MB-231, Hs578T), one ER+/PR+/HER2− line (MCF-7), and one ER+/PR+/HER2+ line (BT-474). Cells were exposed to CHCP for five minutes at either 25 V or 30 V. Membrane permeabilization was assessed via propidium iodide uptake over 120 minutes. Morphological changes, functional pore formation using BCL2A1-targeting siRNA delivery, and clonogenic survival were evaluated. Ex vivo tumor margin samples from a Phase I clinical trial were analyzed to assess tissue-level responses. **RESULTS** | CHCP exposure produced voltage- and time-dependent membrane permeabilization in all four breast cancer cell lines.

Treatment at 30 V resulted in sustained dye uptake, while 25 V induced a weaker, transient response. Treated cells demonstrated structural changes consistent with membrane disruption. CHCP enabled intracellular siRNA delivery and significantly reduced clonogenic survival, confirming effective electroporation. Ex vivo analyses demonstrated selective injury to malignant cells while preserving adjacent non-cancerous tissue. **CONCLUSION** | CHCP functions as a non-thermal, non-contact plasma-based electroporation platform capable of controlled membrane permeabilization and selective cancer cell death. These findings support its potential intraoperative use to eliminate residual tumor cells at surgical margins and reduce the risk of local recurrence in breast cancer.

BTS.304 | MAPPING SEIZURE-DRIVING INPUTS IN A MOUSE MODEL OF FOCAL CORTICAL DYSPLASIA
YASMINE S. DAKAK; ANUP SRIVASTAVA, PHD; ROBERT F. KEATING, MD; KAZUE HASHIMOTO-TORII, PHD; MASAAKI TORII, PHD

BACKGROUND | Focal cortical dysplasia type II (FCD-II) is a leading cause of drug-resistant epilepsy in children, yet the neural circuits that initiate and sustain seizures remain poorly understood. Although FCD is defined by a localized cortical malformation, clinical and experimental evidence suggests that seizures engage distributed brain networks beyond the dysplastic site. Understanding these network-level interactions is critical for developing targeted therapies, as current treatments are often insufficient. **METHODS** | This study aims to identify and map cortical and subcortical inputs associated with dysplastic cortex in a mouse model of FCD. Using in utero electroporation, the mTOR pathway will be hyperactivated in layer 2/3 progenitors of the embryonic mouse prefrontal cortex to generate focal dysplastic regions that recapitulate key features of human FCD-II. Retrograde and anterograde tracing using CTB-Alexa488 will label afferent and efferent projections connected to the dysplastic region. Following perfusion and sectioning, confocal microscopy will be used to quantify labeled neurons and projection patterns across multiple brain regions. Connectivity maps will be generated and compared between FCD and control mice. **RESULTS** | Quantitative analysis is expected to reveal distinct patterns of aberrant cortical and subcortical connectivity associated with dysplastic cortex. These alterations are anticipated to identify candidate regions that provide seizure-driving inputs or receive abnormal outputs, supporting the hypothesis that epileptogenesis in FCD depends on distributed network interactions rather than isolated cortical pathology. **CONCLUSION** | By defining seizure-relevant circuits associated with focal cortical dysplasia, this study will advance understanding of network-level mechanisms underlying drug-resistant epilepsy. These findings may inform the development of circuit-based therapeutic strategies aimed at reducing seizure burden and improving outcomes for individuals with FCD-related epilepsy.

CLINICAL RESEARCH, QUALITY IMPROVEMENT, AND HEALTH SYSTEMS SCIENCE

CRQ.101 | ENHANCING BREASTFEEDING EXCLUSIVITY THROUGH A BEDSIDE NURSING QUALITY INITIATIVE

VICTORIA NORTON, BSN, RN, IBCLC; MARIANNE HILES, MSN, RN, APRN-CNS, ACNS-BC, RNC-MNN, RNC-LRN, C-EFM, FCNS

BACKGROUND | All professional organizations including AAP, WHO, AWHONN recommend exclusive breastfeeding for 6 months and research shows a direct correlation between exclusive breastfeeding during hospital stay post delivery and long term. Breastfeeding exclusivity rate at Frederick Health Hospital was below the Joint Commission benchmark of 50% from July 2022-December 2024 with the exception of 2 months at 50%. **POPULATION** | Mothers who planned breastfeeding or breast and bottle/formula feeding on admission to L&D excluding Late preterm, twin and NICU babies. **METHODS** | I did three months worth of retrospective chart audits of babies who were no longer exclusively breast feeding upon d/c to find what reasons nurses were documenting as to why formula was given and to find out what feeding preferences were on admission. I identified drivers to breastfeeding exclusivity and gaps in our practice. Based on gaps, I implemented RN/CNA staff education via on line learning module, emails/staff meetings and huddles, giving staff kudos when appropriate and extending Lactation Consultant coverage to include evening shift. Implementation of an open ending feeding preference question and feeding plan clarifications were utilized (e.g. some moms wanted to breast and bottle feed breast milk or planned to give formula when back to work only if medically necessary). When moms requested formula, staff asked why and gave appropriate education e.g. reviewed I&O/infant wt to show baby is getting enough, normal newborn feeding behavior (sleepy vs cluster feeding, and taught hand expression/pumping as an alternative to formula. **OUTCOMES** | Our exclusive breastfeeding rate has remained above 50% for the past 7 months specifically 63%,51%,53%,59%,51%,56%,53%). **CONCLUSION** | I found that the majority of babies who received formula were of mothers who reported plan to breast and bottle feed, the majority of nurse documented reasons for first formula was "maternal choice", these moms were not educated during their stay as to the benefits of exclusive breast feeding nor necessarily taught hand expression/pumping to offer extra breast milk instead of formula prior to implementation. The staff and key stakeholders like management were very happy with results and this has helped with sustainability as well as has led to other projects/practice like increasing Lactation education in NICU and in Prenatal Center (with high Hispanic population-also found to have lower breastfeeding exclusivity rate).

CRQ.102 | STANDARDIZING DOWNTIME AND UPTIME WORKFLOWS TO STRENGTHEN CLINICAL DOCUMENTATION CONTINUITY

CLAIRE FLOYD, MSN, RN, NI-BC; ALEXANDRA BROWNE, MSN, RN, CCRN; CYNTHIA RUSSELL, DNP, RN, NI-BC, EBP-C; SARAH GLEASON, MSN-ED, RN, CEN

BACKGROUND | Healthcare systems rely heavily on electronic health records (EHRs), which have become central to clinical workflows since their adoption accelerated under the HITECH Act in the early 2000s (Office of the National Coordinator for Health Information Technology, 2018). EHRs enable real-time documentation, medication management, and decision support, improving efficiency and patient safety. However, this dependence creates vulnerability during downtime, whether planned or unexpected, when access to critical patient information is disrupted. Without strong downtime procedures, delays, miscommunication, and errors can occur. Robust contingency plans are essential to ensure continuity of care and protect patient safety when technology fails. **POPULATION** | This quality improvement initiative included all inpatient nursing units at Frederick Health Hospital: medical-surgical, telemetry, intensive care, and pediatrics. Key stakeholders included bedside nurses, charge nurses, nursing assistants, informatics nurse specialists, and clinical specialists who collaborated to develop, review, and implement standardized tools and processes. **METHODS** | Using a Plan-Do-Study-Act (PDSA) framework and guided by the ANIA Nursing Downtime Toolkit and SAFER Guide principles, the project addressed gaps in downtime and uptime processes. **PLAN** | A nursing-led gap analysis revealed inconsistent downtime documentation, outdated or inaccessible forms, and unclear recovery processes across units. Barriers included variability in communication, storage, and accountability for data reconciliation. **DO** | The team developed 13 standardized downtime documentation forms and reference guides based on the ANIA Toolkit. Ten downtime boxes, charge nurse resource folders, and master copy folders were assembled and labeled for quick access. Checklists, educational guides, and quick-reference materials were created for both scheduled and unscheduled downtime. An Uptime Guide was developed outlining step-by-step recovery actions, including validating orders, reconciling documentation, and identifying which data elements must be entered into the EHR. **STUDY** | Materials underwent review through night shift council and clinical specialist feedback to ensure usability and alignment with clinical workflow. Revisions clarified role responsibilities, improved sequencing of recovery steps, and strengthened expectations for documentation reconciliation. **ACT** | Final, version-controlled materials were deployed organization-wide. Downtime education was added to annual competencies, with plans for simulation drills and post-event evaluations to support sustained readiness and continuous improvement. **OUTCOMES** | The project delivered 24 standardized downtime forms, four recovery tools, and 10 fully equipped downtime boxes across all inpatient units. The recovery tools established a consistent timeline-based approach for documentation recovery relative to downtime duration. Standardization eliminated outdated content, clarified expectations, and aligned nursing units, clinical specialists, and nursing informatics. The work created a durable, systemwide process supporting both readiness and reliable recovery.

CONCLUSION | This nursing-led quality improvement initiative unified downtime and uptime workflows across inpatient units. Standardized forms, downtime kits, and an Uptime Guide strengthened process reliability and created a sustainable framework for organizational readiness. This work reinforces the synergy between nursing informatics and professional development (McNeill et al., 2023) in supporting workflow continuity, documentation accuracy, and confidence in EHR recovery. Future work will evaluate remaining forms and expand to specialty units and additional departments.

CRQ.103 | THE IMPACT OF UTILIZING THE EPIC DETERIORATION INDEX TOOL ON RAPID RESPONSE AND CODE BLUE EVENTS ON MEDICAL-SURGICAL UNITS

AMY NYSWANER, DOCTORAL CANDIDATE, MA, BSN, RN

BACKGROUND | Medical-surgical nurses face many challenges that impact the quality of care they provide to patients. Factors such as complex patients, increased workloads, staffing shortages, turnover, and variations in nurse experience levels may hinder nurses' ability to recognize early clinical deterioration in patients. Utilizing an electronic health record early warning tool to predict clinical deterioration can impact the number of Rapid Response Team (RRT) and/or Code Blue events. **METHODS** | This quantitative, evidence-based practice project involved both retrospective and prospective chart review with a pre- and post-intervention design. A retrospective chart review was conducted to assess the frequency of RRT and code blue events on the project units before implementation. EPIC Deterioration Index (DTI) scores were reviewed twice daily on project units, and any patient scoring 45 or higher would require reassessment and potential intervention. The EPIC Deterioration Index scores were then examined to determine whether utilizing the DTI impacted the number of Rapid Response and/or Code Blue events. **RESULTS** | There were a total of 445 patients, with an average age of 78, who scored 45 or above on the DTI during the project timeframe; 214 of those patients scored 45 or above 1 to 17 times. The average DTI score was 53. There were 25 RRTs during the project timeframe, of which 10 patients scored 45 or above on the DTI tool. There were no code blue events during the project timeframe. **CONCLUSION** | The project experienced an increase in RRT events, and no Code Blue events occurred during the project timeframe. These results indicate that utilizing the DTI tool can assist nurses in early recognition and treatment of clinical deterioration which is a benefit for both nursing staff and patients.

CRQ.104 | IMPROVING INPATIENT HYPOGLYCEMIA SAFETY THROUGH STANDARDIZED WORKFLOW AND AUTOMATED RECHECKS

CLAIRE FLOYD, MSN, RN, NI-BC; ALEXANDRA BROWNE, MSN, RN, CCRN

BACKGROUND | Hypoglycemia is a common, preventable hospital complication, especially among patients receiving insulin, a leading cause of inpatient adverse drug events (Elsayed et al., 2024). Defined as blood glucose <70 mg/dL, hypoglycemia is linked to longer hospital stays, higher costs, increased mortality, and greater likelihood of discharge to skilled nursing facilities (Gilmore et al., 2022). Despite guidelines, variation in nursing response, delayed treatment, and inconsistent documentation persist, limiting timely reassessment and reliable quality measurement. To address these gaps, a standardized nursing hypoglycemia workflow and an automated 15-minute reflex glucose recheck order were implemented to improve care reliability and reduce unwarranted variation. **POPULATION** | This quality improvement initiative included adult inpatients (≥18 years) across medical-surgical, telemetry, and intensive care units; specialty units were excluded. Key stakeholders involved in design and implementation include informatics nurse specialist, clinical nurse specialist, bedside RNs, diabetes educators, and diabetes nurse practitioner.
INTERVENTION | A pre–post observational analysis was conducted using timestamped electronic health record (EHR) data. A total of 1,092 inpatient hypoglycemia events were identified through point-of-care blood glucose measurements and reviewed across pre- and post-intervention periods. Each event was anchored to the timestamp of the initial low blood glucose result to allow for accurate workflow reconstruction. Captured data included unit location, initial glucose value, documentation of treatment, time to first treatment, type of treatment administered, repeat treatments, and sequential blood glucose rechecks with associated timestamps. Time to return to euglycemia and completion of required follow-up glucose checks were recorded when documented. Documentation sources were categorized as nurse narrative notes, medication administration records, structured hypoglycemia intervention documentation, repeat blood glucose testing without documented treatment, and no related documentation. Missing data was not imputed and interpreted as workflow gaps. The intervention, implemented on August 19, included a standardized nursing hypoglycemia management workflow, brief targeted nursing education, and the addition of an automated 15-minute reflex glucose recheck order triggered by documented hypoglycemia.
OUTCOMES | Post-intervention, documentation of hypoglycemia management improved: documented treatments rose from 53.7% to 66.4%, and “no related documentation” dropped from 19.1% to 7.5%. MAR-only entries fell to average 10.3%. Reflex recheck compliance rose sharply, with median treatment-to-recheck time improving from 32 to 9 minutes. Repeat treatments declined, indicating better initial management. Median times improved: initial low to treatment decreased from 8 to 7 minutes, treatment to euglycemia from 31 to 25 minutes, and total time to glycemic control from 46 to 41 minutes. While improvements were not statistically significant, they indicated better workflow reliability and care consistency.

CONCLUSION | Implementation of a standardized hypoglycemia workflow with automated reflex rechecks improved reliability of inpatient hypoglycemia management and reduced variation in nursing response. However, ongoing evaluation is needed. Bedside nurse feedback has identified opportunities to further align the workflow with real-world practice, including refinement of documentation steps and exploration of a targeted alert or notice to support timely action. Continued iteration, stakeholder engagement, and sustainability planning are essential to optimize adoption, usability, and long-term impact on patient safety.

CRQ.105 |IMPROVING EFFICIENCY AND EFFECTIVENESS OF NURSING ORIENTATION

PATRICIA ABATE, BSN, NPD-BC, CMSRN; KAREN COGHILL, BSN, RN, NPD-BC; IDA MEIZANIS, MSN, RN, CAPA

BACKGROUND | In the Clinical Education Center (CEC) at Frederick Health, we aim to ensure an efficient and effective transition from Nursing Orientation (NO) to unit start, while meeting all regulatory and competency requirements. The NO Day 2 schedule did not effectively contribute to this aim. Previously, NO was structured as follows: Day 1: Hospital-wide New Employee Orientation, Day 2: Computer-Based Learning (CBLs) completed at home, Days 3–5: Nursing Orientation onsite with Clinical Education staff with allotted time to complete CBLs. We reorganized NO to bring nursing staff in-house with CEC for four days instead of three. This intervention will address the problem of staff arriving on the unit after NO with CBLs to complete. Day 1: Hospital-wide New Employee Orientation, Day 2-5: NO onsite with CEC, including supported time to complete CBLs.
POPULATION | This initiative targets all nurses, certified nursing assistants, technicians in specialty units, and patient care companions attending NO their first week at Frederick Health.
INTERVENTION | Our intervention is to change home CBLs to onsite allocated time during NO for staff to complete required CBL modules containing mandatory education. By having staff present in-house for four days, we can: Provide guidance and technical support for login, password setup, and authentication on Day 2 instead of Day 3; Ensure completion of mandatory education before staff transition to their assigned units; identify early employees requiring additional educational support; eliminate access barriers so new staff can focus on education and clinical topics; enable staff to start on their units prepared for unit specific orientation. **OUTCOMES** | Primary Goal: To improve timely completion of Joint Commission-mandated CBLs; Secondary Goal: Improve efficiency of onboarding by minimizing time spent troubleshooting technical issues during orientation. We will conduct surveys to assess whether NO helped new hires feel prepared for their unit, and if managers observed more efficient onboarding due to timely CBL completion. **CONCLUSION** | This project is currently in progress. We are analyzing data from new hires in January 2024, 2025, and 2026 to determine whether the average time to complete mandatory education decreases in 2026.

CRQ.106 |INVASIVE INFECTIONS INVOLVING RARE CAMPYLOBACTER SPECIES: EXPERIENCE WITH 11 CASES FROM A RURAL HOSPITAL

KRUPESH PATEL, OMS-IV, BS; JUSTIN NGUYEN, OMS-III, BS; KENDYL CARLISLE, MD; SRIDHAR GONA, MSHA, MS, BS.PHARM; STEPHEN KAVIC, MD; AARON GEORGE, DO; HJR BONATTI, MD

BACKGROUND | Campylobacter spp. are anaerobic, comma- or S-shaped Gram-negative bacteria that can be found in the gastrointestinal tracts of humans and various animals. Whereas Campylobacter jejuni as an enteric pathogen is well studied, still little is known about invasive infections by the organism and other rarer species such as Camplobacter gracilis or Campylobacter uerolyticus, which until recently were listed as Bacteroides species, have recently drawn attention. **POPULATION** | Eleven patients with blood stream or surgical infections involving Campylobacter spp were identified. **METHODS** | This is a retrospective analysis of all invasive infections caused by Campylobacter spp. between 9/2018 and 12/2022 at a rural hospital in the Appalachian region of the United States. **OUTCOMES** | Campylobacter gracilis and ureolyticus were isolated in five cases each, the last patients had monomicrobial bacteremia with Campylobacter jejuni (Table 1). Median age was 65.2 (range 24.2 – 83.6) years, 40% were male. Median BMI was 26.2 (range 20.7 – 60.8) kg/m2; 36% were obese but only 9% were diabetic whereas 45% had hyperlipidemia. 55% were active smokers and 18% had COPD and malignancies, respectively. 27% had bacteremia, 36% had abscesses and 37% had positive cultures from drainage fluids or biopsies. Intra-abdominal infections accounted for 27% (perforated appendicitis 1, anastomotic leak with pelvic abscess after low anterior resection 1, pelvic abscess with vesico-intestinal fistula 1), soft tissue infections for 45% (trunk 3, head/neck 1, lower extremity 1) of infections. 82% of infections were polymicrobial with other anaerobes (n=13) being by far the most common co-pathogens. Whereas Campylobacter gracilis was more commonly found in intra-abdominal infections, Campylobacter ureolyticus was associated mainly with soft tissue infections (Table 1). With surgical or interventional source control and antibiotics active against the organism (such as macrolides) outcome was favorable. C**ONCLUSION** | Campylobacter spp may cause a variety of infections, but the majority of infections were polymicrobial, and the exact role in this setting is poorly researched. The unique antibiotic sensitivity pattern needs to be considered. The various species are isolated in distinctly different infections.

CRQ.107 |GENETIC CAUSES OF SEVERE, EARLY ONSET OBESITY IN A CLINICALLY REFERRED ADULT CASE SERIES

ANJA FERNANDEZ PLACENCIA, MD; SARAH MARTIN, MS; VALERIA MONGE-VALQUI, MS; GABRIELA VILCHEZ, MS; MILAY, LUIS LAM, MD, FTOS

BACKGROUND | Early-onset severe obesity is a recognized marker of potential monogenic or syndromic etiologies, yet genetic testing is frequently delayed until adulthood, often after repeated failure of conventional pharmacologic and surgical therapies. This delay may lead to prolonged exposure to ineffective treatments and missed opportunities for precision-based management. **POPULATION** | We evaluated 30 adults (>18 years) referred over a one-year period to a regional endocrine center for treatment-refractory obesity with onset in childhood, adolescence, or young adulthood, or with body mass index (BMI) ≥40 kg/m^2 (class III obesity). At the time of evaluation, all individuals had persistent obesity with no history of sustained BMI normalization. The mean BMI was 47.9 kg/m^2 (median 45); 83.3% had BMI ≥35 kg/m^2 (class II or III obesity) and 56.7% had BMI ≥40 kg/m^2 (class III obesity). **METHODS**| This was a retrospective clinical case series using de-identified data abstracted from electronic health records. Demographics, anthropometric measures, bariatric surgery history (sleeve gastrectomy, Roux-en-Y gastric bypass, or both), and prior pharmacologic therapies (including GLP-1 receptor agonists and dual GIP/GLP-1 receptor agonists) were collected. Following comprehensive endocrine evaluation, clinician-directed genetic testing was pursued based on early onset, class II–III obesity severity, and resistance to standard medical and surgical interventions. Descriptive analyses were performed using a centralized clinical research database. **OUTCOMES** | Fourteen patients (46.7%) had previously undergone bariatric surgery, including sleeve gastrectomy in 26.7%, Roux-en-Y gastric bypass in 13.3%, and both procedures in 6.7%, yet all remained within class II or class III obesity categories at the time of genetic evaluation. Eighteen patients (60.0%) had prior exposure to GLP-1 receptor agonists or dual incretin therapies (semaglutide, tirzepatide, liraglutide, dulaglutide), with heterogeneous and frequently non-durable responses. Pathogenic or likely pathogenic genetic variants were identified in 26 patients (86.7%), while 13.3% had no clinically significant variants detected. **CONCLUSION** | Adults with early-onset, class II and class III, treatment-refractory obesity referred for endocrine evaluation represent a high-yield population for genetic testing. The high prevalence of clinically actionable genetic variants supports earlier integration of genetic evaluation into routine care pathways and reinforces a precision-medicine, pathway-based approach to individualized obesity management.

CRQ.108 |WORKPLACE VIOLENCE AS A WORKFORCE SAFETY AND RETENTION CHALLENGE: A QUALITY IMPROVEMENT APPROACH

CAROLINE MAGNO RIBEIRO, MS, BSN, RN

BACKGROUND | Workplace violence (WPV) has emerged as a serious occupational hazard in healthcare. WPV is associated with burnout, emotional exhaustion, and turnover intention among frontline clinical staff. National agencies now recognize WPV as both a quality and workforce safety issue, with implications for organizational stability, patient care, and employee well-being. Prior to 2025, WPV reporting at a community hospital was descriptive and primarily focused on physical injury events. There was minimal visibility of verbal aggression and no standardized rate-based benchmarking to guide verbal aggression prevention efforts. **OBJECTIVES** | To establish foundational WPV surveillance processes at a community acute care hospital; identify high-risk clinical settings; examine verbal, sexual, and physical aggression patterns; and support future quality improvement strategies to strengthen workforce safety and retention initiatives. **METHODS**| A retrospective review of WPV events reported through the incident reporting system and Employee Health was conducted for January–October 2025. The analyzed variables included event type, clinical unit, staff role, initiator, activity during the event, and injury severity. Literature-based recommendations and national guidance were reviewed to inform surveillance design. A standardized template for calculating WPV rates per 1,000 patient days was developed to enable future benchmarking and reporting. November–December 2025 data analysis is in progress and will be incorporated into the final poster. **FINDINGS** | Preliminary findings indicate that 75% of WPV events were patient-initiated and occurred during direct care activities, consistent with national Type II WPV patterns. Verbal aggression represented 39% of overall events and appeared disproportionately underreported relative to physical incidents. High-risk clustering was observed in emergency and medical-surgical settings. Establishing a rate-based surveillance framework enabled improved visibility and supported leadership discussions on prevention, training, and reporting. **DISCUSSION** | WPV monitoring functions as a quality improvement strategy by informing prevention initiatives, supporting psychological safety, and aligning with Magnet and Joint Commission expectations for workforce safety. Future QI efforts may integrate burnout and turnover intention metrics to strengthen retention-focused outcomes.

CRQ.108 |WORKPLACE VIOLENCE AS A WORKFORCE SAFETY AND RETENTION CHALLENGE: A QUALITY IMPROVEMENT APPROACH

CAROLINE MAGNO RIBEIRO, MS, BSN, RN

BACKGROUND | Workplace violence (WPV) has emerged as a serious occupational hazard in healthcare. WPV is associated with burnout, emotional exhaustion, and turnover intention among frontline clinical staff. National agencies now recognize WPV as both a quality and workforce safety issue, with implications for organizational stability, patient care, and employee well-being. Prior to 2025, WPV reporting at a community hospital was descriptive and primarily focused on physical injury events. There was minimal visibility of verbal aggression and no standardized rate-based benchmarking to guide verbal aggression prevention efforts. **OBJECTIVES** | To establish foundational WPV surveillance processes at a community acute care hospital; identify high-risk clinical settings; examine verbal, sexual, and physical aggression patterns; and support future quality improvement strategies to strengthen workforce safety and retention initiatives. **METHODS**| A retrospective review of WPV events reported through the incident reporting system and Employee Health was conducted for January–October 2025. The analyzed variables included event type, clinical unit, staff role, initiator, activity during the event, and injury severity. Literature-based recommendations and national guidance were reviewed to inform surveillance design. A standardized template for calculating WPV rates per 1,000 patient days was developed to enable future benchmarking and reporting. November–December 2025 data analysis is in progress and will be incorporated into the final poster. **FINDINGS** | Preliminary findings indicate that 75% of WPV events were patient-initiated and occurred during direct care activities, consistent with national Type II WPV patterns. Verbal aggression represented 39% of overall events and appeared disproportionately underreported relative to physical incidents. High-risk clustering was observed in emergency and medical-surgical settings. Establishing a rate-based surveillance framework enabled improved visibility and supported leadership discussions on prevention, training, and reporting. **DISCUSSION** | WPV monitoring functions as a quality improvement strategy by informing prevention initiatives, supporting psychological safety, and aligning with Magnet and Joint Commission expectations for workforce safety. Future QI efforts may integrate burnout and turnover intention metrics to strengthen retention-focused outcomes.

CRQ.109 |REDUCING POSTOPERATIVE RESPIRATORY FAILURE IN OBSTRUCTIVE SLEEP APNEA PATIENTS THROUGH A PACU BIPAP PROTOCOL

MOLLIE RADONOVICH, MBA, MSN, RN, APRN-CNS, AGCNS-BC, CPAN; JENNIFER A. SCOBIE, MHA, BTPS, RRT; CHRISTINA HENYON, MSN, RN, CPHQ

BACKGROUND | Obstructive sleep apnea (OSA) is associated with increased postoperative pulmonary and cardiovascular complications, particularly within the first 24 hours following anesthesia. Review of hospital safety data demonstrated a high number of respiratory failure events, highlighting the need for targeted interventions. The total number of coded hospital acquired respiratory failure events were 145 events for calendar year 2023 and 121 events for calendar year 2024. Prior to this initiative, no standardized postoperative plan of care existed for patients with diagnosed OSA. Evidence shows that postoperative positive airway pressure therapy reduces cardiorespiratory complications. **POPULATION** | Adult surgical patients with a documented diagnosis of obstructive sleep apnea were included, regardless of home CPAP or BiPAP use. Patients scheduled for discharge directly from the post-anesthesia care unit (PACU) were excluded. **METHODS**| Patients with diagnosed OSA are identified during pre-admission screening or preoperative evaluation and clearly designated as “OSA” in the electronic medical record to alert anesthesia and PACU staff of anticipated postoperative BiPAP needs. A standardized anesthesia order set was developed to streamline BiPAP ordering. Respiratory therapy is notified when the patient transitions to PACU (“closing” status), and anesthesia places the appropriate BiPAP order. BiPAP is applied as soon as the patient is clinically stable using routine settings of 12/8 cm H_2O with 30% FiO_2, unless patient-specific settings are already established. Therapy is maintained for one hour or until the patient is fully awake. Standard PACU monitoring continues with documentation of patient tolerance and response. **OUTCOMES** | Following implementation, BiPAP utilization in the PACU reached 100% for the targeted patient population unless patients met exclusion criteria such as nausea and vomiting or refused. Earlier identification of patients with previously unrecognized OSA or postoperative respiratory compromise allowed for timely intervention. Qualitative feedback from staff indicated shorter recovery times, improved respiratory stability, and smoother transitions of care for high-risk patients. Ongoing data collection is focused on reducing respiratory failure events by 10% each calendar year. **CONCLUSION** | Implementation of a standardized postoperative BiPAP protocol for patients with obstructive sleep apnea resulted in consistent application of therapy, earlier identification of respiratory risk, and perceived improvements in patient recovery. This initiative demonstrated strong interdisciplinary collaboration among anesthesia, nursing, and respiratory therapy resulting in positive patient outcomes.

CRQ.110 |CHANGING ICU CULTURE: STRIVING FOR AN AWAKE AND WALKING ICU

JILL STORER, MSN, RN, CCRN, CNE(CL); ALEAH AARON, BSN, RN

BACKGROUND | Critical care practice has historically emphasized sedation as a necessary strategy to facilitate mechanical ventilation and to protect patients from psychological distress. However, recent evidence demonstrates that sedation and immobility are independent contributors to ICU-acquired weakness, delirium, prolonged mechanical ventilation, increased ICU and hospital length of stay, and higher mortality. Among survivors, more than half experience new cognitive, physical, and psychological impairments collectively known as Post-Intensive Care Syndrome (PICS), resulting in long-term disability, post-traumatic stress, reduced earning capacity, and increased caregiver burden. Although there is an evidence-based framework for minimizing sedation and promoting early mobility, only a small proportion of ICUs nationwide consistently implement these guidelines. Recognizing these gaps, Meritus Health's 4 West ICU nursing leadership initiated a multidisciplinary quality improvement (QI) initiative to reduce unnecessary sedation, increase the frequency and consistency of early mobility interventions, and strengthen interdisciplinary collaboration. **POPULATION** | The project was conducted in a 24-bed community medical-surgical ICU. The population included adult patients aged 18 years and older who required mechanical ventilation and met inclusion criteria outlined in the 4 West ICU Mobility Protocol. METHODS & **INTERVENTIONS** | A structured QI framework guided the initiative, incorporating gap analysis, iterative Plan-Do-Study-Act (PDSA) cycles, and continuous monitoring of process and outcome measures. Weekly multidisciplinary Critical Care Initiatives meetings - attended by physicians, nurses, respiratory therapists, rehabilitation therapists, and pharmacists - were used to identify barriers and prioritize interventions. The gap analysis revealed inconsistent sedation practices, unclear mobility expectations, and workflow misalignment across disciplines. In response, the team implemented several targeted interventions: Protocol and Workflow Redesign: The Early Mobility protocol for ventilated patients was updated, and a unit-level process metric was established requiring ≥50% of ventilated patients to achieve edge-of-bed mobility or greater daily; Sedation Standardization: Sedation titration guidelines were embedded into EPIC order sets to promote clarity and consistency; Education and Simulation: Nurses participated in sedation-titration classes, critical are coursework, and interprofessional simulation with live-actor scenarios to strengthen clinical reasoning and confidence in managing awake, ventilated patients; Interdisciplinary Coordination: Multidisciplinary rounding tools were developed to reinforce daily sedation and mobility goals, and workflows were aligned across nursing, PT/OT, and respiratory therapy to support timely mobilization. Each intervention was tested and refined through multiple PDSA cycles, with real-time feedback informing iterative improvements. **OUTCOMES** | Implementation of the initiative resulted in substantial improvements. Sedation exposure decreased by approximately 50%, with a reduction in the number of concurrent sedative infusions from multiple agents to one or two. Benzodiazepine use declined significantly. Mobility process measures improved, with the unit consistently achieving the goal of mobilizing more than 50% of ventilated patients to the edge of bed or greater each day.

CONCLUSION | A structured QI approach facilitated implementation of an Early Mobility protocol in a community medical-surgical ICU, leading to reduced sedation use and increased mobility frequency. Future phases should incorporate functional outcome measures at ICU and hospital discharge, including mobility scores and discharge disposition, to evaluate the long-term impact of early mobility on patient recovery.

CRQ.112 | HOLISTIC HEALING: THE ROLE OF OSTEOPATHIC MANIPULATIVE MEDICINE IN PALLIATIVE CARE

MANAL FAISAL, MS; CHRIS A. GAUTHIER, DO; HEATHER P.M. THEIBERT, DO

BACKGROUND | One of the core beliefs of Osteopathic Medicine in the interconnection of the mind, body, and spirit. Aligning with palliative care's holistic mission of care, Osteopathic Medicine, specifically Osteopathic Manipulative Medicine (OMM) has found a place within palliative care's repertoire of care modalities. This poster aims to present the evidence base of OMM in palliative care treatment. **POPULATION** | The population to be studied are those receiving palliative care. **METHODS** | Literature review will be conducted using databases such as PubMed.gov search for "Osteopathic Manipulative Treatment" and its synonyms (ex: "Osteopathic Manipulative Treatment") and "Palliative Care." Primary research articles on the use of OMM in palliative care will be reviewed for evidence. This evidence will be compiled and presented via meta-analysis. **OUTCOMES** | The primary outcome will be the determination of which OMM techniques have the most evidence for use in palliative care. **CONCLUSION** | This project aims to present the evidence base of OMM in palliative care treatment. With achievement of this aim, we hope osteopathic providers will be informed of optimal techniques to be used for the palliative care patient. Additionally, non-osteopathic providers will be educated on OMM's role in palliative care with hope in aiding future care directions.

CRQ.113 | ASSOCIATION OF EARLY VS LATE ED RE-ADMISSION AND MORTALITY AMONG PATIENTS HOSPITALIZED FOR SEPSIS

SUHANI PATEL, BS; JOSEPH MCKINNERNEY, BS; JASON YAN, BA; RAHUL KASHYAP, MBBS, MBA, FCCM

BACKGROUND | Sepsis is associated with significant post-discharge morbidity and mortality. Early acute care utilization after discharge is common with a large proportion being emergency department (ED) visits. It is not well studied, if the timing of ED return after discharge reflects differences in illness severity and risk of adverse outcomes. This study compares mortality and clinical outcomes among adults discharged after inpatient sepsis treatment who returned to the ED within 3 days versus 4–30 days after discharge. **METHODS** | A retrospective cohort study was conducted using de-identified patient data from the TriNetX Research Network (2005 to 2025). Adult patients of age ≥18 discharged from inpatient hospitalization for sepsis, who subsequently returned to the ED were categorized into two groups: early (≤3 days) ED return and late (4–30 days) ED return. Cohorts were balanced based on demographics (age, sex, race, ethnicity) and select comorbidities, using 1:1 propensity score matching. Primary outcome assessed was 60-day mortality.

Secondary outcomes were divided into short-term (0-7 days) and downstream (0-60 days) outcomes, measured from the ED return visit. Short term outcomes included vasopressor use, mechanical ventilation, and acute kidney injury. Downstream outcomes included hospital readmission, recurrent sepsis, and new-onset heart failure, respiratory failure, or chronic kidney disease. **RESULTS** | After 1:1 propensity score matching, a total of 4,310 patients were included (2,155 per group). Early ED return was associated with lower 60-day mortality (3.7% vs 5.3%; OR = 0.678; p = 0.009) higher short-term (0–7 days) rates of mechanical ventilation (7.8% vs 0.8%; OR = 9.876, p = <0.0001) and vasopressor use (21.2% vs 5.8%; OR = 4.407, p = <0.0001), but lower acute kidney injury (1.2% vs 3.1%; OR = 0.379, p = 0.001). Within 60 days, early presenters had higher hospital readmission (85.2% vs 35.7%; OR= 10.391,p = <0.0001) and recurrent sepsis (55.3% vs 20.2%; OR= 4.88, p = <0.0001). There were no significant differences in new onset acute respiratory failure (3.6% vs 2.8%; p= 0. 2167), heart failure (3.3 vs 3.5%; p = 0.75) or chronic kidney disease (2.1% vs 3.2%; OR = 0.65, p = 0.044) between groups. **CONCLUSION** | Among adult patients discharged from inpatient sepsis hospitalization, those who returned earlier (≤3 days), had lower mortality but higher acute illness severity, readmission and recurrent sepsis. This suggests that despite higher acuity, early recognition and aggressive intervention in the immediate post-discharge period may be beneficial, warranting further prospective studies.

CRQ.114 | EXAMINING PHYSICIAN OBLIGATION TO PROVIDE NONCLINICAL CARE: INCORPORATING POSITIVE PSYCHOLOGY INTERVENTIONS TO FACILITATE PATIENT RECOVERY

REN YAGAWARA, MS, MA

BACKGROUND | A complete medical recovery requires focus beyond clinical operations and pharmacological treatment—patients need to take their prescribed medication, attend to physical rehabilitation, or enact lifestyle changes from diet to exercise to account for underlying influences of one's diagnosis. Failing to address such nonclinical components of recovery can lead to or exacerbate further medical complications, burdening both patients and clinicians alike. Physicians thus have an ethical obligation to provide individualized, integrative care that considers the person beyond the patient. Positive psychology, or the study of promoting well-being, can supplement conventional medicine by recognizing psychological and social variability across patients to provide a more humanistic approach to health care—practicing optimism can illuminate a patient's motivating factors to push through adversity, deliberate goal-setting can promote health behavior adherence, even simple activities such as viewing art can have massive benefits to one's well-being. **METHODS** | This project has three aims, 1) examine the effectiveness of positive psychological interventions in clinical populations and their benefits on patients, 2) assess the feasibility of successful implementation, and 3) identify potential areas of improvement. A comprehensive literature review searching PubMed, PsycINFO, and ProQuest was conducted on positive psychological and positive psychology-based interventions with patient populations in clinical settings. **RESULTS** | Findings suggest positive interventions are a consistent and reliable tool in improving nonclinical well-being with wide-ranging benefits including decreased pain perception and alleviation of symptoms of depression and anxiety. Furthermore, positive interventions heighten positive affect and feelings of life satisfaction, which are especially pertinent for the challenging circumstances faced by many patients.

CONCLUSION | This project implicates the merit of prescribing positive interventions with the same rigor and personalization as pharmacological treatment. The mind and body are intricately connected and positive psychology acts as a vital bridge, ensuring psychological and social needs are met to strengthen physical health in patients with varying prognoses.

CRQ.115 | EVOLVING RESEARCH INTAKE AND REVIEW INFRASTRUCTURE TO SUPPORT SCALABLE, INVESTIGATOR-CENTERED SCHOLARSHIP

BRIANNA GOLDEN, MPH; CHRISTINE FORNWALT; AUDREY VASAUSKAS, PHD

BACKGROUND | Clear classification of scholarly projects is essential to ensure appropriate regulatory oversight, ethical compliance, data governance, and institutional support. For over 15 years, Meritus Health has utilized manual, paper-based processes to support scholarly activity. The matriculation of the inaugural class of the Meritus School of Osteopathic Medicine (MSOM) and the continued expansion of Meritus Health residency programs in July 2025 marked a period of significant institutional growth. This growth has contributed to increased volume and complexity of scholarly activity, which required enhancements to support consistent project classification, structured routing, and scalable review. **METHODS** | To support the increase in project volume and complexity, the institution implemented two complementary process enhancements. The first was the implementation of the Project Intent and Classification Form (PICF), a centralized electronic entry point for all scholarly submissions. The second was the transition from a paper-based IRB process to an electronic management system, Cayuse, for the submission and review of human subjects research protocols. The PICF standardizes project intake, supports accurate classification of scholarly activity, and streamlines pathways for regulatory review, resource identification and allocation, and institutional tracking. The Form also facilitates preliminary data governance planning related to storage, access control, and data protection strategies. In parallel, the Cayuse electronic IRB system centralizes human subjects research documentation, facilitates efficient communication between regulatory personnel and investigators through real-time tracking of protocol revision requests and comments, and reduces administrative burden for both investigators and administrators. The electronic IRB forms were also designed using human-centered design principles, incorporating plain-language questions, embedded help text, and structured response options to reduce cognitive load and improve clarity for both new and experienced investigators. **ANALYSIS** | Descriptive metrics are being evaluated for projects submitted since PICF implementation, including project volume, classification (HSR, NHSR, QI/EBP), and time from PICF submission to determination letter distribution.

CRQ.116 | CHARACTERIZATION OF GROUND LEVEL FALLS AT A RURAL LEVEL 3 TRAUMA CENTER

SHIVIKA GAIND, OMS-III; ADAM MOWERY, OMS-I, BSN; SADIQ SYED, OMS-I, BS; KYLE N. REMICK, MD, FACS

BACKGROUND | Ground-level falls (GLF) are the leading mechanism of injury among older adults and are associated with significant morbidity and mortality. While much of the literature describes outcomes at Level I academic trauma centers, less is known about the epidemiology and resource utilization of GLF patients treated at Level III centers, where patient volume, subspecialty access, and disposition patterns may differ. This study characterizes patients presenting with ground-level falls to a Level III trauma center over a four-and-a-half-year period. **POPULATION** | All adult patients (age ≥18 years) presenting with ground-level falls to a Level III trauma center between June 2020 and December 2024 were included. A total of 4,703 patients were identified, with an age range of 18–104 years. The cohort was predominantly geriatric, with 80.3% aged >65 years. Most patients presented from independent living environments, though a notable subset originated from skilled nursing or assisted living facilities. All patients were evaluated through the institutional trauma activation pathway and captured within the trauma registry. **METHODS** | A retrospective descriptive review was performed using data from the institutional trauma registry. Variables collected included age, sex, injury severity score (ISS), cardiac, pulmonary, and other comorbidities, anticoagulant use, alcohol involvement, operative intervention, ICU admission, ICU length of stay (LOS), total hospital LOS, mortality, discharge disposition, and place of origin. Subset analysis was performed for patients >65 years. Descriptive statistics were calculated. **OUTCOMES** | A total of 4,703 patients were identified, with an age range of 18–104 years; 80.3% were >65 years of age. The overall in-hospital mortality rate was 1.2%. Operative intervention was required in 18.3% of patients, most commonly for orthopedic fixation of fractures. ICU-level care was required in 4.1% of cases, with a median ICU LOS of 3 days. The median hospital LOS was 4 days. Discharge disposition included 63.6% home, 22.8% to skilled nursing or rehabilitation facilities, 4.2% to specialty referral centers, and 1.5% to hospice care. Hypertension was present in 59.2%, chronic obstructive pulmonary disease in 14.2%, and diabetes mellitus in 26.6%. Anticoagulant use was documented in 43.5%, and 5.3% had positive alcohol levels. Among patients >65 years, mortality was 1.4%, ICU utilization was 3.5%, operative intervention occurred in 19.4%, and median hospital LOS was 4 days. Isolated hip fractures accounted for 12.6% of GLF in this age group. Discharge to skilled nursing or rehabilitation facilities occurred in 31.9% of patients >65, and 52.1% had more than two major comorbidities. **CONCLUSION** | Ground-level falls represent a significant and resource-intensive component of trauma care at a Level III center. Patients >65 years, particularly those with multiple comorbidities, demonstrate substantial healthcare utilization and increased rates of non-home discharge. These findings highlight the burden of geriatric fall trauma within community-based trauma systems and underscore the importance of targeted geriatric trauma management and discharge planning strategies.

CRQ.117 | IMPROVING HCAHPS SCORES THROUGH THE USE OF A STANDARDIZED MEDICATION EDUCATION TOOL

DEBI DISBROW, DNP, RN; STEPHANIE KLINE, BSN, RN; VICTORIA MASON, MSN, RN; HILARY ROSENBLOOM, BSN, RN; MARIE SANT'ANNA, BSN, RN

BACKGROUND | Providing education to patients about the purpose and side effects of medications can improve the patient's health outcomes and their satisfaction with their care. One way to measure the patient's satisfaction is by using the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey. There are two questions on the survey regarding medication education, specifically about the purpose of medication and side effects education. The hospital created a multidisciplinary task force comprised of providers, nurse leaders, bedside nurses, and pharmacists to improve the organizational scores. Before implementation of the task force, the organizational average score for medication communication was 53.9. The QBR threshold for no penalty is 58.1 and the Maryland average is 58.6. **POPULATION** | An eighteen-bed telemetry unit was selected to do a nine-week pilot to improve the HCAHPS scores on medication communication. Pre-pilot the unit's score was 43.8. The organization's goal was to improve the score to 56.0. **QUALITY IMPROVEMENT APPROACH** | The task force reviewed the twenty-five most common medications used on the adult inpatient units. With the assistance of marketing, the team developed a standardized medication education sheet for healthcare providers to use at the patient's bedside. The unit's practice council determined the location of the form in the patient's room and added a highlighter for nursing or providers to highlight or circle new medications. To focus on compliance and peer-to-peer accountability, the team decided to use Kamishibai Cards (K-Cards). Telemetry nurses received education on the new medication form and the K-Cards. **INTERVENTION** | The pilot started on June 9, 2025; each nurse completed one K-card audit per shift. During the pilot, the task force met bi-weekly to review the compliance of the audits and the HCAHPS scores. The team came up with two other interventions to re-enforce patient education: updating the discharge instructions to include a statement that the patient had reviewed and understood the purpose and side effects of their new medications, and QR codes were added to the prescriptions filled with the organization's pharmacy which provided a link to videos about the purpose and side effects of the medication. **EVALUATION OF OUTCOMES** | At the end of nine weeks, 224 K-cards audits were completed and the unit's HCAHPS medication scores improved from 43.8 to 54.7. Seeing an improvement in the scores, the task force rolled out the initiative to all adult inpatient units. **IMPLICATIONS** | After implementing the standardized education sheets on all inpatient units, the pilot unit's score improved to 55 and the organizational score went from 53.9 up to 56.4. Not all units saw positive benefits of using peer audits and eventually nurse leader rounds started to include asking the patients about their medications and side effects. Even though the pilot unit is still working to reach the goal of 56 on the HCAHPS, the nurse leader rounds show the patients are getting the education. After all, improved understanding of medications can lead to increased compliance and reduced medication-related readmissions or complications.

CRQ.118 | MEALS THAT HEAL: IMPLEMENTING A CLINICALLY INTEGRATED "FOOD FARMACY" FOR CHRONIC DISEASE MANAGEMENT

ELIZABETH FIELDS DOWDELL, DNP, CRNP, CEN & MIRANDA RAMSEY, BASC

Food insecurity is a social determinant of health that affects approximately 13.3% of Maryland residents and 15.8% of Washington County residents with chronic medical conditions, often contributing to poor disease control and increased healthcare utilization. These problems disproportionately impact rural areas such as Washington County, MD, which is classified as a food desert. This designation has been reinforced by the Washington County Community Health Needs Assessment (CHNA), which identified limited access to nutritious food as a persistent and critical community concern. “Food as Medicine” programs are clinically integrated initiatives that pair access to healthy food with nutrition education and care coordination. Across the country, these programs have emerged as practical, effective strategies to address food insecurity and improve chronic disease management. At Meritus Health, this initiative is known as the Food Farmacy. This abstract describes the evolution of the Food Farmacy through phased quality improvement initiatives utilizing a staggered implementation across primary and specialty care settings. The program began as the Care to Share model, distributing shelf-stable, non-perishable food boxes to residents of Washington County in need. It then transitioned to a hybrid model incorporating both perishable and non-perishable items, and ultimately evolved into a comprehensive Food Farmacy focused on nutritional quality, clinical integration, and whole-person care. Implementation initially launched in a single outpatient primary care practice, expanded to all outpatient primary care sites and select specialty clinics, and was later extended to hospitalized patients. The current model is fully integrated into the Electronic Health Record (EHR), requiring a provider order through condition-specific Epic order sets (e.g., diabetes, pregnancy, malnutrition). Nutrition Services assembles dietitian-designed, color-coded food bags, with approximately 50% of items sourced locally. Participants enroll for 8–12 weeks and receive individualized dietitian consultations, cooking demonstrations, and wraparound support services, including a loneliness-reduction “Care Caller” initiative The Food Farmacy launched in May 2025. By January 2026, approximately 650 community members had been enrolled, with nearly 5,200 bags of food distributed. Each bag provides approximately 14 meals and contains recipe cards and educational resources, at an average cost of $35 per bag. Meals are designed by Registered Dietitians and ordered by healthcare providers using electronic health record-based order sets tailored to specific chronic conditions, as well as pregnancy and malnutrition. Food bags are color-coded by diet type and assembled daily by Nutrition Services, which also joined a cooperative to locally source approximately 50% of the distributed food. Program enrollment requires a written provider order within Meritus Health's EHR. Participation typically lasts 8–12 weeks and is designed to equip individuals with the knowledge and skills they need to make healthy food choices beyond program completion. Two trained team members conduct intake calls and schedule initial pickup appointments. At the conclusion of the program, participants are expected to follow up with their primary care provider to reinforce continuity of care. Beyond food access, participants are eligible to receive individualized dietitian consultations and are given the opportunity to participate in cooking demonstrations and

other wraparound services offered by Meritus Health, such as the Care Caller program. Analyses of Food as Medicine programs have demonstrated associations with improved clinical outcomes, reduced food insecurity, improved diet quality, increased engagement in preventive care, and fewer emergency department visits and hospitalizations. Collectively, these findings position the Meritus Food Farmacy as a scalable, patient-centered model for improving health outcomes and advancing health equity in food-insecure communities.

CLINICAL CASE REPORTS

CCR.401 | IDIOPATHIC OSTEOPOROSIS AND RECURRENT HIP PAIN IN A 14-YEAR-OLD ATHLETE

ASHIKA CHALUVADI, DO, FM-PGY2; GRACE M. PERRY, OMS-IV; GEOFFREY N. SANYI, DO, CAG-SM

BACKGROUND | Osteoporosis is rare in pediatric populations, particularly among otherwise healthy adolescents. Osteoporosis is diagnosed using a Dual-Energy X-ray Absorptiometry (DEXA) scan. The results of the scan are compared to bone density of young, healthy adults resulting in a T-score. A T-score of -2.5 diagnoses a patient with osteoporosis. Usually, adolescent osteoporosis is caused by an underlying etiology such as an eating disorder or prolonged corticosteroid use. We present the case of a 14-year-old female cross-country athlete with idiopathic adolescent osteoporosis and recurrent hip pain, ultimately diagnosed following persistent symptoms and Magnetic Resonance Imaging.
CASE PRESENTATION | A 14-year-old previously healthy female presented with lateral left hip pain, initially attributed to iliotibial band syndrome and trochanteric bursitis. Despite physical therapy and activity modification, her symptoms rapidly worsened, leading to severe pain and inability to bear weight. Initial X-rays were unremarkable, but MRI revealed a stress reaction and a possible nondisplaced femoral neck stress fracture. She was managed with prolonged non-weightbearing, calcium and vitamin D supplementation, physical therapy, and gradual return to activity. After a period of symptom resolution and return to competitive track, the patient reported recurrence of left hip and significant lower back pain. Further evaluation revealed a history of 9–10 childhood fractures. A DEXA scan confirmed decreased bone mineral density consistent with osteoporosis. Laboratory evaluation was largely unremarkable, and lumbar MRI showed no abnormalities. The patient was referred to a pediatric endocrinologist and pediatric rheumatologist. The pediatric rheumatology work up yielded no significant results. The pediatric endocrinologist also yielded no significant results in their work up of underlying etiology. A repeat DEXA scan continued to remain consistent with the initial diagnosis of osteoporosis despite improvement in symptoms and supplementation. Ongoing management includes continued supplementation, slow return to sports, as well as continued care under a pediatric endocrinologist which includes a repeat DEXA scan in 6 months. Bisphosphonate therapy will be initiated if there is no improvement of T-score. **CONCLUSION** | This case highlights the importance of considering underlying bone pathology in pediatric athletes with persistent musculoskeletal pain and recurrent fractures. Idiopathic adolescent osteoporosis, although rare, should be included in the differential diagnosis when imaging and clinical history are suggestive. Early recognition and multidisciplinary management can help prevent complications and facilitate safe return to sports.

CCR.402 | REFRACTORY OBESITY AND T2DM IN ADULT MONOZYGOTIC TWINS WITH RARE GENETIC VARIANTS

VALERIA MONGE-VALQUI; ANJA FERNANDEZ PLACENCIA, MD; TINA PHAM, PGY-1; MILAY LUIS LAM, MD, FTOS

BACKGROUND | Obesity and type 2 diabetes mellitus are complex, multifactorial diseases with significant genetic contribution. Twin and family studies estimate that 40–70% of body mass index variability is heritable. Although bariatric surgery remains the most effective intervention for severe obesity, outcomes vary widely. Increasing evidence suggests that rare genetic variants may contribute to treatment-resistant obesity and influence postoperative metabolic trajectories. We present monozygotic twin sisters with childhood-onset obesity and long-standing diabetes who demonstrated refractory weight outcomes despite advanced medical and surgical therapies.

CASE PRESENTATION | Two 42-year-old monozygotic twin women developed severe obesity during childhood and were diagnosed with type 2 diabetes mellitus in early adulthood. Both underwent extensive pharmacologic therapy including metformin, insulin, sodium–glucose cotransporter 2 inhibitors, glucagon-like peptide-1 receptor agonists, and dual glucose-dependent insulinotropic polypeptide/glucagon-like peptide-1 receptor agonist therapy. Twin A underwent laparoscopic sleeve gastrectomy at a weight of 133 kg (BMI 47.9 kg/m^2) with initial 23-kg weight loss and insulin discontinuation. However, she experienced progressive weight regain to 135 kg with worsening glycemic control despite maximal medical therapy and adherence to a supervised hypocaloric diet. Resting energy expenditure measured 1900 kcal/day, consistent with metabolic adaptation. Twin B underwent staged bariatric procedures including gastric band placement, band removal, and subsequent sleeve gastrectomy. Although she achieved partial weight loss and improved glycemic control, she remained severely obese long term. Both sisters were diagnosed with idiopathic intracranial hypertension. Secondary endocrine causes of obesity were excluded. Genetic testing using a rare obesity gene panel identified three shared heterozygous variants of uncertain significance in GNAS, PLXNA4, and VPS13B. **DISCUSSION** | The presence of identical rare variants in monozygotic twins with nearly concordant severe, treatment-refractory obesity suggests a potential oligogenic contribution to their phenotype. Variants in GNAS have been associated with melanocortin pathway signaling abnormalities, while PLXNA4 and VPS13B have emerging roles in neurodevelopmental and metabolic regulation. Although classified as variants of uncertain significance, their co-occurrence raises biological plausibility for impaired appetite regulation or altered hypothalamic signaling. The heterogeneous response to bariatric surgery between the twins underscores the complexity of genetic influences on metabolic adaptation, energy expenditure, and weight regain. Their concurrent diagnosis of idiopathic intracranial hypertension further supports possible neuroendocrine involvement.

CONCLUSION | This case highlights the limitations of conventional obesity management in individuals with early-onset, treatment-resistant disease and shared rare genetic variants. Incorporating genetic evaluation into selected patients with refractory obesity may improve risk stratification, guide therapeutic decisions, and support development of precision-based management strategies.

CCR.403 | WHEN TSH ELEVATION DEFIES EXPLANATION: INSIGHTS FROM A PATIENT WITH A TSH-OMA

GRACE PERRY, OMS-IV; ANJA FERNANDEZ-PLACENCIA, MD; MILAY LUIS-LAM, MD, FTOS

BACKGROUND | Papillary thyroid carcinoma (PTC) accounts for 80–85% of thyroid malignancies and typically carries an excellent prognosis. However, recurrence occurs in 5–21% of cases, most commonly in the thyroid bed or central neck due to lymphatic spread. Standard management includes total thyroidectomy followed by radioactive iodine ablation when indicated, along with thyroid-stimulating hormone (TSH) suppression using levothyroxine to reduce recurrence risk. The degree of suppression is guided by risk stratification; in high-risk patients, TSH is typically maintained below 0.1 µIU/mL. Levothyroxine dosing after total thyroidectomy is weight-based, generally 1.6–2.0 mcg/kg/day. Thyrotropin-secreting pituitary adenomas (TSH-omas) are rare functional pituitary tumors characterized by inappropriately normal or elevated TSH levels despite elevated thyroid hormone concentrations. The coexistence of TSH-oma and thyroid carcinoma is exceedingly rare and may result in diagnostic confusion and inappropriate management. **CASE PRESENTATION** | A 56-year-old male with a history of papillary thyroid carcinoma and pituitary macroadenoma, both previously treated surgically, presented with persistently elevated TSH levels despite biochemical and clinical features suggestive of thyrotoxicosis. The patient underwent total thyroidectomy for PTC in 2007 followed by radioactive iodine ablation. In 2011, he developed metastatic recurrence in the thyroid bed requiring central neck dissection; follow-up whole-body scan and stimulated thyroglobulin were negative. In 2015, while taking 224 mcg levothyroxine daily (2.4 mcg/kg), his TSH was 0.34 µIU/mL and FT4 1.43 ng/dL. In 2017, he experienced atrial fibrillation, though his levothyroxine dose remained unchanged.In 2019, laboratory studies revealed TSH 5.12 µIU/mL with elevated FT4 2.0 ng/dL. Medication noncompliance was suspected. In April 2020, evaluation for new visual changes revealed a 2.2 cm pituitary macroadenoma with suprasellar extension and optic chiasm compression. He underwent transsphenoidal resection in May 2020. Pathology demonstrated CAM5.2 positivity and mild prolactin staining; TSH immunostaining was unavailable. The tumor was classified as nonfunctioning. Postoperatively, he required transient hydrocortisone but no long-term hormone replacement. By 2024, MRI suggested tumor regrowth. TSH levels continued to rise despite elevated FT4 and stable levothyroxine dosing. Visual symptoms recurred in January 2025, with labs showing TSH 6.49 µIU/mL and FT4 1.7 ng/dL. In March 2025, he experienced recurrent atrial fibrillation and was started on beta-blocker therapy and anticoagulation before referral to neuroendocrinology. Repeat labs in April 2025 demonstrated TSH 6.4 µIU/mL and FT4 2.2 ng/dL. Given unavailable prior TSH staining, serum alpha-subunit was obtained and found elevated at 1.7 mg/mL (reference 0.1–0.5), supporting the diagnosis of TSH-secreting adenoma. MRI in May 2025 confirmed residual bulky sellar disease with cavernous sinus invasion and optic apparatus compression. **DISCUSSION** | This case illustrates a rare and diagnostically challenging coexistence of TSH-secreting pituitary adenoma and differentiated thyroid cancer. Diagnosis was delayed due to the rarity of TSH-omas, absence of TSH immunostaining, and initial suspicion of medication noncompliance. Persistent elevation of TSH despite high free T4 levels, elevated alpha-subunit, and radiographic progression ultimately confirmed the diagnosis. This case underscores the importance of maintaining diagnostic vigilance in post-thyroidectomy patients with discordant thyroid function tests and highlights TSH-oma as a rare but critical cause of persistent TSH elevation in endocrine oncology.

CCR.405 | PERIOPERATIVE STEMI MIMIC AFTER CARDIAC ARREST: INFERIOR ST-ELEVATION, NON-OBSTRUCTIVE CORONARIES, AND ANOMALOUS RCA ORIGIN

ABDULLAH GHUMAN, MD; MAUMITA DAS, MD; MOHAMMAD HAMZA, MD; AHMED ABU-HANIYEH, MD

INTRODUCTION | Perioperative inferior ST-elevation after cardiac arrest is not uncommon and often reflects mimics rather than acute plaque rupture. Rapid differentiation is crucial when bleeding risk limits antithrombotics and intervention. **CASE PRESENTATION** | A 67-year-old man with CAD, HTN, HLD, and cirrhosis underwent laparoscopic cholecystectomy for gallstone pancreatitis. Intraoperatively he had ~1 L falciform bleeding, hypotension, and PEA arrest; after epinephrine he developed VT, was defibrillated, and achieved ROSC. Post-ROSC ECG showed inferior ST-elevation with reciprocal lateral/anterior depression. Intraoperative TEE demonstrated a hyperdynamic LV (EF≈70%) without regional wall-motion abnormality (RWMA). Despite hemorrhagic risk, emergent angiography revealed nonobstructive coronary arteries and an anomalous right coronary artery arising from the left coronary cusp; no culprit lesion was identified. **DISCUSSION** | The discordant triad—ST-elevation, hyperdynamic TEE, and nonobstructive coronary arteries—supports catecholamine-provoked vasospasm and/or type II ischemia from hemorrhagic shock. Alternative causes (e.g., transient microvascular dysfunction, supply–demand mismatch from hemorrhage) were considered; absence of RWMA on TEE reduced likelihood of acute plaque rupture. Cross-sectional imaging was deferred given active bleeding and immediate perioperative instability; outpatient CCTA is planned when clinically safe to define anomalous RCA course and long-term risk. **CONCLUSION** | Perioperative ST-elevation demands ECG–TEE–hemodynamic correlation. When findings diverge, catheterization may still be warranted for diagnosis, while antithrombotics and PCI are constrained by bleeding risk. Anomalous coronaries merit deferred CTA to define course and guide follow-up once hemostasis is secured.

CCR.406 | ACUTE STENT THROMBOSIS AFTER ONE-MONTH DAPT INTERRUPTION FOR TIME-SENSITIVE CANCER SURGERY

ABDULLAH GHUMAN, MD; MAUMITA DAS, MD; MOHAMMAD HAMZA, MD; AHMED ABU-HANIYEH, MD

INTRODUCTION | Perioperative DAPT after PCI remains unsettled. ACC/AHA advise ≥12 months after ACS and ≥6 months after DES in stable CAD; ESC allows 1–3 months only for very high bleeding risk. Validated pathways for time-sensitive surgery are lacking. **CASE PRESENTATION** | A 63-year-old man with NSTEMI received a mid-LAD DES and was discharged on aspirin/ticagrelor. For newly diagnosed colorectal cancer, resection was delayed ~1 month to balance oncologic urgency and ischemic risk; DAPT was then held for hemostasis. Within 24 h postoperative he developed chest pain with inferior ST depressions. Angiography showed acute LAD stent thrombosis; repeat PCI restored TIMI grade 3 flow. Echocardiography showed LVEF 30–35%. **DISCUSSION** | Short-DAPT trials (MASTER-DAPT, STOPDAPT-2, TWILIGHT) excluded surgical patients. Cangrelor bridging has evidence only in CABG (BRIDGE); its role in noncardiac surgery is untested. This case highlights a systems gap: absence of standardized perioperative algorithms and inconsistent coordination among cardiology, surgery, and anesthesia. **CONCLUSION** | DAPT interruption for time-sensitive cancer surgery precipitated stent thrombosis. Short-DAPT data should not be extrapolated to noncardiac surgery. Multidisciplinary pathways and validated bridging strategies are needed to reduce ischemic complications in high-risk patients.

CCR.407 | WATCHMAN DEVICE EMBOLIZATION IN CAULIFLOWER-TYPE LEFT ATRIAL APPENDAGE

MOHAMMAD HAMZA, MD; ABDULLAH GHUMAN, MD; AHMED ABU-HANIYEH, MD; MOHAMMAD OMAR BUTT, MD; MUHAMMAD JIBRAN, MD

INTRODUCTION | Left atrial appendage occlusion (LAAO) devices, like the Watchman, help prevent stroke in atrial fibrillation patients by blocking the LAA, an area prone to clot formation. They are an alternative to long-term anticoagulation but carry a risk of device or thrombus embolization. Watchman device embolization is a rare but serious complication, occurring in 0.2%–0.7% of cases. Most events happen intraoperatively or within the first month post-implantation. Risk factors include use of older device, improper sizing, implantation during sinus rhythm, and procedures at low-volume centers. In-hospital mortality is about 14%, rising to 20.5% if surgical retrieval is needed.
CASE PRESENTATION | An 82-year-old female with a history of persistent atrial fibrillation underwent planned implantation of the Watchman device, for thromboembolism prophylaxis due to contraindication to anticoagulation. Preprocedural transesophageal echocardiography (TEE) showed no LAA thrombus and suitable anatomy. Intra-procedure imaging revealed a cauliflower-type LAA. A 35 mm Watchman FLX was deployed with proper positioning (20–30% compression), passing the PASS criteria. Stability was confirmed, and TEE showed excellent sealing. Post-procedure, the patient developed a severe coughing spell, followed by chest pain and hypotension. A STAT echocardiogram showed device embolization into the mitral valve, then the left ventricle. The patient required emergent surgical intervention for device retrieval. The device, which was entangled in the mitral leaflets, was successfully retrieved and the mitral valve was repaired. Postoperatively, the patient developed worsening cardiogenic shock, requiring high-dose vasopressors, dialysis, and intra-aortic balloon pump support. Despite escalation of care, she progressed to multi-organ failure and eventually passed away. **DISCUSSION & CONCLUSION** | This case highlights the risk of Watchman device embolization in patients with complex LAA anatomy, particularly the cauliflower-type morphology, which is defined by a short overall length, multiple lobes, and irregular geometry, and poses significant challenges for device anchoring and sealing. Despite meeting standard procedural criteria, the device dislodged due to poor anchoring. Studies link this LAA type to higher rates of leaks and embolic events. To mitigate risk, centers should use advanced imaging, newer-generation devices like the Watchman FLX, and multidisciplinary planning.

EVIDENCE-BASED PRACTICE

EBP.601 | BE IN THE ROOM, KNOW THE CODE STATUS!

ABIGAIL KINNAIRD, BSN, RN; LAUREN WEBER, RN; MELISSA GOLDMAN, LPN; MELINDA VAUGHN, LPN

PURPOSE | Prevent wrongful resuscitations in DNR patients, and decrease the amount of time it takes to start emergency interventions on full code patients utilizing a standardized visual code status identifier. **BACKGROUND** | In emergent situations, rapid recognition of a patient's code status is critical. Currently, code status is often documented solely within the electronic health record (EHR), which may not be immediately accessible during time-sensitive emergencies. The reliance on electronic verification can result in unintended resuscitation of DNR patients or delays in initiating cardiopulmonary resuscitation (CPR) for full code patients. The American Heart Association (AHA) recommended in 2008 the use of standardized, color-coded wristbands to improve identification of DNR status. Despite adoption in many institutions, inconsistency in practice remains and concerns regarding patient privacy and misinterpretation persist. **DISCUSSION** | Since recommendations from the AHA in 2008 hospitals from around the country began designating purple-colored wristbands for DNR status. Hospitals and clinicians began using these visual aids as a way to provide and easily recognizable way to acknowledge a patient's clinical code status. Along with potential concern for mistaking alternate bracelets for code status bracelets patient can be asked to remove all social bracelets during hospital stay so there is no risk for additional confusion (The Color of Safety: Hospitals join together on wrist bands standards, 2009). A common objection to DNR wristbands and visual code status identifiers is HIPPA violation and violation of patient privacy. Yet, per joint commission, color coded wrist bands do not interfere with patient privacy (Marcus, 2015). Visual/ color identifiers are not a new system in health care and are used every day. For example, red and green socks to distinguish high vs low fall patients and interventions needed. Along with contact isolation rooms having colored and visual identifiers placed on doors. And finally, visible tattoos and or sleeves placed on patients with PICC lines or fistulas to prevent blood pressure cuffs applied to the arm or blood draws being performed (Lynch, 2016). **RECOMMENDATION & CONCLUSION** | A standardized visual code status identifier has the potential to reduce wrongful resuscitation events, decrease time to intervention for full code patients, and improve overall patient safety. Successful implementation requires organizational policy support, interdisciplinary collaboration, and comprehensive staff education to ensure consistency and compliance. This EBP initiative aligns with national patient safety goals and supports ethical, timely, and patient centered care delivery.

HEALTH EQUITY, SOCIAL DETERMINANTS OF HEALTH, COMMUNITY, AND POPULATION HEALTH

SDOH.201 | BUILDING ADVANCED PRIMARY CARE TO ADDRESS SOCIAL AND MEDICAL NEEDS IN A SEVERELY UNDERSERVED COMMUNITY

HOWARD HAFT, MD, MMM, CPE, DFAAPL

BACKGROUND | The Somerset Primary Care practice was established under the state's EQIP-PC program to build new advanced primary care in the most medically underserved areas in Maryland. The practice is delivering advanced community-based primary care with integrated behavioral, clinical pharmacists, community health workers, point of care ultrasound and laboratory testing, and cutting edge technology in a comfortable patient focused setting. We are targeting improvements in the county-wide population health indicators as a measure of success. Somerset County: The primary health indicator we are targeting is access to primary care. As can be seen in the table below from 2024 US News Healthiest Communities Score, Somerset County falls far below Maryland and National levels. The County Health rankings show that Somerset has the 22nd worst health outcomes in the state. In addition, Somerset County has been identified as the 23rd worst county for having unfavorable health factors. The most recent data from the CRISP Disparity Index reveals very high levels of age adjusted hospital encounters for all the major health conditions in Somerset as compared to the state overall. For example, the rate per 1,000 people for hypertension encounters is 418 compared to 147 for the state (184% higher), diabetes 229 compared to 79 for the state (190% higher), heart disease 170 compared to 57 (200% higher), and asthma 75 compared to 25 for the state (200% higher). Other key measures of health reflect Somerset residents have elevated healthcare risks. Specifically, 1) The rate of prenatal smoking is higher in Somerset than the state average; 2) The life expectancy at birth is lower by 1.5 years than the state average; 3) The percent of people with obesity is higher than the state; 4) Access to healthy food is lower than the state average; and 5) Higher rates of diabetes and asthma compared to state averages. We will be targeting these outcomes through the broad application of advanced primary care and monitoring changes annually.

SDOH.202 | MERITUS HEALTH CARE CALLERS REPORT POSITIVE BENEFITS FOR THEMSELVES AND THEIR RELATIONSHIP TO COMMUNITY: FINDINGS FROM A CROSS-SECTIONAL STUDY

ELIZABETH FIELDS-DOWDELL DNP, CRNP, CEN; HUFSA KHAN, OMS-I; AUDREY VASAUSKAS, PHD

BACKGROUND | Loneliness is a significant public health concern associated with poorer health outcomes. To address this need, Meritus Health created the Care Caller Program, an initiative in which volunteers make supportive phone calls to community members who self-enroll to receive regular check-ins. While prior studies have examined the positive outcomes for call recipients, no research has evaluated the program's impact on the volunteers themselves. Understanding these effects is essential for improving volunteer engagement, retention, and community health programming. This study assessed the perceived benefits experienced by care callers across seven domains: personal meaning, social connection and belonging, communication skill development, civic attitudes, self-perceived well-being and mental health, empathy, and perceived community impact.

Hypothesis: We hypothesized that participation in the Meritus Care Caller Program would yield positive perceived benefits for volunteers across several domains spanning both self and community. **METHODS** | A voluntary, anonymous survey was distributed electronically to active care callers (IRB-FY25-26-17). Survey items assessed the seven target domains using Likert-type response options and optional free-text fields. Descriptive statistics were used to summarize response patterns across domains. **RESULTS** | A total of 28 volunteers completed the survey (response rate: 47%). Analyses indicated overall positive perceptions of the program's personal impact on the care callers. Personal Meaning: 86% of respondents strongly agreed (67.9%) or agreed (17.9%) that participating in the care caller program gives them a sense of purpose. Social Connection: 92.9% indicated enhanced feelings of connection (50% strongly agree, 42.9% agree) and 85.7% indicated a feeling of community belonging (53.6% strongly agree, 32.1% agree, 10.7% neutral). Communication Skill Development: 82.2% reported increased communication skills and 78.6% cite increased comfort in their interactions with others due to their participation as a care caller. Civic Attitudes: 85.7% of respondents noted an improved understanding of the community with 92.8% citing an increased understanding of the challenges faced by the community (60.7% strongly agree, 17.9% agree). Self-Perceived Well-Being and Mental Health: 92.8% of care callers indicated improved mood as a result of participating as a care caller (607% strongly agree, 32.1% agree); 71.4 % reported improved stress levels on days they participate as a care caller (57.1% strongly agree, 14.3% agree, 21.4% neutral), and 89.2% felt that participating as a care caller has improved their overall well-being. Empathy: 100% of respondents noted that participating as a care caller has increased their empathy towards others' experiences (60.7% strongly agree, 39.3% agree). Thematic analysis of open-ended questions yielded the following themes: 1. Positive impact on others, 2. Personal fulfillment and gratitude, 3. Deepened empathy and human connection, 4. Communication and support skill development, 5. Enhanced sense of belonging, identity, and purpose, 6. Increased awareness of community needs, and 7. Occasional challenges, 8. and sense of responsibility towards others. **CONCLUSION** | Initial analysis demonstrates that participation in the Care Caller Program yields substantial perceived benefits for volunteers across psychosocial, skill-based, and civic domains. High percentages of volunteers reported increased personal meaning, social connection, communication skill development, empathy, and emotional well-being. Nearly all respondents believed their involvement positively impacts the community. These findings underscore the reciprocal value of community-based outreach initiatives and support the continued expansion and evaluation of primarily volunteer-driven interventions addressing loneliness.

SDOH.203 | HOW COMMON ARE SOCIAL DETERMINANTS OF HEALTH? A COMPARISON OF NATIONAL ESTIMATES AND HEALTH SYSTEM-REPORTED PREVALENCE

REMI PATEL, MHA; VIGNESH PRASAD, MS; MAULIK JOSHI, DR.PH

BACKGROUND | Social determinants of health (SDOH) are non-medical factors that influence health outcomes, healthcare utilization, and health equity. While national data demonstrate high prevalence of social needs such as food insecurity, financial strain, and loneliness, health systems increasingly rely on brief clinical screening tools embedded in electronic health records to identify local needs. However, the extent to which this SDOH data reflect true population-level prevalence remains unclear. **POPULATION** | This study examined adult patients (≥18 years) who completed at least one SDOH questionnaire within Meritus Health, a regional integrated health system serving Western Maryland and surrounding tri-state areas. The analytic sample included all patients with a completed screening between January and December 2024, with the most recent response per patient used for prevalence estimation. **METHODS** | Meritus Health implemented a patient-reported SDOH questionnaire embedded in the MyChart patient portal and administered prior to ambulatory and hospital encounters. Six SDOH domains were assessed using single-item, dichotomous (yes/no) questions: food insecurity, financial insecurity, loneliness, health literacy, transportation insecurity, and housing insecurity. National prevalence benchmarks were identified through a structured review of peer-reviewed literature, federal surveys, and major public health reports for each domain. **ANALYSIS** | Observed prevalence rates from Meritus Health were compared with published national estimates. Differences were interpreted in the context of screening methodology, population characteristics, and clinical data collection settings. The analysis emphasized variation across instruments, including single-item versus multi-item validated tools, and differences between anonymous surveys and clinical screening environments. **OUTCOMES** | Across all six domains, Meritus Health patients reported substantially lower prevalence of social needs (range: 3.5%–7.9%) compared with national estimates, which commonly exceeded 10% for food insecurity and financial strain and 20–30% for loneliness. Loneliness emerged as the most frequently endorsed social need locally (7.9%), followed by health literacy concerns) 4.6%), and transportation insecurity (3.8%). Food insecurity (3.6%), financial insecurity (3.5%), and housing insecurity (3.5%) were least frequently reported. Despite the low prevalence, the relative ranking of domains mirrored the national patterns, with loneliness appearing more prominent than material hardship domains. The findings also highlighted wide divergence between single-item clinical screening results and prevalence derived from multi-item national instruments, suggesting substantial underdetection of social risk.
CONCLUSION | SDOH prevalence derived from real-world clinical screening was lower than national benchmarks, likely reflecting measurement limitations, selective patient participation, and contextual underreporting rather than true absence of need. While embedded SDOH screening provides valuable operational insight, health systems should interpret prevalence estimates cautiously and consider supplementing brief screens with more sensitive tools and broader outreach. Aligning screening methods with known population-level patterns is critical for accurately identifying unmet social needs and guiding intervention strategies.

SDOH.204 | WHAT MATTERS TO YOU, MATTERS TO US: LEVERAGING THE ELECTRONIC HEALTH RECORD FOR PATIENT-CENTERED CARE

VIGNESH PRASAD, MS; MAULIK JOSHI, DR.PH

INTRODUCTION | Patient-centered care is paramount for optimal outcomes. To address this, at Meritus Health, we asked a simple, yet profound question: "What matters most to you? (WMM)" This question, integrated into the patients' electronic health records (EHRs), facilitates meaningful conversations and helps tailor care to align with patient goals. This initiative, grounded in the principles of Age Friendly Healthcare from the John A. Hartford Foundation, underscores the power of information by enabling clinicians to gain a comprehensive understanding of their patients. Our implementation required significant teamwork and provider engagement. Over 3 years, we have recorded more than 65,000 responses, creating a strategic priority for the health system to personalize care, guide clinical decision making, and drive continuous improvement. This strategic priority is health system-wide. Patient-facing units and departments all across the health system track and report monthly metrics on the number of WMM responses captured. In addition, many departments across the system lead quality-improvement projects to improve and refine the process of asking this question. **METHODS** | We assessed the patient responses to the WMM question to identify the frequency of common answers and also sought to review the implementation of the question process for learning. **RESULTS** | In our analysis of more than 65,000 patient responses, we categorized the answers into the top distinct groups with the top five categories identified being family and relationships (noted 38% of the time), well-being (22%), health concerns (15%), lifestyle (6%), and religion and faith (3%). **CONCLUSION** | Asking and knowing WMM to patients offers more than just insight; it builds a meaningful conversation and relationship between the provider and patient in knowing the whole person. The top responses from patients are intuitively not surprising. The key to our questioning of the patients and the integration in the EHR are not the responses themselves, but the process of asking, knowing, and acting on WMM to patients. Ultimately, asking WMM can be a powerful tool in advancing patient-centric care and building population health. Keywords: what matters most, patient-centered, patient-provider communication, population health.

SDOH.205 | EXPLORING THE ASSOCIATION BETWEEN ANTENATAL DEPRESSION AND ADVERSE BIRTH OUTCOMES AMONG A DIVERSE URBAN POPULATION

JULIANA ISAAC, BS, MPH

BACKGROUND | Antenatal depression is a prevalent condition with established negative long-term outcomes for mothers, infants, and families. To date, literature regarding the potential effects of antenatal depression on birth outcomes has been limited to homogenous populations (e.g., predominantly white). POPULATION | Studies on these populations have generally found that while antenatal depression is associated with an increased risk of preterm birth and low birthweight, the effects are often attenuated by greater access to prenatal care, mental health resources, and social support. However, findings on other outcomes, such as admission to the NICU, have been mixed, with some studies suggesting no significant association. Given the limited generalizability of these findings, this study aims to investigate whether antenatal depression is associated with adverse birth outcomes within a large, diverse urban population.

METHODS | Data were derived from the electronic health records of 2,230 pregnant patients at an urban obstetric clinic (51.0% Black, 55.6% publicly insured, Mage=32.1 years, SD=5.7). Antenatal depression was assessed via an Edinburgh Postnatal Depression Scale (EPDS) score ≥13, and data regarding birth outcomes of interest (i.e., preterm birth, infant birthweight, NICU admission) were identified using delivery medical records. Bivariate analyses were used to compare characteristics among individuals with and without antenatal depression, and individual logistic and linear regressions were used to examine the relationship between antenatal depression with preterm birth (<37 weeks gestation), infant birthweight, and admission to the NICU. We adjusted for maternal age and race in our models due to their well-documented associations with adverse birth outcomes in existing literature. **ANALYSIS** | Antenatal depression was significantly associated (p<.001) with the following: Black race (72.6% vs 47.9%), unemployment (34.0% vs 13.5%), public health insurance (68.6% vs 41.1%), younger average maternal age (30.2 vs. 32.4 years), lifetime mood disorder (28.1% vs 10.6%), use of psychiatric medications (20.4% vs 8.3%), preterm birth (15.8% vs. 9.3%), and lower average infant birthweight (3131.2 vs. 3249.3 grams). Following adjustment for maternal age and race, antenatal depression remained significantly associated with preterm birth (OR=1.7, 95% CI: 1.2-2.5, p=.008) and lower average infant birthweight (β=-70.713, SE=56.81, p=.001). **CONCLUSION** | The present findings suggest that antenatal depression is associated with preterm birth and lower infant birthweight in a racially and socioeconomically diverse urban sample. These results align with the findings of previous studies on predominantly white, high-income populations, which have also found a link between antenatal depression and adverse birth outcomes, particularly preterm birth and low birthweight. However, our findings did not indicate a significant association with NICU admission, suggesting that other medical factors influence the need for neonatal intensive care. Our findings suggest that continued routine EPDS screenings as a part of prenatal care will help to identify individuals at risk for adverse birth outcomes. Future research should explore if preterm birth and low infant birthweight can be prevented or mitigated by implementing evidence-based mental health treatment during pregnancy, particularly for marginalized groups.

SDOH.206 | CHARACTERIZING PATIENTS WHO UTILIZE NON-EMERGENCY MEDICAL TRANSPORTATION SERVICES IN AN INTEGRATED HEALTH SYSTEM

ADAM MOWERY, OMS-I, BSN; PAUL SAUM, OMS-I; ZACHARY LATHAN, OMS-I, MS; SADIQ SYED, OMS-I; MAULIK JOSHI, DR.PH

Transportation barriers are a major social determinant of health that contribute to delayed care, missed appointments, and potentially preventable emergency department (ED) utilization. Non-emergency medical transportation (NEMT) programs aim to improve access to care, yet limited data exist describing the populations who use these services and their patterns of healthcare utilization. This retrospective, descriptive cohort study includes all adult patients who utilized NEMT within an integrated health system. Using linked electronic health record and transportation service data, we will characterize demographic factors, clinical comorbidities, and social determinants of health among NEMT users, with the first documented NEMT ride serving as the index date. Healthcare utilization measures, including ED visits, hospitalizations, outpatient encounters, and appointment adherence, will be extracted and de-identified prior to analysis. Descriptive analyses will summarize patient

characteristics and transportation utilization patterns, while exploratory comparisons will evaluate trends in healthcare use in defined periods before and after NEMT initiation. Subgroup analyses will examine differences by chronic disease burden, insurance status, and social risk factors. This study is intended to be hypothesis-generating and to establish a foundational understanding of who relies on NEMT services and how they interact with the health system. Findings will inform future population health research and interventions aimed at reducing disparities, improving access to care, and advancing health equity through transportation-based support.

SDOH.207 | PUBLIC KNOWLEDGE OF DATA CENTERS, PUBLIC HEALTH IMPACTS AND THE EFFECTS OF EDUCATION

PAUL G. GOMEZ; PRINCESS J. BARGE, BA; YOLANDA WIMBERLY, MD

BACKGROUND | Recent expansions by major technology firms such as Google, OpenAI, and large streaming services have accelerated data center construction across metropolitan areas, including Atlanta, Georgia. While these facilities support digital infrastructure, community awareness of their environmental and public health implications remains limited, particularly in historically marginalized areas. Data centers generate substantial heat, increase energy demand, strain local utilities, and may worsen air quality, factors associated with respiratory, cardiovascular, and heat-related health outcomes. This study examined public understanding of data center impacts and assessed how targeted educational interventions influence perceptions, civic engagement, and policy outcomes related to health equity and environmental justice. **METHODS** | A survey was conducted among 114 Metro Atlanta residents aged 13 years and older, including individuals from South Fulton, where active zoning and legislative decisions regarding data center development were underway. Participants completed a baseline assessment measuring knowledge of data center operations and perceived environmental, economic, and health impacts. They were then provided with a brief educational intervention outlining data center infrastructure, energy consumption, heat island effects, air quality concerns, utility cost implications, and related public health risks. Post-intervention responses evaluated changes in attitudes, willingness to engage civically, and support for policy action. **ANALYSIS** | Baseline findings revealed widespread gaps in knowledge: 74% of respondents reported limited understanding of air quality impacts, 60% did not consider potential increases in utility costs, and 60% were unaware of heat island risks. Following the educational intervention, substantial shifts were observed, with 81.7% of participants opposing new data center developments, 93.3% calling for greater transparency from civic leaders, and 26% expressing interest in joining community advocacy efforts. Sharing the study's findings with community members in South Fulton helped mobilize public opposition and played a major role in stopping the passage of a local bill that would have fast-tracked data center development without adequate health or environmental protections. Despite concerns, 53.2% of respondents indicated conditional support for data center projects if tangible community benefits, safeguards, and transparency were ensured. **CONCLUSION** | These findings highlight the critical role of community-centered education in shaping population health outcomes and influencing policy decisions. The absence of accessible educational materials prior to data center construction may exacerbate environmental health disparities and undermine health equity in affected communities. Providing timely, transparent, and culturally responsive educational interventions empowers residents to engage in decision-making processes, mitigates preventable health risks, and supports more equitable and just approaches to large-scale technological development.

MEDICAL AND INTERPROFESSIONAL HEALTH AND SCIENCES EDUCATION

HSE.501 | LIFESTYLE MEDICINE DOMAINS AND WELL-BEING AMONG MEDICAL STUDENTS: A PILOT ASSESSMENT USING A VALIDATED SURVEY TOOL

AARON GEORGE, DO; JAKE KLAUBER; ANVI GUPTA; AUDREY VASAUSKAS, PHD

BACKGROUND | Medical training is characterized by intense academic, emotional, and physical demands, and numerous studies document high rates of burnout, lifestyle disruption, and psychological distress among medical students. These challenges often intensify during the transition from pre-clinical to clinical education and can diminish empathy, impair cognitive performance, and contribute to long-term professional dissatisfaction. Lifestyle medicine, encompassing nutrition, physical activity, restorative sleep, stress management, substance avoidance, and social connection, offers a preventive, evidence-based framework that has received increasing attention in patient care. Yet little is known about how medical students themselves engage in these health-promoting behaviors. This pilot study aims to evaluate lifestyle patterns among medical students across both allopathic (MD) and osteopathic (DO) programs during pre-clinical (years 1-2) and clinical (years 3-4) undergraduate medical training. **METHODS** | A validated lifestyle medicine assessment survey was distributed to medical students from United-States-based allopathic and osteopathic institutions. Survey responses were collected anonymously across the six lifestyle medicine domains. Descriptive statistics summarized patterns in nutrition, physical activity, sleep, stress management, social connection, and substance use. A total of 27 responses were analyzed, representing students from osteopathic (DO, 84% of respondents) allopathic (MD, 16%) programs. Respondents included 78% first year medical students, 15% second year students, and 7% third year (clinical) students. There were no responses from fourth-year students. **RESULTS** | Across both MD and DO respondents, restorative sleep emerged as a significant concern: although 85.2% reported sleeping 6–7 hours nightly, only 22.2% woke feeling refreshed on most days. Nutritional patterns indicated suboptimal intake, with 59.3% consuming only one serving of fruit per day and 77.8% consuming fewer than three daily servings of vegetables. Physical activity levels varied: nearly 34% performed less than 30 minutes of weekly cardiorespiratory exercise, while 18.5% engaged in five or more hours. Trends were consistent across both allopathic and osteopathic students, though early-year students (MS1/OMS1) reported slightly lower activity levels compared to those in clinical years. First year medical students exhibited the lowest physical activity, while those students in clinical years exhibited the worst sleep quality (in terms of waking feeling refreshed = 0%). Substance use was low across all groups.
CONCLUSION | Across both allopathic and osteopathic programs and across all training years represented, medical students demonstrate notable challenges in multiple lifestyle medicine domains —particularly sleep, nutrition, and physical activity. These findings underscore the demands placed upon medical students and potential need for system-level supports aimed at enhancing student well-being. Strengthening lifestyle habits during medical education may reduce burnout risk, promote resilience, improve clinical empathy, and prepare future physicians to model evidence-based healthy behaviors. Future longitudinal research should explore differences across training stages and evaluate interventions designed to improve lifestyle medicine competencies and personal well-being among medical students.

TECHNOLOGY, AI, AND DIGITAL HEALTH

TAD.701 | LEVERAGING EMAR CLINICAL DECISION SUPPORT TO IMPROVE PAIN MANAGEMENT SAFETY AND COMPLIANCE

CYNTHIA RUSSELL, DNP, RN, NI-BC, EBP-CH; ANNIE SHANTON, PHARMD, BCPS; KASEY ZERN, MSN, RN, CEN

BACKGROUND | Adherence to PRN pain medication parameters is essential for patient safety and compliance with The Joint Commission standard PC.01.02.07. Safe administration requires that the documented pain score aligns with the provider-prescribed range; deviations constitute medication errors, increasing risks of overdosing or uncontrolled pain. Manual documentation and high-stress clinical environments contribute to these errors. Pharmacy audits revealed dosing outside parameters, underscoring a systemic vulnerability. A technology-driven intervention was needed to ensure accurate pain management, reduce adverse drug events, and strengthen adherence to evidence-based protocols. **PROBLEM** | Pharmacy data showed 3% overdosing and 36% underdosing of PRN pain medication administered outside prescribed pain score thresholds, posing patient safety risks and noncompliance with medication standards. Manual workflows lacked safeguards to prevent inappropriate dosing. A digital solution was required to enforce adherence and improve medication safety. **DIGITAL SOLUTION** | An eMAR-integrated clinical decision support tool was implemented to compare nurse-documented pain scores with provider-prescribed parameters before medication administration. If the pain score is below the PRN order threshold, a hard-stop alert prevents dosing to avoid overdosing. If the pain score is above the threshold, a soft-stop warning appears, allowing the nurse to proceed if the patient requests less medication, but never more than prescribed. This approach balances patient autonomy with safety, reduces medication errors, and ensures compliance with pain management standards. **METHODS OF EVALUATION** | A pre/post-implementation analysis of pharmacy reports assessed PRN pain medication administrations. Post-intervention, inappropriate dosing decreased from 3% to 1%, but this reduction reflects only overdosing prevented by hard-stop alerts. Residual errors (1%) were linked to free-text pain score parameters that bypassed alert logic. Underdosing, identified through soft-stop alerts, was 36% of PRN administrations in June 2025 and decreased to 25% by October 2025, demonstrating meaningful improvement in adherence and patient-centered dosing. **EVIDENCE OF EFFECTIVENESS AND SCALABILITY** | The intervention reduced overdosing by two-thirds and significantly lowered underdosing rates, improving compliance and patient safety. Exceptions related to non-analgesic pain orders prompted pharmacy dictionary updates for broader drug classification. This approach is scalable across units and medication categories, supporting system-wide standardization. Future expansion will integrate formulary reviews and order structure optimization to sustain improvements.

TAD.702 | IMPLEMENTING TECHNOLOGY TO MONITOR AND CUE PATIENT REPOSITIONING TO DECREASE HOSPITAL ACQUIRED PRESSURE INJURIES (HAPIS)

ALEXANDRA BROWNE, MSN, RN, CCRN; CYNTHIA K. RUSSELL, DNP, RN, NI-BC, EBP-CH; MARGARET M. MCNEILL, PHD, RN, APRN-CNS, CCNS, EBP-CH, CCRN, TCRN, CPAN, NEA-BC, FASPAN, FCNS, FAAN

BACKGROUND | Hospital-acquired pressure injuries (HAPIs) remain a major challenge despite established prevention protocols. HAPIs have a major financial impact on health care organizations affecting reimbursement costs. Although there is significant evidence to support regular turning and repositioning of patients, adherence to turning protocols is inconsistent. Traditional workflows surrounding patient turn adherence lack accurate monitoring and timely reminders, limiting compliance. Innovative solutions are needed to bridge these gaps and improve patient safety while supporting clinician workflow. Despite established prevention protocols, pressure injuries continue to occur in acute care settings, leading to significant patient harm and increased healthcare costs. High patient acuity, limited mobility, and staffing challenges often result in inconsistent adherence to repositioning and risk assessment practices. These gaps contribute to prolonged hospital stays, infections, and higher mortality rates. Addressing this issue requires innovative, evidence-based strategies to improve compliance and reduce the incidence of hospital-acquired pressure injuries. The LEAF Patient Monitoring System uses a small wearable, wireless sensor to track patient position and movement in real time. By Monitoring turn frequency, angle, and reperfusion time, it ensures patients are repositioned appropriately and alerts staff with visual cues when intervention is needed. This technology supports adherence to individualized turning plans and significantly reduces HAPIs while improving workflow efficiency and giving nurses clear and actionable data to support patient care. **METHODS** | Increased patient turn compliance from literature baselines (under 50%) to a mean over 80%, and a decrease in sacral/coccyx/back/buttock HAPIs by at least 50%. Leaf daily reports automatically capture compliance rates, which were not practically measurable prior to the sensor technology. HAPIs are measured with monthly incidence and prevalence audits in place. Pre and post staff surveys will collect input on the technology and challenges associated with turning/repositioning patients and HAPI prevention. **RESULTS** | Data gathered and reported daily by the sensors indicated a greater than 80% turn compliance. During the trial, in hospitalized patients admitted on the trial units, the number of HAPIs that developed in the areas of the sacrum, buttocks, or coccyx totaled 8. Compared to the same months last year, when 15 HAPIs developed, we saw a 53% decrease. Given each HAPI is estimated to cost the hospital $32,292, approximately $226,044 was saved. The increased efforts and attention to HAPI prevention on the intervention units resulted in a decrease of all locations and types of HAPIs from 36 to 16 (44%). **CONCLUSION** | The LEAF system improved turn compliance to nearly 89% during the pilot, reducing risk for hospital-acquired pressure injuries in targeted populations. Medical/Surgical nurses reported greater confidence in patient care through real-time monitoring and automated alerts. Its wireless sensors, and centralized displays proved adaptable across ICU, telemetry, progressive care, and medical-surgical units. This success demonstrates scalability in a small community hospital, offering cost-effective, evidence-based solutions that can expand to other units or facilities with minimal infrastructure changes.

TAD.703 | ARTIFICIAL INTELLIGENCE AND CLINICAL REASONING: A HYBRID FRAMEWORK FOR MEDICAL-LEGAL INJURY ASSESSMENT

RALPH T. SALVAGNO, MD

BACKGROUND | Artificial intelligence tools have become increasingly visible in healthcare for their ability to synthesize information, surface patterns, and streamline documentation. These capabilities are now being used informally by clinicians and trainees in settings ranging from differential diagnosis to chart preparation. However, complex musculoskeletal injury evaluations, particularly those arising from motor vehicle collisions, workplace injuries, and liability disputes in the transportation industry, require reasoning that extends beyond pattern recognition. These assessments involve mechanism of injury, causation, functional impairment, recovery trajectory, and future care considerations, and they must be articulated in a manner that is medically accurate, economically relevant, and legally defensible. Current AI models assist with summarization and document organization but encounter difficulty in areas central to this domain, including longitudinal interpretation across time, differentiation between baseline and injury-related impairment, counterfactual reasoning ("what would have occurred absent the injury"), resolution of conflicting or incomplete data, and defensible projection of return to work or future care. These limitations reflect the statistical foundation of the models rather than a fundamental safety concern, and they highlight an unmet need for hybrid approaches that preserve clinical judgment and accountability. **APPROACH** | To address this need, we developed the Comprehensive Medical Legal AssessmentTM (CMLATM) model, a structured expert and AI framework for musculoskeletal injury evaluation. The model decomposes assessments into discrete orthopedic and medicolegal components including diagnosis characterization, causation analysis, medical necessity, functional impact, attribution and apportionment, and return to work and future care considerations. AI tools are used for document ingestion, organization, and comparison of findings, while physicians retain responsibility for interpretation, narrative reasoning, and final conclusions. The framework is being developed with the intention of commercial deployment to support scalability and standardized use in liability, insurance, and occupational health environments. **EVALUATION** | Early testing has included review by experienced orthopedic and medicolegal evaluators who compared structured CMLATM reports to conventional narrative assessments to determine whether the structured format improves consistency and defensibility in personal injury cases. **EVIDENCE OF EFFECTIVENESS** | AI assisted document synthesis reduced the time required to organize and summarize records without replacing clinical judgment, which supports a complementary rather than replacement role for technology. Because the model is modular, it has potential applicability beyond musculoskeletal injury, particularly in clinical fields where causation, chronology, and outcome projections are central, such as oncology, cardiology, and geriatric medicine. Further work will assess reproducibility across evaluators and settings, examine downstream effects on claim resolution, and explore commercial translation pathways for broader adoption.

TAD.705 | PLAY HIGHER FOR BEHAVIORAL HEALTH: AN EDUCATIONAL PIPELINE INITIATIVE
MEGAN GANDY, MSW, PHD, LICSW; HEATHER COLE, MFA; SAMANTHA LEGGETT-BRADLEY, PHD

BACKGROUND | A 2015 article (Lin et. al, 2015) projects that 30 states in the U.S. will experience a shortage of social workers by the year 2030, and the nationwide shortfall will reach just under 200,000 social workers. "As of December 2023, more than half (169 million) of the U.S. population lives in a Mental Health Professional Shortage Area" with substantial behavioral health professional shortages projected by 2036 (HRSA Health Workforce, 2023, p.1). Ample research illuminates the importance of career exploration efforts in our K-12 school systems and the myriad of programs in place to introduce students to various professions. The behavioral health discipline, however, seems to be overlooked in these workforce recruitment efforts as no literature could be identified by the current authors to reflect K-12 social work recruitment. **METHODS** | Educational pipeline grant funding from the Department of Labor and West Virginia Higher Education Policy Commission has afforded our team the financial resources to create a virtual reality career exploration game taking middle-school, high-school, and undergraduate college students through a day-in-the-life of a behavioral health social worker. Virtual reality has been shown in recent years to be a career exploration modality that yields similar to or even better outcomes in career readiness and efficacy, job orientation and training comprehension, as well as general career exploration for youth and adults. Using this body of literature to create our virtual reality game, students journey alongside a fictional, virtual social worker named Jenna. Users help Jenna provide services for a new client. This new client is an adolescent facing housing insecurity, bullying, and lack of parental support. Users are taught behavioral health concepts like person-in-environment and self-determination, they are taught how to ask open-ended questions, and how to utilize Maslow's Hierarchy of Needs when assisting clients. All along the way users are awarded prizes to decorate their virtual social work office. At the conclusion of the experience users are given information on how to pursue a degree in social work. In addition to creating this virtual reality game and having it released for free on the Meta Horizon app store, our team also created a program called the "Play Higher Pioneers." Through an application and award process, 15 under resourced schools across the state of West Virginia were chosen to receive a free Meta Quest 3s headset from us that comes pre-loaded with our Social Work Simulator game, as well as nearly 10 other games and apps that would be appropriate for educational use to teach students behavioral health and/or career readiness and exploration concepts. Partnership with each pioneer includes having 50 students per academic year for three consecutive years play our game and complete pre and post-game quantitative surveys measuring various career readiness, behavioral health, and virtual reality-related outcomes. **RESULTS & CONCLUSION** | We are currently in month six of our three-year collaboration with our pioneers, and we have received data from 55 students so far. Initial data analysis is proving promising with paired t-tests showing increases in career readiness and career exploration after students play our game.

Frederick Health

MERITUS SCHOOL OF OSTEOPATHIC MEDICINE
Meritus
MARYLAND

Meritus Medical Center

MSOM.ORG