

Ohio State Medical Association - Annual Meeting

April 11, 2026

Medical Student Poster Abstracts

#1

Abigail Bautista, BS

MS2 - Ohio University Heritage College of Osteopathic Medicine

Advocacy, Policy, or Public Health

Private Equity and General Pediatric Outpatient Health Care - A Review and Case Study

Co-Presenting Authors: Abigail Bautista, BS1 and Lauren Beard, BS1 Authors: Abigail Bautista, BS1; Lauren Beard, BS1; Mitchell Nelson, BS2; Nikitha Balaji, BS3 ; Claire Tinkler, BS4 ; Isaac Meng, BS5; Anisha Mandava, BS6; Vaishu Labhishetty, BS6; Eli Schantz, BS7; Dr. Jeffrey Goldhagen, MD, MPH8 1 Ohio University Heritage College of Osteopathic Medicine 2 Marshall University Joan C. Edwards School of Medicine 3 Case Western Reserve School of Medicine 4 University of Louisville School of Medicine 5 Indiana University School of Medicine 6 Wright State University Boonshoft School of Medicine 7 The Ohio State University College of Medicine 8 University of Florida College of Medicine Note: Study conducted on Jacksonville, Florida, where PI resides.

Introduction The growing role of private equity (PE) in healthcare creates tension between the financial objectives of corporate investors and the fundamental goals of enhancing patient access and clinical outcomes. Although research considering PE's impact on healthcare is expanding, studies examining pediatrics are notably scarce. Evidence from adult-focused settings such as hospitals, nursing homes, and specialty practices indicates that PE ownership may correlate with increased costs and potentially harmful quality outcomes. This gap is particularly important in pediatrics, where care emphasizes long-term preventive health, family-centered models, and a heavy reliance on Medicaid. These characteristics may conflict with PE's typically short-term, high-return investment strategies, underscoring the need to better understand the effects of PE investment in pediatrics. Case

Description/Methods This study combined a review of literature on private equity ownership across healthcare settings with a case study of the outpatient general pediatric market within and surrounding Duval County, Florida. We classified the ownership structure of each practice, analyzing state corporate records, National Provider Identifier data, public directories, and digital branding history. Subsequently, practice locations were mapped and linked with U.S. Census tract median household income data to analyze geographic and socioeconomic trends of market penetration and growth from 2018 to 2025.

Discussion Our analysis of the Duval County pediatric market revealed that PE market share in general pediatrics surged from 0% in 2018 to 19.75% of all practices by 2025. When limiting the analysis to physician/physician group-owned and PE-backed practices, the market share of the latter increased to ~30.77%. Additionally, evidence suggests that PE-backed practices, especially those established by recent investors, were situated in census areas with higher median household incomes compared to physician-owned counterparts. While PE offers capital and scale, its short investment timeline and profit-driven motive raises concerns about alignment with pediatric care priorities. These findings highlight the need for increased awareness among pediatricians and policymakers of the potential dangers and effects of private equity acquisition. Future research endeavors from this group should provide insight into the effects of private equity ownership changes on physicians and patients.

#2

Ali Osman, BS

OMS2 - Ohio University Heritage College of Osteopathic Medicine- Dublin
Advocacy, Policy, or Public Health

Defining Key Factors in Burnout and Resilience in Pediatric Residents and the Relationship to Performance

Purpose Pediatric residents experience substantial stress and burnout, yet resilience may help mitigate these effects. While previous studies have identified high stress in training, few have examined which factors are associated with resilience and their impact on resilience changes over time. Using national data from pediatric residents, we investigated how stress, burnout, and resilience interact and evolve across training and how these factors relate to performance-relevant outcomes.

Methods We analyzed data from the Pediatric Residency Burnout–Resilience Study Consortium (PRB-RSC), including pediatric residents who reported data across two consecutive years between 2017 and 2024 ($n = 5,647$). Measures included the Perceived Stress Scale (PSS), Brief Resilience Scale (BRS), and the two-item Maslach Burnout Inventory. Cross-sectional analyses examined associations between BRS and current rotation, year in training, burnout status, and time since last vacation. Longitudinal analyses used a cross-lagged model with two time points to explore relationships between burnout, stress, and resilience over time. Multivariable models were used to assess longitudinal associations.

Results In cross-sectional analyses, residents who had taken more than five days off in the past one to three months reported higher resilience ($p < 0.004$). ICU, emergency department, and inpatient rotations were associated with higher resilience ($p = 0.03$). Perceived stress was significantly associated with lower resilience ($p < 0.001$), while burnout was not associated with resilience ($p = 0.87$). In longitudinal analyses, higher BRS at time point one predicted lower PSS one year later ($p < 0.001$) and higher BRS one year later ($p < 0.001$). Higher PSS at time point one was associated with higher PSS one year later ($p < 0.001$). Burnout was not associated with PSS or BRS over time.

Conclusions These findings highlight the dynamic and protective role of resilience during pediatric residency. Perceived stress was significantly associated with lower resilience, whereas burnout was not, suggesting that stress may be a more meaningful target for intervention. Given that stress tends to peak during intern year, early resilience-building may help prevent downstream effects on well-being. Short, evidence-based interventions such as brief, web-based positive psychology programs should be implemented early in residency training to foster long-term well-being and adaptive coping.

#3

Caden Togrul, MS

OMS2 - Ohio University Heritage College of Osteopathic Medicine

Clinical Medicine

Improving Clinical Documentation in Radiation Oncology: A Quality Improvement Initiative Using Disease-Specific Pre-Visit Checklists

Purpose/Objective(s): Incomplete clinical information at initial consultation and follow-up visits can delay treatment planning and hinder multidisciplinary coordination in radiation oncology. This quality improvement (QI) project aimed to reduce the frequency of missing information at patient visits by implementing standardized, disease site-specific pre-visit checklists.

Materials/Methods: Baseline workflow relied on referring providers to transmit clinical documentation prior to visits, often resulting in incomplete records. A retrospective review of 279 visits from December 2024 to June 2025 revealed missing information in 56% of consults and 19% of rechecks. To address this gap, a multidisciplinary QI team (radiation oncologist, nurses, therapists) developed disease-specific pre-visit checklists capturing pathology, imaging, and referring provider notes. Nursing and therapy staff performed weekly pre-chart reviews, documented status (completed and obtained, completed but not obtained, not completed), and coordinated retrieval of missing records. Checklists were reviewed with the physician daily as needed and integrated into clinical workflow.

Results: During the baseline period, there were 279 total visits, including 89 consults and 190 rechecks. Missing information was identified in 31.0% of total visits (n = 86), with a higher proportion occurring during consults (56.2%) compared with rechecks (19.0%). Following implementation of the quality improvement intervention, the proportion of visits with missing information declined substantially. In July 2025, missing information was present in 4.8% of visits (2/42), decreasing further to 1.9% (1/52) by November 2025 and reaching 0% by December 2025. Across the post-intervention period, consults demonstrated marked improvement, with rates of missing information decreasing from 20–35.7% early in the intervention phase to 0% from October through December 2025. Rechecks similarly showed sustained reductions, with missing information decreasing to ≤5.9% after August 2025 and reaching 0% by December 2025.

Conclusion: Implementation of structured pre-visit checklists significantly improved the completeness of clinical documentation prior to radiation oncology visits, reducing delays in patient care. This QI intervention highlights the value of multidisciplinary collaboration and standardized workflows in optimizing clinic efficiency and care coordination. Expansion of this initiative across disease sites and longitudinal follow-up will assess sustainability and long-term impact.

Vivek Aslot, BS, Thomas Shneker

MS2 - University of Toledo College of Medicine and Life Sciences

Clinical Surgical

A Pilot Program: Management of the Post-operative Dressing in Pediatric Urology after Hypospadias Repair

Purpose: Close post-operative monitoring is essential for optimal hypospadias repair outcomes. Post-operative dressing management is a significant source of anxiety for both surgeons and families. The dressing is critical for preventing post-operative edema, reducing hematoma formation, and maintaining phallic positioning for optimal healing. Post-operative dressing issues are often the source of frequent patient calls. To address this, we developed a pilot program utilizing secure daily post-operative image submission to monitor dressing integrity remotely until the first clinic visit.

Methods: We conducted an eight-question survey to 28 families whose children had undergone a hypospadias repair. Upon discharge, the families were instructed to send daily post-operative images of the dressing to the operating surgeon using a secure network. Images were reviewed daily by the surgeon to triage the need for early dressing changes or unscheduled clinic evaluations. The families were then asked questions about their experience, including if this type of post-operative follow-up relieved anxiety, if delays in surgeon replies were a source of anxiety, if sending daily pictures were burdensome, and their overall satisfaction with the pilot program.

Results: A 100% survey response rate was achieved. A significant reduction (70–100%) in post-operative anxiety was reported by 92% (26/28) of families. All families reported prompt surgeon response times. Further, 78.6% (22/28) reported no increased anxiety even with occasional delays in replies. As a result of the post op communication, only one patient's dressing was removed earlier than scheduled due to proximal migration. Image submission was not burdensome, with 96.4% (27/28) reporting no difficulties using the secure network. However, 21.4% (6/28) initially reported discomfort sending the photos. Overall satisfaction was high: 60.7% (17/28) reported 100% satisfaction, and an additional five families reported 90% satisfaction.

Conclusion: The pilot program effectively monitored post-operative hypospadias dressings. The system was user-friendly, significantly reducing family anxiety and minimizing the need for unscheduled in-person visits. To optimize implementation, pre-operative counseling must explicitly address the secure photo submission protocol to mitigate the initial discomfort some families experienced.

#5

Adeline Whaley, BS

MS2 - Northeast Ohio Medical University (NEOMED)

Advocacy, Policy, or Public Health

High-Risk, Underserved, Under-Protected: Perceptions of Skin Cancer Prevention Among Rural Appalachian Primary Care Patients

Purpose: Rural populations, including those in Appalachian Ohio, often experience higher rates of skin cancer compared to urban areas. Contributing factors include limited access to dermatologic care, increased sun exposure, and lower health literacy. Despite these risks, rural communities often rely on primary care providers for skin cancer education and preventative screening, highlighting the need to understand the perceptions and behaviors regarding skin cancer prevention. This study aims to identify the perceptions and prevention practices of skin cancer among patients in primary care clinics across rural Appalachian Ohio.

Methods: Two rural primary care clinics participated in this study. Over an eight week period, adult patients were invited to complete a 12-question survey assessing skin cancer perceptions and prevention practices. Minors were excluded. An IRB was obtained.

Results: Of the 315 participants, 223 (70.8%) reported not having a history of skin cancer, with 191 (85.7%) believing it is preventable. Among 80 participants (25.4%) with a personal history of skin cancer, 62 (77.5%) shared this belief. Overall, 265 participants (84.1%) considered sunscreen to be an effective tool, however only 199 (75.1%) reported regular use. Although 291 participants (92.4%) reported trust in their healthcare provider regarding skin cancer, only 152 (48.3%) had ever received a skin check, with just 105 (33.3%) receiving one within the past year.

Conclusions: Despite the high levels of awareness and trust in healthcare providers, many patients do not consistently practice preventative behaviors, such as regular sunscreen use or routine skin checks. As many rural communities rely on primary care providers for guidance on preventative health, these findings highlight an opportunity for primary care providers to bridge this gap through patient education, counseling, and regular skin cancer screening.

Brandon Lee, BS

MS1 - Northeast Ohio Medical University (NEOMED)

Clinical Surgical

Healthcare Utilization and Outcomes After Revision Versus Index Lumbar Discectomy

Brandon H. Lee, BS; Collin Stirpe, MD; Christina Cheng, MD University Hospitals Cleveland Medical Center

Purpose Lumbar disc herniation is a leading cause of radiculopathy and disability, with discectomy serving as the gold-standard surgical intervention after failure of conservative management. Recurrent herniation often necessitates revision discectomy, a technically more complex procedure due to scar tissue and adhesions. While prior studies have emphasized long-term functional outcomes, comparative data on short-term healthcare utilization and postoperative morbidity following revision versus index discectomy remain limited. This study compares short-term healthcare utilization and postoperative systemic morbidity between revision and index lumbar discectomy.

Methods A retrospective propensity score–matched cohort study was performed using the TriNetX research network. Patients undergoing index lumbar discectomy (CPT 63030, 63035) and revision lumbar discectomy (CPT 63042, 63044) were identified using ICD-10 and CPT codes. A total of 1,563 revision discectomy patients and 33,060 index discectomy patients were included, with 1,551 patients retained in each cohort after propensity density matching for demographics and comorbidities. Outcomes were assessed at short-term (1–90 days) and long-term (180 days–2 years) intervals and included healthcare utilization, postoperative complications, neurologic sequelae, opioid utilization, need for reoperation or fusion, implant failure, and mobility limitations.

Results After matching, revision discectomy patients demonstrated a significantly higher short-term complication burden compared with index discectomy patients, despite similar healthcare utilization patterns and comparable long-term outcomes in implant failure and mobility limitations. Within 90 days, revision discectomy was associated with higher rates of infection ($p=0.0358$), hematoma ($p=0.0033$), opioid utilization ($p=0.0002$), foot drop ($p=0.0186$), radiculopathy or myelopathy ($p=0.0237$), and subsequent fusion procedures ($p=0.0459$).

Conclusions In this large, propensity-matched national cohort, revision lumbar discectomy was associated with significantly increased 90-day postoperative morbidity compared with index discectomy. These findings underscore the need for careful patient counseling, perioperative optimization, and risk stratification in the management of recurrent lumbar disc herniation. Future research should evaluate strategies to mitigate short-term complications and explore disparities in access to revision spine care, postoperative outcomes, and resource utilization among underserved populations, with the goal of reducing orthopedic outcome inequities and improving equitable delivery of spine care.

#7

Savanna King, MS

MS3 - University of Toledo College of Medicine

Advocacy, Policy, or Public Health

Naloxone Decriminalization and Opioid Overdose Trends: A Comparative Study of Lucas County, Ohio and the U.S.

Purpose: This study aims to determine the effect of Ohio's 2020 Naloxone decriminalization on opioid overdose trends in Ohio and Lucas County in lieu of U.S. trends. Opioid overdose deaths have been on the rise for many years, despite the declaration of an opioid epidemic in the United States in 2017 and an increase in efforts to reduce deaths. Harm reduction aims to reduce opioid overdose deaths through education of the opioid epidemic and distribution of Naloxone, an emergency medication that reverses opioid overdoses. Although Naloxone has been used for the treatment of opioid overdoses since the 1970s, Naloxone was considered drug paraphernalia in Ohio until 2020, limiting its availability.

Methods: Opioid overdose death data from 2017-2023 for U.S., Ohio, and Lucas County was collected via the appropriate health departments. Relative change was determined between the 2017-2020 and 2021-2023 overdose deaths across the three regions.

Results: In the US overall, opioid overdose deaths have relatively increased by 14.28% from 2017-2020 to 2021-2023. However, in Ohio opioid overdose deaths have relatively decreased by 17.68% from 2017-2020 to 2021-2023, and in Lucas County there has been a relative decrease by 20.99% from 2017-2020 to 2021-2023.

Conclusion: The decrease in opioid overdose deaths, from 2017-2020 to 2021-2023, in Ohio and Lucas County can be partially attributed to the local legalization of Naloxone in 2020. Further widespread Naloxone distribution and access across the U.S. can help decrease opioid overdose deaths amidst the national rise.

Simran Chandawarkar, BS
MS3 - Northeast Ohio Medical School
Clinical Medicine

When PreP Hits the Proximal Tubule: Tenofovir-Associated Fanconi-Like Syndrome

Purpose/Background: Tenofovir-based pre-exposure prophylaxis (PrEP) is a highly effective strategy for preventing HIV transmission. While tenofovir disoproxil fumarate has historically been associated with renal toxicity, tenofovir alafenamide (TAF) was developed to improve renal safety. Fanconi syndrome remains a rare but potentially life-threatening complication. Early recognition of drug-induced renal tubular dysfunction is critical to prevent severe metabolic consequences.

Case Presentation: A 30-year-old transgender male with a history of Tourette's disorder, migraines, depression, autism, and fibromyalgia presented with three weeks of progressive nausea, vomiting, and poor oral intake. Home medications included long-term topiramate, rosuvastatin, testosterone gel, and recently initiated tenofovir alafenamide/emtricitabine (TAF) for HIV PrEP. On presentation, the patient was tachypneic but hemodynamically stable. Laboratory evaluation revealed anion gap metabolic acidosis, ketonuria, elevated creatine kinase, acute kidney injury, and significant electrolyte abnormalities including hypokalemia, hypomagnesemia, and hypophosphatemia. Urinalysis demonstrated proteinuria >300 mg/dL, ketonuria, and hematuria. Despite intravenous fluid resuscitation and treatment for presumed statin-induced rhabdomyolysis, the patient developed worsening acidemia and electrolyte derangements. Given persistent metabolic abnormalities and evidence of proximal tubular dysfunction, a Fanconi-like syndrome was suspected. Although urine amino acid analysis was not obtained, elevated urine phosphate levels and ongoing electrolyte wasting supported the diagnosis. Management included transition to intravenous bicarbonate infusion, aggressive electrolyte repletion, and discontinuation of TAF, testosterone, and topiramate. Following cessation of TAF, the patient's metabolic abnormalities gradually resolved. Renal function returned to baseline prior to discharge, and no ongoing electrolyte supplementation was required.

Discussion: TAF is associated with significantly lower plasma tenofovir levels and reduced nephrotoxicity compared to earlier formulations; however, rare cases of Fanconi syndrome have been reported. This case highlights that TAF can still precipitate clinically significant renal tubular dysfunction, particularly in the setting of additional renal stressors such as dehydration and rhabdomyolysis. Clinicians should maintain a high index of suspicion for PrEP-associated Fanconi-like syndrome in patients presenting with unexplained acidosis and electrolyte derangements.

Maya Dunson, BS, MPH

MS2 - The Ohio State University College of Medicine

Advocacy, Policy, or Public Health

Temporal Trends in Uterine Cancer–Specific and Non–Cancer Specific Mortality and Racial/Ethnic Disparities, SEER

[mean (SD) age at diagnosis, 61.3 (11.7) years; 12,826 (7.5%) Asian, 15,751 (9.2%) Black, 22,295 (13.0%) Hispanic, and 120,682 (70.3%) White]

Purpose: Uterine cancer is the most common gynecological malignancy in the United States, with rising incidence and mortality. Although five-year survival has remained stable, non-cancer-specific mortality now represents an important contributor to long-term health outcomes but has not been well-studied or documented in the current literature, especially when accessing racial and ethnic differences in mortality. This knowledge gap is important to address, because patients are living longer and experience competing mortality risks from comorbidities or other causes than the cancer itself, and it is important to expose possible racial and ethnic disparities – especially since they are seen in cancer-specific survival trends. This can help identify opportunities for clinic innovation and intervention for vulnerable populations.

Objectives: To evaluate temporal trends in uterine cancer–specific and non-cancer–specific survival, and disparities across racial and ethnic group.

Methods: Using the Surveillance, Epidemiology, and End Results (SEER) Program database, uterine cancer cases (age ≥ 18) diagnosed between 2000 and 2019 were identified. Adults (≥ 18 years) with first primary uterine cancer diagnosed (2000–2019) were identified from SEER 17 registries. Patients were stratified into four categories: Non-Hispanic (NH) Asian, NH Black, Hispanic, NH White. Kaplan–Meier curves, log-rank tests, and Cox proportional hazards models estimated 5-year relative survival (divided into time periods of 2000–2004, 2005–2009, 2010–2014, 2015–2019), hazards ratios, and disparities within histology, stage, and time periods.

Results: A total of 171,554 uterine cancer cases [mean (SD) age at diagnosis, 61.3 (11.7) years; 12,826 (7.5%) Asian, 15,751 (9.2%) Black, 22,295 (13.0%) Hispanic, and 120,682 (70.3%) White] were included. NH Blacks experienced higher risks of non-cancer and cancer-specific mortality compared to NH Whites, and lower 5-year survival. NH Asians had a protective effect, and NH Hispanics saw emerging disparities in non-cancer specific mortality risk recently. NH Asian, NH Whites, and Hispanics had stagnant five-year relative survival rates.

Conclusion: Marked disparities in survival and mortality persist for NH Blacks in other-cause survival. These findings display a need for tailored interventions for these populations that look at both cancer care and comorbidities present to reduce disparities seen.

#10

Rena Brown, MS, RD

MS2 - University of Toledo

Basic Science / Translational Research

An Apple a Day, Just a Click Away: Using Digital Interventions in Older Americans Act Programs to Expand Reach and Assess Outcomes

Introduction: The Older Americans Act of the United States is a federal law providing funding for meals and nutrition education, primarily for adults aged ≥ 60 years, to help them live independently. Nutrition education has traditionally been delivered in-person, but an evolving population has prompted a need to utilize digital programming. The Georgians Receiving Insightful Telenutrition Services (GRITS) study was a 20-month feasibility study to provide group education and individual medical nutrition therapy (MNT) to adults using phone and online video conferencing. The objective of this study was to develop a virtual program and to evaluate its effect on nutrition knowledge, confidence, and health behaviors, as well as overall feasibility and acceptability of delivering education in a virtual format.

Methods: Implementation occurred from 2020–2023 within senior centers across Georgia, USA. Group education and individual MNT sessions were led by a Registered Dietitian Nutritionist (RDN). Outcome measures were collected at baseline and post-intervention using qualitative surveys to assess program effects and acceptability of the program. Mixed-effects regression models were used to examine program effects.

Results: A total of 22 senior centers completed at least 12 group nutrition sessions serving 5,012 duplicated clients. Participants who completed surveys showed a modest 1.6% improvement in knowledge scores (95% CI: 0.4, 2.9; $p = 0.012$, FDR-adjusted $p = 0.012$). For acceptability, 87% of group education respondents reported to be satisfied with the nutrition sessions overall. A total of 318 virtual MNT sessions were completed with 142 unduplicated clients. At post-survey, 87% of post-survey respondents reported at least one behavior change after participating in MNT sessions. Among participants who responded, 91% reported that they found benefit in talking with the dietitian. In terms of feasibility, senior center staff reported positive focus group feedback regarding the virtual format and its ability to expand client access to registered dietitians.

Conclusion: Results suggest virtual nutrition education in group and individual settings was acceptable, feasible, and showed preliminary effects on knowledge and behavior among a subset of Older Americans Act clients. Future directions include long-term evaluation of virtual methods to better serve community-dwelling older adults for long-term health.

#11

Jonathan Bernard, BS

MS3 - University of Cincinnati College of Medicine

Basic Science / Translational Research

Evaluating an Open-Weight Large Language Model for Structured Extraction of Psychosocial Variables from Pediatric Psychiatric Notes

Co-authors: Erika Rasnick Manning, Cole Brokamp, Carson Hartlage Cincinnati Children's Hospital Medical Center, Cincinnati, OH

Introduction: Pediatric psychiatric notes contain valuable information on child mental health, but much of it is unstructured. Existing tools for structured data extraction require paid licenses and use rule-based models that limit the breadth of data extraction. Open-weight large language models (LLMs) offer a more accessible and flexible approach with demonstrated success in other fields. Our study sought to evaluate the reliability of LLMs in extracting structured social and health history variables from psychiatric intake notes when compared to human reviewers.

Methods: We considered pediatric psychiatric intake notes from admissions (1/1/2016-12/31/2024) at Cincinnati Children's Hospital Medical Center. The open-weight LLM gpt-oss:120b, selected for its ability to consistently produce structured output, was deployed on a secure research server. We selected variables that were not available in structured fields, had $\geq 5\%$ prevalence (in a set of 1,000 notes), and had good reliability with human raters ($K > 0.7$). Variables assessed included peer conflict, school-related issues (academic, attendance, disciplinary), and sleep disruption. Two sets of 20 notes were used for prompt engineering; preliminary results are based on an additional 20 notes. The LLM and four human raters independently reviewed each note for the presence or absence (or lack of evidence) of each variable. We calculated Fleiss' Kappa among the four human raters and between human raters and the LLM. LLM response stability was assessed using variable-level percent agreement across 20 repeated runs.

Results: Interrater reliability did not differ between human-only and human + LLM raters across all five variables. Fleiss' Kappa for two-level ratings (presence vs. absence/no evidence) ranged from 0.70-0.79 for four human raters and 0.68-0.85 when including the LLM. The LLM returned consistent answers, with high percent agreement for 20 repeated runs (89.8-98.5%).

Conclusion: Open-source LLMs may serve as reliable and effective data extraction tools for pediatric psychiatric intake notes, with performance comparable to human review. Future work will include validation in a larger dataset to establish a human-derived gold standard and incorporation of uncertainty estimates. Scaling this approach could enable efficient extraction of clinically relevant psychosocial information, supporting research, advocacy, and quality improvement efforts to improve child mental health outcomes.

#12

Alaya Kiser, BS

MS1 - Northeast Ohio Medical University

Advocacy, Policy, or Public Health

Skin Cancer Awareness and Practices Among Salon and Spa Professionals: A Cross-Sectional Study in Northeast Ohio

Purpose: Skin cancer is the most common malignancy in the United States. Early detection of skin cancer dramatically improves health outcomes. Hairdressers, estheticians, massage therapists, and nail technicians routinely observe clients' skin longitudinally, allowing for recognition of changes over time and positioning them as allies in the early detection of skin cancer. However, little is known about the level of skin cancer awareness and practices among salon and spa professionals in the Northeast Ohio region; therefore, this study aims to address this gap.

Methods: This cross-sectional study targets hair, nail, massage, and spray tan professionals throughout Northeast Ohio. To compare urban, suburban, and rural communities, participants were recruited from both the Akron and Portage County areas. Ten salons of each specialty were randomly selected in both regions for outreach via phone or email. A 20-question survey was developed using Qualtrics to assess baseline knowledge, interest in education, and demographics. All responses will be collected through QR code or direct link and be submitted anonymously to protect privacy.

Results: At the time of submission, the survey is active and will collect responses through March 2026. A preliminary analysis of the survey responses suggests low confidence levels associated with identifying skin lesions, along with a lack of education about skin cancer detection. The responses also indicate that participants rarely examine clients for suspicious moles or lesions. We anticipate that participants will be interested in receiving skin education to improve their clients' overall health. Upon completion of the survey distribution and organization processes, the responses will be presented and undergo a thorough statistical analysis.

Conclusions: Our preliminary findings highlight an opportunity to improve early skin cancer recognition for nonmedical professionals. Identifying this gap in skin cancer education is important because salon and spa professionals routinely see areas of the skin that clients cannot easily view on their own. With appropriate education on what to look for and when to recommend medical evaluation, nonmedical professionals can support earlier recognition and referral. Structured educational initiatives designed specifically for salon and spa professionals may offer a practical, community-based approach to improving public awareness and contributing to earlier skin cancer detection.

#13

Noyonikaa Gupta, BA, MA

MS2 - Northeast Ohio Medical University

Advocacy, Policy, or Public Health

Capacity Building in Public Health: Northeast Ohio as a Case Study

Capacity Building in Public Health: Northeast Ohio as a Case Study Authors: Noyonikaa Gupta, Elsa Khan, Cathy Tang, Shivane Chawla, Arley Lutz, Justin Iwuagwu Northeast Ohio Medical University, Rootstown, Ohio

Purpose Public health efforts addressing maternal and adolescent health often rely on isolated, short term programs that fail to address underlying structural barriers. Capacity building, defined as strengthening existing institutional, workforce, and community systems, offers a sustainable framework for addressing complex health inequities. This project applies a capacity building approach to maternal and adolescent health in Northeast Ohio, using teen pregnancy and infant mortality as illustrative case indicators.

Methods A community embedded pilot intervention across Summit, Portage, Trumbull, and Cuyahoga counties was developed that prioritizes enhancement of existing health infrastructure rather than creation of standalone services. Capacity building strategies included: expansion of mobile health clinics serving affordable housing complexes, integration of interpreter services to address language barriers, development of a near-peer sexual health education workforce utilizing pre-health university students, and strengthening of fatherhood support programming through mobile outreach and facilitated peer groups. Target communities were selected based on elevated infant mortality rates and documented barriers to healthcare access, including refugee and immigrant populations. Evaluation metrics focus on system level indicators such as service utilization, enrollment, referral follow through, and demographic reach.

Results As a pilot initiative in development, outcomes are projected rather than finalized. Anticipated results include increased utilization of mobile health services, improved access to prenatal and mental health care, higher enrollment in family support programs, and expanded delivery of culturally responsive school-based health education. These outcomes are framed as markers of improved system capacity rather than isolated program success.

Conclusion This case study demonstrates how capacity building can serve as both a theoretical and practical framework for advancing maternal and adolescent health equity. By embedding interventions within trusted community institutions and aligning clinical services with policy relevant infrastructure investments, this model emphasizes sustainability, ethical engagement, and scalability. While teen pregnancy and infant mortality provide measurable indicators, the broader contribution lies in demonstrating how health systems strengthening can address multifactorial inequities applicable across clinical and policy domains.

Anam Dewani, BS

MS1 - University of Toledo College of Medicine and Life Sciences

Advocacy, Policy, or Public Health

Financial Impact and Usage Analysis of POCECE Laboratory Services at Student-Run Free Clinic

Introduction In July 2025, CommunityCare Clinics completed a multi-year initiative to expand point-of-care (POC) laboratory services through funding from Heart-to-Heart International as part of its Point of Care, Enhancing Clinical Effectiveness (POCECE) grant program. The expansion aimed to improve diagnostic precision and reduce barriers to care for underserved patients in Toledo. As part of grant reporting requirements, laboratory officers track monthly test types and frequencies, enabling evaluation of early financial impact. At six months post-implementation, we analyzed laboratory utilization, quantified direct patient cost avoidance, and estimated reductions in downstream healthcare expenditures to assess financial sustainability and alignment with the clinic's mission of delivering high-quality, accessible care to socioeconomically vulnerable populations.

Methods Laboratory utilization data from August through November 2025 were categorized by test type and normalized to the number of clinic sessions conducted. A linear regression model was used to project monthly testing volumes for the remainder of the first operational year. Projected testing volumes were multiplied by the variable per-test supply cost to estimate total annual operating expenses. Patient cost savings were calculated using standard community laboratory pricing compared with no-cost services provided.

Results Between July and November 2025, 474 patients were seen, with monthly volumes ranging from 70 to 130 visits. POC laboratory testing was performed for 195 patients, representing a substantial proportion of encounters. Among 172 new patient visits, 79 individuals received POC testing, underscoring the role of immediate diagnostics in initiating timely care. Cost savings were greatest for lipid panels (\$10,752), followed by Piccolo Comprehensive Metabolic Panels (\$8,820) and hemoglobin A1c testing (\$7,176). Additional savings were generated through other laboratory services (\$5,678) and venipuncture (\$4,875). First-year operational costs are projected at \$11,036.59 after grant-supported supplies conclude, supporting financial feasibility for continued services.

Conclusion Early findings demonstrate strong utilization and meaningful financial benefit to patients, with sustainable projected operating costs. Ongoing evaluation will assess pre- and post-implementation comparisons, test completion rates, and management changes associated with POC results. This model highlights how targeted laboratory expansion can enhance quality, affordability, and equity of care through student-run clinics serving underserved communities.

Courtney Harrington, BA

MS3 - University of Cincinnati College of Medicine

Clinical Medicine

Differences in Medication Compliance in Affective and Non-Affective Psychotic Disorders

Courtney K. Harrington, B.A.1*, Jonathan Bernard, B.S.1*, Anna Lanier Upole, B.S.1*, Fabiano Nery, MD, PhD1, Zana Percy, MD, PhD2 University of Cincinnati College of Medicine1 Brown University2 *These authors contributed equally to this work

Purpose: Medication compliance remains a persistent challenge in psychiatric care, with some studies finding that around 49% of patients are non-compliant with psychotropic medications (Semahegn et al., 2020). We hypothesized that medication compliance will be related to type of psychiatric disorder (affective vs. non-affective), even after adjusting for other variables traditionally related to compliance.

Methods: Data from patients who were admitted to the University of Cincinnati Medical Center with psychosis were extracted from electronic medical records from October 2012 to March 2020. For each admission (N = 4,144), patient demographics and characteristics such as insurance type, housing status, number of prior psychiatric admissions, and prior psychiatric diagnoses were noted. Patients whose medication compliance status could not be determined, or who had neither an affective nor non-affective prior diagnosis were excluded (N = 1,677). We used multivariable logistic regression to evaluate the odds of medication compliance in patients with affective vs non-affective psychosis, while adjusting for confounding variables and exploring potential effect modifiers.

Results: Overall, our results showed that patients with affective psychosis had greater odds of being compliant with their medications than patients with non-affective psychosis (OR = 1.40, 95% CI 1.19–1.65, $p < 0.001$). This association remained significant after adjusting for potential confounders such as insurance type, race, sex, age, housing status, and number of prior psychiatric admissions (adjusted OR = 1.34, 95% CI 1.13–1.59, $p < 0.001$). Additionally, patient race, insurance type, sex, age, and housing status did not significantly modify this association.

Conclusion: These results suggest that patients diagnosed with affective psychosis are more likely to be compliant with medications than those diagnosed with non-affective psychosis. In addition, the results suggest that demographic factors and other socioeconomic factors like insurance status, housing status, and number of prior psychiatric admissions do not impact these odds. Differences in insight among those with affective vs. non-affective psychosis are a limiting factor of this study. Further studies could examine the direct impact of impaired cognitive functioning on medication compliance, but these data suggest that patients with non-affective psychiatric psychosis may need additional support to maintain medication adherence.

#16

Thomas Fanning, MS

MS2 - University Hospitals Cleveland Medical Center

Clinical Surgical

Mid-to-long-term Patient-Reported Outcomes Following Periacetabular Osteotomy and Labral Repair for Hip Dysplasia

Introduction: Hip dysplasia is a structural deformity that leads to chronic hip pain, instability, and often necessitates surgical correction to prevent the onset of early osteoarthritis and restore proper hip function. Periacetabular osteotomy (PAO) is the primary procedure for correcting hip dysplasia, and it is frequently combined with acetabular labral tear repair. The modified Harris Hip Score (mHHS) is a validated patient-reported outcome (PRO) measure designed to assess pain and function following hip preservation surgery.

Methods: This retrospective study evaluated the long-term functional outcomes of patients with hip dysplasia who underwent combined PAO and labral repair. The mHHS, a patient-reported measure with a maximum score of 100 (best function), was collected at a minimum of 2 years post-operation. Statistics were calculated for the mHHS scores. Results were categorized based on established mHHS interpretation criteria: Excellent (≥ 90), Good (80–89), Fair (70–79), and Poor (< 70).

Results: A total of 55 patients were included in the analysis. The cohort demonstrated a mean mHHS of 88.8 ± 15.4 (Mean \pm SD). This mean score falls within the "Good" range of clinical outcome. Overall, 78% (43/55) of patients achieved a score corresponding to a Good or Excellent result (mHHS ≥ 80), confirming substantial improvement in function and reduction in pain.

Conclusion: Patients who undergo PAO combined with acetabular labral repair for hip dysplasia demonstrate favorable mid-to-long-term patient-reported outcomes. The high mean mHHS and the majority of patients achieving Good or Excellent functional results support the efficacy of this combined surgical approach in restoring function and achieving symptomatic relief in this patient population.

#17

Sophie Tayade, BS

MS3 - Northeast Ohio Medical University

Advocacy, Policy, or Public Health

Practicing Advocacy, Resolution Writing, and Coalition Building through a Population and Global Health Case Competition at a Stand-Alone Medical University.

Henyah Dardir, Sophie Tayade, Ekaterina Kravets, Danielle Oh, Christy Pitzer, and Maya Ghoul

Introduction: Health inequities such as infant mortality represent violations of the right to health that disproportionately impact marginalized communities. While human rights frameworks are increasingly incorporated into medical education, limited opportunities exist for students to apply these principles through interdisciplinary, advocacy-focused problem solving. Ohio State Medical Association (OSMA) and Physicians for Human Rights (PHR) emphasizes the integration of medicine, public health, and advocacy to address structural injustice. This project examines a student-led Population and Global Health Case Competition as a novel educational strategy to amplify local OSMA efforts and raise institutional awareness of infant mortality in Northeast Ohio.

Objectives: To propose avenues on how a two-day Population and Global Health Case Competition can (1) increase student awareness of infant mortality as a human rights issue, (2) promote evidence-informed advocacy skills, and (3) advance the mission of a local student chapters, notably OSMA and PHR, at a stand-alone medical university.

Methods: The NEOMED Physicians for Human Rights chapter organized a two-day case competition in January 2025 focused on infant mortality in under-resourced communities in Northeast Ohio. Undergraduate, graduate, and medical students were recruited through institutional and community channels and assigned to interdisciplinary teams of 4–5 participants. Teams were provided a complex, faculty-written, patient-centered case and charged with developing a feasible, evidence-based intervention addressing infant mortality within a defined budget and timeline. Faculty and community judges with expertise in public health, medicine, and health systems evaluated proposals using standardized criteria.

Results: The competition reached full capacity and engaged interdisciplinary teams, promoting new pathways to health professional collaboration. Competition design elements fostered awareness and advocacy-oriented problem solving. The local resources and evidence-informed interventions addressing infant mortality identified in team solutions emphasized OSMA values.

Conclusions: Population and Global Health Case Competitions offer a scalable approach to advancing OSMA objectives by integrating interdisciplinary collaboration and applied advocacy into medical education. Teams comprised of future health providers were exposed to a wide range of human rights problems and local solutions that they can use later in their careers. This is a powerful avenue to advance the values of OSMA and AMA within local networks.