

B01**Melody Eckert B.M.**

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Examining HPV- and HPV Vaccine-Related Cognitions and Acceptability in Immigrant Communities

Background: Human Papillomavirus (HPV) is the most common STI and a known cause of cancer. Over 70% of new oropharyngeal squamous cell carcinomas (OPSCC) are attributable to HPV infection. Three highly effective vaccines (nine-valent Gardasil, quadra-valent Gardasil, and Cervarix) are supported by the CDC and professional primary care organizations for the prevention of HPV-related disease. We hypothesized that poor understanding of HPV vaccine effectiveness for OPSCC prevention is the primary driver of vaccination hesitancy.

Methods: This cross-sectional study surveyed adults aged 18-45 years old at two clinics in an urban academic medical center with a large underserved, immigrant population. Questions assessed demographics, medical information, and HPV vaccine knowledge and attitudes. Data was collected via Redcap software and analyzed using descriptive statistics.

Results: From April-November 2025, 77 surveys were obtained. Mean age was 32 years; 66% female; 57% Black/African American; 44% immigrants; 66% had health insurance. 27% reported prior HPV vaccination, 45% had not received it, 27% were unsure. While 64% had heard of or discussed the vaccine with a provider, only 43% agreed it prevents STIs. While 68% recognized alcohol and tobacco as OPSCC risk factors, only 42% reported HPV infection as one, and 43% were unsure. Most respondents were unsure whether the vaccine prevents OPSCC (66%), cervical cancer (52%), or genital warts (65%). Uncertainty also extended to vaccine safety (38%), short-term effects (48%), and long-term health problems (55%), as well as to provider access (29%), provider availability (34%), vaccine availability (40%), affordability (38%), and community uptake (73%).

Conclusions: Substantial knowledge gaps exist regarding HPV-related OPSCC and vaccine effectiveness. Hesitancy may stem from limited awareness and uncertainty about safety and access. Targeted community-based education may improve vaccine uptake.

B02**Anthony James B.S.**

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Gender and Racial/Ethnic Disparities in Bladder Cancer Stage at Diagnosis: A National Claims Database Analysis

Intro: Bladder Cancer is the sixth most common cancer among men and women in the US. However, there exists a disproportion where women are diagnosed at a more advanced stage of the disease with less favorable outcomes, which has not been explored within a large claims database.

Methods: Using the Komodo health database, we conducted a retrospective cohort study from 2014 to 2024 to explore gender disparities in bladder cancer stage at diagnosis. Cases were identified using ICD-10 code C67.x, and disease stage was inferred from procedure codes. Advanced-stage disease (muscle-invasive or metastatic) was compared by gender and race/ethnicity, adjusting for age, comorbidity, and year of diagnosis using multivariate logistic regression.

Results: 229,821 patients (N= 202,939 men, N=26,882 women) were identified with incident bladder cancer. Women were found to be diagnosed with an advanced stage of disease as compared to men (11% to 7.8%, $p<0.001$). Additionally, women presented with 33% higher odds of advanced-stage diagnosis (OR: 1.33, 95% CI 1.27 to 1.39, $p<0.001$). We observe this across all age groups, and (OR range: 1.28-1.58) and racial/ethnic groups (White: OR=1.32; Black: OR=1.37; Hispanic: OR=1.25; interaction $p=0.62$) with Black patients experiencing the highest absolute rates of advanced disease (women: 12.4%; men: 9.3%).

Conclusion: Using a large national claims database, we reveal that even after accounting for age, comorbidities, women are more likely to be diagnosed with advanced-stage bladder cancer than men across age and racial/ethnic groups. This highlights the need for increased awareness and earlier diagnosis among women, particularly among racial/ethnic minorities.

B03**Saniah Reid**

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Examining the Use of Telehealth as a Catalyst for Patient-Provider Communication on Cancer Prevention in the United States

Background: Telehealth has become an essential component of healthcare delivery in the United States, with the potential to improve patient-provider communication on cancer prevention. However, disparities in telehealth access may influence its impact on preventive care.

Objective: To examine the association between telehealth use and the quality of patient-provider communication regarding cancer prevention.

Methods: Data were analyzed from the Health Information National Trends Survey (HINTS) 7 (n = 7,278; March - September 2024). Telehealth utilization was the main predictor variable, and the outcome measures included frequency and quality of cancer prevention communication. Chi-square tests and descriptive analyses were performed using SPSS Version 29, with significance set at $p < 0.05$.

Results: Telehealth users reported more frequent cancer prevention discussions compared to non-users ($\chi^2(2) = 300.7, p < .001$) and were more likely to consider cancer testing information “very valuable” ($\chi^2(3) = 44.9, p < .001$). Awareness of Multi-Cancer testing was significantly higher among telehealth users ($\chi^2(1) = 6.08, p = .014$). Telehealth use varied by region and income, with lower adoption among households earning $< \$20,000$ (17.1%) compared to those earning $> \$100,000$ (32.7%).

Conclusion: Telehealth enhances patient-provider communication on cancer prevention, increasing engagement and awareness of screening options. Expanding telehealth access, particularly in underserved communities, may reduce disparities and support early cancer detection.

B04**Dakota Woolcock**

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Examining the Role of Digital Connectivity in Building Trust and Promoting Cancer Prevention Among Adults in the United States

Background: Cancer prevention depends on public trust in health authorities and engagement in preventive behaviors such as screening and healthy lifestyle choices. In an increasingly digital society, internet connectivity has emerged as a key social determinant of health, shaping access to credible information and institutional trust. Unequal digital access may therefore reinforce existing cancer prevention inequities.

Methods: A cross-sectional analysis of 7,278 U.S. adults from Health Information National Trends Survey (HINTS) 7 examined associations between high-speed internet and electronic health information access, trust in government and scientific health authorities, and engagement in cancer prevention behaviors using descriptive statistics and chi-square tests.

Results: Overall, 87.8% of respondents reported access to high-speed internet, and 92.3% reported frequent internet use. Internet access was significantly associated with higher trust in government ($\chi^2(3)=39.3$, $p<.001$) and scientists ($\chi^2(3)=69.7$, $p<.001$). Individuals who accessed electronic health information demonstrated the highest trust in both government ($\chi^2(3)=91.2$, $p<.001$) and scientists ($\chi^2(3)=207.3$, $p<.001$). While social media use was common (59% daily use), only 2.1% relied on it for health decision-making, highlighting persistent trust gaps.

Conclusion: Digital connectivity is strongly associated with institutional trust and engagement in cancer prevention. Addressing broadband access and digital literacy inequities, particularly in underserved and rural communities, represents a critical public health strategy for rebuilding trust and advancing equitable cancer prevention.

B05**Kareem Bain**

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Exploring the Impact of Social Media on Perceived Accuracy of Health Information and Age-related Barriers Among Adults in the United States

Background: Social media is a major source of health information in the United States, yet perceptions of its accuracy vary by age and may influence health behaviors and decision-making. Understanding age-related differences in exposure to and interpretation of online health information is essential for addressing misinformation and advancing health equity.

Methods: This cross-sectional study used Health Information National Trends Survey (HINTS) 7 (2024) data (n=7,278) to examine associations between social media use and perceived accuracy of health information among younger and older U.S. adults. Descriptive statistics and chi-square tests assessed age-related differences in social media engagement, exposure to misleading information, difficulty judging accuracy, and influence on health decision-making.

Results: Social media use varied significantly by age ($\chi^2(8)=1023.7, p<.001$), with daily use highest among young adults (18-39) (82.3%) and lowest among seniors (≥ 60) (42.0%). Seniors most frequently reported never using social media (64.3%). Exposure to misleading health information ($\chi^2(8)=799.8, p<.001$) and difficulty judging accuracy ($\chi^2(6)=163.3, p<.001$) were greatest among seniors, while younger adults reported the strongest influence of social media on health decisions ($\chi^2(6)=148.4, p<.001$).

Conclusions: Age-related disparities in social media use and information appraisal highlight the need for targeted digital literacy and misinformation-prevention strategies. Addressing these gaps supports equitable access to accurate health information and focuses on prevention-driven health equity.

B06**Kathryn McKee B.A.**

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Doulas as Health Messengers: Strengthening Knowledge to Address Black Maternal Health Disparities

Introduction: The maternal mortality landscape in New York City remains dire, with Black individuals being five times more likely to face pregnancy-related death compared to their White counterparts. As non-clinical birth workers and trusted advocates, doulas provide patient-centered care throughout the perinatal period, improving maternal health outcomes for Black birthing individuals. The goal of this pilot study is to build the capacity of doulas to serve as lay health messengers for pregnant and postpartum individuals.

Methods: The doula training program that was developed utilized a mixed-methods community-based participatory research (CBPR) approach. Existing community-academic partnerships were leveraged to create a culturally responsive doula training curriculum and identify community doulas. Participants completed pre- and post-surveys collecting demographic data and attitudes toward health education and knowledge of cardiovascular disease, mental health, and maternal health.

Results: Sixteen doulas were trained, with eight matched surveys collected. Findings showed that seven of eight (88%) participants reported confidence discussing health-related matters, identified maternal mental health and cardiovascular health as central to doula care, and felt prepared to recognize urgent maternal warning signs. All participants indicated they were very likely to share new information with clients, suggesting the workshop reinforced key health concepts.

Conclusions/Implications: The use of a CBPR approach in this pilot initiative demonstrates potential for expanding doula training curricula to strengthen doulas' knowledge of intersections in maternal health and cardiovascular health. In bridging psychosocial support with medical awareness, responsive doula training can address the disproportionate burden of maternal mortality among Black birthing individuals.

B07**Moyouri Bhattacharjee M.P.N.**

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Patient-Reported Healthcare Experience in Sickle Cell Disease Measured by the Brooklyn Health Equity Index (BKHI) : A Matched Analysis

Background:Patients living with Sickle Cell Disease (SCD) report experiencing stigma and discrimination in healthcare settings and are also more likely to have fragmentation in preventive care and chronic disease management. However, limited research has assessed the healthcare experiences of patients with SCD using a standardized and validated instrument. The Brooklyn Health Equity Index (BKHI) is a novel, community-developed patient-reported tool designed to measure equity in clinical care. This study examined whether patients with SCD differed in healthcare experiences compared to other patients.

Methods:We analyzed data from a subset of 60 patients at a Central Brooklyn hospital system from February to March 2023, who completed the BKHI survey, 30 of whom had SCD. Exact 1:1 matching was performed on age category, gender, and care setting. Latent class analysis was used to identify distinct experience profiles from the BKHI questions. Poisson regressions with robust standard errors modeled the association of patient type and worse healthcare experiences.

Results:Patients with SCD had a mean age of 43.9 years; all were Black, were more likely to be unemployed (56.7%), and were primarily insured through Medicaid (66.7%). Compared with controls, patients with SCD scored, on average, 1.63 points lower (95% CI: -3.70, 0.43) than other patients. The latent class analysis resulted in two (better vs worse) experience profiles. Overall, patients with SCD had an 83% higher risk of a worse patient-reported experience (IRR = 1.83, 95% CI = 0.77, 4.35) compared with those without SCD, but the association was not statistically significant.

Discussion: Patients with Sickle Cell Disease appeared to have marginally worse patient-reported healthcare experiences. More data or a larger sample would be needed for a more precise estimate. Future studies should explore other aspects of care specific to patients with SCD, such as acuity or frequency of emergency department visits.

B08**Moyouri Bhattacharjee M.P.H.**

Advisor(s): Simone Reynolds Ph.D.

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Perceived Medical Discrimination and Healthcare System Trust Among Adults Living With Obesity in the United States in a National Dataset

Background:

Adults with obesity ($BMI \geq 30 \text{ kg/m}^2$) in the U.S. require consistent, multidisciplinary management to prevent progression to diabetes. Adults with obesity have previously reported negative experiences in healthcare settings, as well as lower trust in the healthcare system. We assessed the association between perceived medical discrimination and high healthcare trust in a national sample of obese adults in the United States.

Methods:

Our data include survey results from adults with obesity from the 2023 - 2024 Health Information National Trends Survey (HINTS 7). Complete-case logistic regression was carried out, and we controlled for sociodemographic, SDOH barriers, psychological distress (PHQ-4), and visit frequency. We also assessed interaction and confounding.

Results:

In the final cohort of 1815 participants, 21% self-reported medical discrimination. The cohort was primarily aged 50 - 64 (30%), female (64%), non-Hispanic White (57%), college educated (63%), and insured (93%). Discrimination was more common in females, non-Hispanic Black participants, and those with lower education, financial strain, transportation barriers, or moderate psychological distress (all $p < 0.05$). Only 16% of those who perceived healthcare discrimination reported high trust compared to 42% without discrimination. In crude analyses, absence of discrimination was associated with higher odds of high trust (OR=3.87, 95% CI 2.94 - 5.09). However, in adjusted models, discrimination was not independently associated with trust (AOR=1.05, 95% CI 0.43 - 2.59). Financial hardship, psychological distress, and transportation barriers were major confounders. Visit frequency significantly interacted with discrimination.

Discussion:

While we found that perceived discrimination was not associated with lower healthcare trust in final analyses, we also found that trust among obese adults was shaped by a complex web of determinants that go beyond discrimination alone, which bears further research.

B09**Daniel Rosenthal**

Advisor(s):

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Shared Decision-Making to Improve Colorectal Cancer Screening in Underserved Urban Populations

Introduction: This study evaluated whether shared decision-making discussions of fecal immunochemical testing versus colonoscopy increase colorectal cancer screening completion among underserved patients in an urban safety-net clinic.

Methods: In a retrospective analysis of colorectal cancer screening rates among adult patients seen in a resident clinic from October to December 2025 evaluating a structured shared decision-making intervention in which residents reviewed the benefits and risks of fecal immunochemical testing versus colonoscopy and emphasized patient preference, we assessed changes in overall screening completion before and after implementation.

Results: At baseline, 52 patients (mean age over 50 years, predominantly Afro-Caribbean) were reviewed; 17% selected FIT and 71% colonoscopy, with completion rates of 78% and 26%, respectively (overall 34%). Post-intervention, 42 patients participated in SDM; 71% chose FIT and 29% colonoscopy. FIT completion remained high (73%), whereas colonoscopy completion was limited by short follow-up. Overall completion increased to 52%.

Conclusion: Incorporating shared decision-making into colorectal cancer screening discussions shifted patient preference toward fecal immunochemical testing and increased overall screening completion in an urban underserved population, suggesting that aligning screening strategies with patient priorities may reduce barriers and improve uptake among at-risk groups.

B10

Yassir Azzam

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Disparities in Developmental Disorder Care: Socioeconomic Influences on Health Services for U.S Adolescents with Neurodevelopmental Disorders

Background: Adolescents in the United States with neurodevelopmental disabilities (NDDs) encounter extreme and substantial barriers to accessing mental health services. This study examines the relationship between socioeconomic disadvantage and mental health treatment utilization among U.S. adolescents aged 10-17 with NDDs, focusing on indicators such as government assistance, insurance coverage, household income, and caregiver education.

Methods: Data were drawn from the 2023 National Survey of Children's Health, a nationally representative dataset identifying adolescents with parent-reported NDDs. Weighted bivariate analyses and multivariable logistic regressions were performed using SAS Studio to estimate adjusted odds ratios (ORs) for receiving mental health treatment while accounting for the survey's complex design.

Results: The analytic sample included 5,986 adolescents, representing approximately 7.6 million U.S. youth with NDDs. Nearly half of the sample (47.2%) received government assistance; however, no significant difference in treatment access was observed between recipients and non-recipients (35.7% vs. 36.8%, $p = 0.779$). Female adolescents were significantly more likely to receive treatment than males (OR = 1.54, $p < 0.001$), while Asian adolescents were less likely to receive treatment compared to White adolescents (OR = 0.58, $p = 0.03$). Adolescents from households with incomes between 100% and 299% of the federal poverty level had lower odds of receiving treatment (OR = 0.67, $p = 0.007$) compared to those at or above 300% FPL.

Conclusion: While government assistance was not associated with access to mental health services among adolescents with NDDs, other factors, such as sex, race, and household income, played a significant role, underscoring the need for comprehensive, equity-focused interventions that extend beyond financial support alone.

B11**Coleman Yorke M.S.**

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Effectiveness and Implementation of Mental Health Interventions for Children and Adolescents in the Republic of Ireland: A Scoping Review

Background: Childhood and adolescence are critical developmental periods during which individuals are at increased risk of mental health disorders. The Republic of Ireland has the fourth highest adolescent suicide rate in the European Union, yet only 44% of children and adolescents requiring care access specialist services. The Republic of Ireland's Health Service Executive is overstrained and unable to meet the rising mental health needs of children and adolescents. This scoping review maps the mental health services and interventions available to children and adolescents (aged 0-24) in the Republic of Ireland to identify gaps in current provision.

Methods: In this PRISMA-compliant scoping review, we searched for peer-reviewed literature in eight databases (Embase, Web of Science, Scopus, MEDLINE, PsycINFO, CINAHL, Lenus, and ProQuest) and grey literature from 19 Irish mental health organizations. Studies were included if participants were aged 0-24, in English with full text available, and described a specific mental health intervention implemented in the Republic of Ireland. Narrative synthesis was used to analyze intervention types, settings, outcomes, effectiveness, implementation components, and cultural adaptations.

Results: Fifty-one studies published between 2004-2025 were included. Intervention types were primarily psychotherapeutic (n = 16, 31.3%), parenting-based (n = 13, 25.4%), universal manualized school-based (n = 8, 15.6%), mindfulness (n = 4, 7.8%), or peer-support based (n = 3, 5.9%). Most interventions targeted adolescents 14 years and older (n = 30, 58.8%), with limited provision for younger children. A minority of interventions were conducted in exclusively rural settings (n = 5, 9.8%) despite the high burden of mental health needs. Few studies involved children and adolescents in intervention design (n = 8, 15.6%) or were culturally adapted for an Irish context (n = 6, 11.8%). Psychotherapeutic interventions were associated with improvements.

B12**Kushal Kriplani MBBS**

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Early Onset Gastrointestinal cancers: Rural-urban divide and geographic disparities in outcomes.**Background**

Early-onset gastrointestinal (eoGI) cancers, defined as diagnoses occurring before age 50, represent a growing public health concern. While incidence rates of several eoGI malignancies (most notably colorectal cancer) have risen over recent decades, population-level mortality trends remain less clearly characterized. We therefore examined national trends in age-adjusted mortality from eoGI cancers.

Methods

We retrieved the mortality data from the CDC WONDER underlying causes of death database (years: 1999 - 2020) for the population aged 18-49 with “Neoplasms of digestive organs” (ICD-10 C15-26) listed as “underlying cause of death”. We analyzed age-adjusted mortality rates (AAMRs) per 100,000 population and assessed temporal trends in the average annual percent change (AAPC) of AAMRs. AAPC and 95% CIs were estimated using the NCI Joinpoint regression program 5.4.0.

Results

A total of 180,512 eoGI cancer - related deaths were identified. Overall, AAMRs declined, with an AAPC of -0.25% (95% CI, -0.34 to -0.16; $p < 0.05$). However, trends varied substantially by cancer site. Early-onset colorectal cancer demonstrated a significant increase in mortality (AAPC, 0.56%; 95% CI, 0.30 - 0.91; $p < 0.001$).

Urban - rural analyses revealed rising mortality for eoGI cancers in rural areas (AAPC, 0.30%; 95% CI, 0.04 - 0.57; $p = 0.01$), stable trends in small and medium metropolitan areas (AAPC, 0.06%; 95% CI, -0.16 to 0.24; $p = 0.24$), and a significant decline in large metropolitan areas (AAPC, -0.46%; 95% CI, -0.84 to -0.08; $p = 0.02$).

Conclusion

Despite an overall decline in age-adjusted mortality from eoGI cancers in the US, this improvement was not uniform across cancer sites or regions. EoCRC continues to demonstrate a consistent rise in mortality, particularly in rural areas and select geographic divisions, highlighting persistent and emerging disparities. These findings underscore the need for targeted public health strategies that aim to improve and ensure equitable access.

B13**Smita Rajan M.D.**

Advisor(s): Melissa Lee M.D.

Co-author(s):

Staying Fit: Engaging Patients in Colorectal Cancer Screening

Colorectal cancer (CRC) is the second leading cause of cancer-related deaths in the United States. This study examines the role of health literacy in improving CRC screening completion in underserved communities.

An educational pamphlet describing colorectal cancer, screening options and step wise instructions for screening completion was developed. The pamphlet was piloted in a Brooklyn safety net hospital, serving predominantly underserved/insured Afro-Caribbean and Black communities. Faculty and 36 resident physicians at the PCP clinic used pamphlets available in provider rooms to support shared decision making around CRC screening. Patients who opted for FIT testing received the standardized handout along with a 2 week deadline, counseling was reinforced by patient care associates (PCAs). The intervention was administered over a 2 week period, reaching over 300 patients. 2 week completion of CRC screening with FIT tests was measured before and after the educational intervention. A chi-squared test of independence was performed to examine whether implementation of the educational pamphlet affected completion of CRC screenings. A total of 679 of cases were reviewed, 369 in the pre-intervention group and 310 in the interventional group. Results revealed a statistically significant improvement in screening completion ($\chi^2 = 4.03$, $p = 0.045$). 2 week completion rates increased from 50.9% before the pamphlet to 58.4% after the pamphlet. These results showed the educational pamphlet, along with a strict return deadline, improved screening completion. Educational pamphlets can help improve a patient's understanding of key healthcare topics and support shared decision making. We found that educational pamphlets increased the overall CRC screening at 2 weeks in our high risk population. However, pamphlets alone are not sufficient. Provider counseling, pairing education with counseling and adequate time for decision making are crucial for completion.

B14**Samantha Lam B.S.**

Advisor(s):

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Prescriptions Ordered at a Student-Run Free Clinic: A Retrospective Analysis

Background/Objectives:

Medication therapy is central to disease prevention and management. Uninsured patients face barriers to accessing medications, especially cost. The Anne Kastor Brooklyn Free Clinic (BFC), a student-run free clinic, is part of the social safety net for the uninsured population in New York City, offering many medications free of cost. This study aims to analyze patterns in prescriptions ordered at the BFC in the past two years to better understand our patient population.

Methods:

A retrospective chart review using RedCap was performed on initial BFC visits from Jan 1, 2024 - Dec 10, 2025. Deidentified demographics and prescriptions ordered were extracted from the electronic medical record and summarized. Patient age was calculated using date of birth and visit date and categorized into 18 - 35, 36 - 64, and ≥ 65 years.

Results:

Of 562 initial BFC visits from 2024-2025, 264 (47%) had 1+ prescription drug order. A total of 529 prescriptions were ordered, with 64% for females and 36% for males. Females aged 36-64 had the most prescriptions ordered, accounting for 30% of all orders.

The most common prescription for patients aged 18-35 was fluconazole for females (7%) and doxycycline for males (6%). The most common for patients aged 36-64 was amlodipine for both females (10%) and males (11%). The most for patients aged 65+ was atorvastatin for females (10%) and insulin for males (14%). The BFC with Lifecare pharmacy paid for most prescriptions (57%), followed by patient self-payment (39%), GoodRx coupon (3%), and in-clinic direct relief (0.3%).

Conclusion:

Uninsured patients face cost barriers to medications. Prescription payment by the BFC and Lifecare Pharmacy is integral to the patients' care access. There is a continued need to apply for grants related to obesity, hypertension, high cholesterol, and diabetes to fund the prescription payment program.

B15**Cassidy Psihos B.S.**

Advisor(s):

Co-author(s): -

Prescriptions Ordered at a Student-Run Free Clinic: A Retrospective Analysis

Background/Objectives:

Laboratory testing is needed for detection, diagnosis, and disease management. Uninsured patients face higher costs and more barriers to care than insured individuals, increasing risk of delayed or missed lab testing. The Anne Kastor Brooklyn Free Clinic (BFC), a student-run free clinic, provides healthcare services to the uninsured population in New York City at no cost to the patients. This study aims to analyze patterns in lab tests ordered at the BFC in 2024-2025.

Methods:

A retrospective chart review using RedCap was performed on initial visits at the BFC from Jan 1, 2024 - Dec 10, 2025. Deidentified patient demographics and laboratory tests ordered were extracted from the electronic medical record and collected data was summarized. Patient age was calculated using date of birth and visit date and categorized into 18 - 35, 36 - 64, and ≥ 65 years.

Results:

Of 562 initial BFC visits from 2024-2025, 443 (79%) involved ordering at least one laboratory test. A total of 1648 labs were ordered, 62% for females and 35% for males, and 3% unknown sex. Patients were ordered a mean number of 2.9 tests per visit. Males between the age of 18-35 were the group that ordered the most labs on average (3.3 labs per patient).

The most common labs ordered for patients aged 18-35 were STI/hepatitis (16%), HIV testing (12%), and complete blood count (CBC) (12%). The most common for patients aged 36-64 were CBC (15%), HbA1C (13%), and comprehensive metabolic panel (CMP) (12%). The most common for patients aged 65+ were CBC (16%), HbA1C (15%), and CMP (14%). There were no significant differences between sex in the top 3 labs ordered within each age group.

Conclusion:

The BFC relies on laboratory testing to provide care. Types and frequency of labs differed by age and sex, with more sexual health screening in younger patients and more diabetes screening in older patients. Future studies should assess missed lab tests and indicated vaccines at the BFC.

B16**Alexia Collins B.S.**

Advisor(s): Carla Boutin-foster M.D.

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Workforce Representation in Dermatology and Its Relationship to Early Detection and Community-Based Prevention

Background:

Early detection of dermatologic disease is essential to reducing morbidity and mortality across oncologic, autoimmune, and inflammatory conditions. Recognition of disease in skin of color may be delayed due to underrepresentation of diverse skin tones in medical education and training materials, contributing to missed or late diagnoses. Prevention extends beyond clinical recognition and includes community education on self-identification of concerning lesions and timely care-seeking. The composition of the dermatology workforce and institutional training environments may influence access to care, culturally responsive counseling, and early detection. However, limited data exist regarding which residency programs are training Black dermatologists.

Objective:

To evaluate dermatology residency training institutions among Black dermatologists listed in the Black Derm Directory and identify programs contributing most to workforce representation.

Methods:

We conducted a cross-sectional analysis of publicly available data from dermatologists listed in the Black Derm Directory (n = 337). Residency training institutions were extracted and frequencies calculated to identify programs with the highest representation.

Results:

Howard University (combined training pathways) trained the highest number of Black dermatologists (31; 9.2%), followed by the University of Michigan (16; 4.7%) and Henry Ford Hospital (14; 4.2%). SUNY Downstate Health Sciences University and the University of Pennsylvania each trained seven dermatologists (2.1%). These findings demonstrate marked clustering of Black dermatology graduates within a limited number of residency programs.

Conclusions:

Identifying residency programs that train a substantial proportion of Black dermatologists may inform targeted recruitment, mentorship expansion, and institutional pipeline development. Strengthening high-yield training environments may represent a systems-level strategy to improve early detection.

B17**Raiyan Satti**

Advisor(s): Marlene Camacho-Rivera M.S.,ScD

Co-author(s):

Considerations of Diversity, Equity, and Inclusion in Undergraduate Public Health Education Curricula

Public health is a fast-growing, diverse field. However, studies suggest that what is taught in the classroom may not accurately reflect this diversity, especially in the way race and identity are represented in course materials. Our research explores this gap by analyzing the visual representation of different demographic groups in public health textbooks. Using a concurrent mixed-method approach, we coded images from four widely used public health textbooks based on visible characteristics such as race, age, gender identity, and disability status. Each image was independently reviewed by four coders using a shared codebook to ensure inter-rater reliability. Our qualitative analysis revealed several emerging themes within 129 images, including a lack of real-world images, inclusion of multimodal images, and association of roles with certain demographics. In bivariate analyses, we observed statistically significant differences in the distribution of images across textbooks by age ($p=0.007$), race ($p<0.001$), ethnicity ($p<0.001$), gender identity ($p<0.001$), and disability ($p<0.001$). There was no statistically significant difference in group type (individual, groups, or communities) represented across textbooks ($p=0.270$). IRR across all variables was excellent (>0.88). Marginalized identities, including racial minorities, individuals with disabilities, non-binary people, and non-English speakers, were consistently underrepresented. While public health textbooks aim to prepare a diverse student body, the visuals often fall short in representing the populations they are meant to serve.

B18**Jenique Reid MPH**

Advisor(s): Simone Reynolds Ph.D.,MPH

Co-author(s): -

Prevalence of Elevated Blood Pressure in a Faith-Based Community Screening Initiative

Background: Chronic illnesses, including hypertension, obesity, and diabetes, remain leading contributors to morbidity across urban and suburban communities in the United States. Informal assessment within a church congregation in Valley Stream, New York, suggested a substantial burden of cardiometabolic risk factors, highlighting the need for accessible, community-based, culturally appropriate prevention strategies delivered in trusted settings.

Objectives: To evaluate the preliminary effect estimates of a faith-based wellness ministry on health literacy and early screening and detection of cardiometabolic risk factors among adult congregants.

Methods: A faith-based screening and education initiative was implemented within a church congregation and staffed by a multidisciplinary team of clinical and public health professionals. Programming included educational workshops, health fairs, and screening events focused on hypertension, diabetes, and obesity. Screening measures included blood pressure (BP) readings. Pre- and post- intervention surveys were administered at educational events to assess changes in knowledge. Descriptive statistics were used to summarize preliminary screening findings and survey outcomes.

Results: Among participants screened for BP (N=46), 12 (26.1%) reported a prior diagnosis of hypertension and 2 (4.3%) reported a history of borderline hypertension. At screening, 28 participants (60.9%) had measured BP > 130/80 mmHg, while 18 (39.1%) had readings ≤ 130/80 mmHg. Analysis of post-intervention survey data assessing chronic disease knowledge is ongoing.

Discussion: Implementation of a health ministry is a feasible model for delivering chronic disease education and screening in churches. A significant portion of screened participants had elevated BP, underscoring the potential role of faith institutions in identifying undiagnosed or uncontrolled cardiometabolic risk and supporting community-level prevention efforts.

B19**Julia Fitzgerald B.S.**

Advisor(s): Michael Augenbraun M.D.

Co-author(s):

A Comparative Study of Third-Generation Cephalosporins Vs. Fluoroquinolones as Step-Down Therapy After IV Ceftriaxone in Acute Pyelonephritis

For decades, oral fluoroquinolones were used for empiric outpatient treatment of acute pyelonephritis. However, due to rising antimicrobial resistance the Infectious Diseases Society of America now recommends IV ceftriaxone followed by step-down therapy of oral third-generation cephalosporins rather than fluoroquinolones. Although prior studies demonstrated similar effectiveness, they were limited by small sample sizes or single-to three-center designs. We obtained real-world data by using TriNetX Research Network, a federated electronic health record database consisting of 154 million patients across 112 U.S. healthcare organizations. We hypothesized that oral fluoroquinolones would demonstrate lower therapeutic efficacy compared with third-generation cephalosporins. This retrospective cohort study included adults aged 18 - 65 diagnosed with acute pyelonephritis in the emergency department who received IV ceftriaxone. Cohort 1 received oral third-generation cephalosporins; Cohort 2 received fluoroquinolones. Patients who were immunocompromised, had structural or obstructive urinary disease, nephrostomy tubes, or indwelling catheters were excluded. Propensity score matching balanced demographics and comorbidities. Matched cohorts included 2,952 patients. Outcomes were assessed using CPT and lab codes relating to treatment failure within 7 - 30 days. Risk ratios with 95% confidence intervals were calculated. There were no significant differences between groups: fever (RR 0.914; CI 0.418 - 1.997; p=0.821), sepsis (RR 1.335; CI 0.645 - 2.766; p=0.435), leukocytosis (RR 0.565; CI 0.287 - 1.114; p=0.095), and ED readmission (RR 1.107; CI 0.931 - 1.317; p=0.249). To our knowledge, this is the first nationally representative retrospective cohort analysis of these regimens. These findings suggest that IV ceftriaxone followed by oral third-generation cephalosporins is comparable in treatment efficacy to step-down therapy with oral fluoroquinolones for outpatient acute pyelonephritis.

B20**Peace Asumadu B.S.**

Advisor(s): Allison Polland M.D.

Co-author(s):

Is Phenazopyridine (Pyridium) Safe? A pharmacovigilance study in the FAERS Database

Background: Recent media reports have raised concerns about a possible link between Phenazopyridine and cancer, referencing a 1978 National Cancer Institute (NCI) study that observed increased colorectal tumors in rats and hepatic tumors in female mice. Phenazopyridine, a urinary tract analgesic, was introduced to the U.S. market before the 1962 Kefauver-Harris Amendment mandated stringent safety and efficacy standards for pharmaceuticals. Given its widespread use, an evaluation of its safety profile is warranted.

Methods: We performed a retrospective pharmacovigilance analysis using the FDA Adverse Event Reporting System (FAERS) database. Only reports in which phenazopyridine was the sole active ingredient were included. Duplicate case entries and events related to the indications for drug use were excluded.

Results: From January 1970 to June 2025, we identified 885 total reports related to phenazopyridine. Upon excluding 682 cases involving other drugs, and 7 duplicates, 196 reports comprising 471 adverse events were analyzed. No colorectal or hepatic tumors were reported. The most common adverse events included allergic reactions (n=43), methemoglobinemia (n=26), hemolytic anemia (n=18), dyspnea (n=16), chromaturia (n=13), and acute kidney injury (n=11).

Conclusion: Few phenazopyridine-associated adverse events were reported in the FAERS database, which may reflect a favorable safety profile or underreporting given the unknown number of exposed patients over the past 55 years. Tumor associations observed in the animal studies were not observed in humans; this could reflect a latency bias or differences in exposure levels. Specifically, in the NCI study, animals were exposed to daily dosing for over a year, while human use is typically recommended for a few days. While causality cannot be established based on our findings, clinicians should remain aware of potential adverse events and address public concerns when counseling patients on phenazopyridine use.

B21

William Dennis B.S.

Advisor(s): Adam Grippin Ph.D.,M.D.

Co-author(s):

Association of pre-biopsy COVID-mRNA vaccination and tumor proportion score of PD-L1 in a large multi-histology patient cohort

Introduction:

We previously demonstrated that mRNA vaccines induce interferon-mediated increases in tumor PD-L1 expression, promoting synergy with immune checkpoint blockade. As this effect is antigen-independent, we hypothesized that COVID mRNA vaccines would similarly increase PD-L1 expression in tumor biopsies.

Methods:

We assembled a tissue-agnostic cohort of patients at our institution with pathology reports containing “PD-L1” from August 2020 to November 2023 (n=5,524). Extracted data included PD-L1 tumor proportion score (TPS), histology, biopsy site, stage, and COVID vaccination history.

Results:

Across all cancers, shorter interval between COVID vaccination and biopsy was significantly associated with higher PD-L1 TPS. Patients vaccinated within 100 days prior to biopsy had a mean TPS of 16.93% (95% CI 12.64 - 21.21), compared to 10.65% (95% CI 8.74 - 12.57; p=0.0033) in those vaccinated >100 days prior and 10.13% (95% CI 8.98 - 11.29; p=0.0004) in unvaccinated patients.

The effect was more pronounced in metastatic tumors (OR 1.93, 95% CI 1.32 - 2.59) than primary tumors (OR 1.35, 95% CI 0.81 - 1.89). Metastatic tumors biopsied within 100 days of vaccination showed a 78.9% increased likelihood of TPS >50% (p=0.0009), whereas primary tumors showed no significant difference. This primary - metastatic difference was observed only within the 100-day window.

Among metastatic adenocarcinomas, vaccination within 100 days was associated with higher TPS (21.67% vs. 12.97%, p=0.047). Bone tumors biopsied >100 days after vaccination showed higher PD-L1 expression than unvaccinated tumors (10.11% vs. 2.83%, p=0.048). Significant differences were also seen in gastrointestinal tumors (9.27%, 10.90%, 5.02%; p=0.023) and CNS tumors (42.75%, 8.9%, 6.37%; p=0.0012) across vaccination groups.

Conclusions:

COVID mRNA vaccination was associated with increased tumor PD-L1 expression, particularly in metastatic disease and within 100 days of vaccination.

B22**Mickey Yu M.S., B.E.**

Advisor(s): Steven Esses M.D.

Co-author(s): Inna Shyknevsky M.D.

PI-RADS 3 and Likelihood of Clinically Significant Prostate Cancer (GG2, GG3): A Single Center Experience

Prostate Imaging-Reporting and Data System (PI-RADS) category 3 lesions on multiparametric magnetic resonance imaging (mpMRI) are considered indeterminate, creating uncertainty about whether patients should undergo biopsy. We evaluated the positive predictive value (PPV) of PI-RADS 3 lesions for clinically significant prostate cancer (csPCa), defined as Grade Group (GG) 2 or higher, at a single center. We performed a retrospective cohort study of patients who underwent prostate mpMRI at Maimonides Medical Center from January 2023 to March 2024. Patients with at least one PI-RADS 3 lesion who proceeded to magnetic resonance imaging-ultrasound (MRI-US) fusion biopsy were included; lesions were marked with MIM Symphony and biopsied using MRI-US fusion guidance. Among 715 prostate mpMRI examinations, 203 patients had at least one PI-RADS 3 lesion and 101 underwent MRI-US fusion biopsy. Of 128 PI-RADS 3 lesions identified, 118 were biopsied. Pathology was benign in 82 lesions, GG1 in 15, GG2 in 15, and GG3 in 6, yielding a PPV for csPCa of 17.8% (21/118). Overall, PI-RADS 3 lesions demonstrated a modest likelihood of csPCa, supporting use of additional clinical and imaging risk factors to refine biopsy selection. In practice, these data can aid shared decision-making about whether to biopsy PI-RADS 3 lesions and help limit unnecessary procedures.

B23**Olivia He B.S.**

Advisor(s): Inci Dersu M.D.,MPH

Co-author(s):

Clinical Considerations Among Brimonidine Ophthalmic Formulations: A Focused Review of Concentration and Preservative Differences**Purpose / Relevance:**

Brimonidine is widely used for glaucoma and ocular hypertension and is available in multiple concentrations (0.2%, 0.15%, 0.1%) and preservative systems (benzalkonium chloride [BAK] and Purite in U.S. formulations). Preservative-free 0.15% formulations have primarily been studied in international settings and are not currently standard U.S. glaucoma formulations. We evaluated whether concentration or preservative modifications are associated with clinically meaningful differences in intraocular pressure (IOP) reduction or safety.

Methods:

We conducted a focused review of comparative clinical studies evaluating IOP reduction, ocular tolerability, systemic adverse events, and patient-reported outcomes across brimonidine formulations. These include randomized trials, comparative cohort studies, and meta-analyses examining 0.2%, 0.15%, and 0.1% concentrations, as well as preserved and preservative-free formulations.

Results:

Across concentrations, IOP-lowering efficacy was consistently comparable. Transition from 0.2% BAK-preserved brimonidine to 0.15% Purite maintained similar IOP control and was associated with lower rates of allergic conjunctivitis and improved comfort. In randomized trials, 0.1% Purite was non-inferior to 0.15% Purite for IOP reduction, with pooled analyses reporting fewer systemic adverse events at the lower concentration. International studies of preservative-free 0.15% brimonidine demonstrated equivalent IOP control, with modest improvements in tear film stability and patient satisfaction.

Conclusion:

Available evidence suggests minimal efficacy differences among brimonidine concentrations. Tolerability differences-particularly with lower concentrations and Purite-based formulations-appear more consistent and may be more clinically relevant in formulation selection. Further evaluation of cost and prescribing patterns may clarify real-world implications.

B24**Peter Khouri M.S.**

Advisor(s): Inci Dersu M.D.,MPH

Co-author(s):

Psychiatric Medication-Associated Risk of Acute Angle Closure Glaucoma: A Retrospective Cohort Study in the TriNetX Database

Acute angle-closure glaucoma (AACG) is an ophthalmic emergency requiring prompt treatment. Certain psychiatric medications pose a risk of AACG, particularly those with a mechanism of action via autonomic receptors. Literature has shown a possible increase in glaucoma risk in patients prescribed some anticonvulsants, tricyclic antidepressants (TCAs), selective serotonin reuptake inhibitors (SSRIs), or serotonin-norepinephrine reuptake inhibitors (SNRIs) (2,3). The objective of this study was to characterize the associations of AACG in patients on psychiatric therapy in a large database.

This study utilized de-identified data from the TriNetX database. Based on literature, medications most associated with glaucoma as an adverse effect were selected. Patients diagnosed with mental/behavioral disorders were placed into two cohorts: a psychoactive medication group and a control group. Propensity score matching (PSM) was conducted to balance for age, clinical, and socioeconomic factors. The primary endpoint was history of an AACG attack. Hazard ratios (HR) were calculated and Kaplan-Meier analyses were performed.

After PSM, a total of 14,931,500 patients were compared. At 5-year intervals, SSRIs, SNRIs, Bupropion, and second-generation antipsychotics were associated with HR < 1 (lower risk) ($p < .001$), while certain TCAs and Trazodone were associated with HR > 1 (greater risk) ($p < .001$). At a 3-year interval, patients on clozapine exhibited HR=1.8 ($p < .001$), the greatest risk of any cohort.

Statistically significant associations with AACG were observed in cohorts on certain psychiatric medication. The magnitude of these effects was modest and of uncertain clinical significance. This analysis underscores the need for additional prospective studies to further delineate risk stratification and clinical decision-making when prescribing psychiatric medications.

B25**Zain Ahmed B.S.**

Advisor(s): David Ramsey Ph.D.,M.D.

Co-author(s):

Effect of Homelessness on Access to Glaucoma Monitoring and Treatments

Background: Homelessness affects ~0.25% of the US population, and housing insecurity is a major social determinant contributing to vision health disparities. This study evaluated the impact of homelessness on access to glaucoma monitoring and treatment.

Methods: This retrospective population-based cohort study used the US Collaborative TriNetX database (2015 - 2022) and included adults ≥ 40 years with open-angle glaucoma (ICD-10 H40.11/H40.12).

Individuals with angle-closure or secondary glaucoma were excluded. Propensity-score matching (1:1, caliper 0.1) balanced 50 baseline variables between patients with and without a history of homelessness. Cox proportional hazards models assessed associations between homelessness and glaucoma monitoring and treatment over three years.

Results: After matching, 525 individuals experiencing homelessness (mean age 61.2 years; 25.0% female) were well balanced with housed controls (mean age 60.5 years; 26.1% female). Homelessness was associated with significantly lower rates of visual field testing (HR 0.55; 95% CI 0.45 - 0.70) and retinal nerve fiber layer imaging (HR 0.60; 95% CI 0.50 - 0.74; both $p < 0.001$). Patients experiencing homelessness were also less likely to receive selective laser trabeculoplasty (HR 0.58; $p = 0.03$) or incisional glaucoma surgery (HR 0.38; $p = 0.002$), and had lower rates of any procedural escalation. There were no significant differences in progression to severe glaucoma, use of systemic glaucoma medications, or risk of low vision or blindness.

Conclusion: Homelessness is associated with nearly a 50% reduction in glaucoma monitoring and procedural treatment. Barriers such as insurance gaps, transportation challenges, and concerns about postoperative care likely contribute. Integrating eye care with supportive services within Housing First models may reduce these disparities.

B26**Adriana Kaganovski**

Advisor(s): R. Theodore Smith Ph.D.,M.D.

Co-author(s):

High-Density Lipoprotein Levels and Risk of Progression to Exudative Age-Related Macular Degeneration: A Large Real-World Cohort Study**Purpose:**

To evaluate whether sex-specific high-density lipoprotein (HDL) levels are associated with progression from nonexudative to exudative age-related macular degeneration (AMD).

Methods:

Using the TriNetX Research Network (154M+ patients), adults ≥ 18 years with nonexudative AMD (ICD-10 H35.31) and HDL measured within ± 6 months of diagnosis were identified. HDL categories were sex-specific: men-high (≥ 60 mg/dL), normal (40 - 59), low (< 40); women-high (≥ 60), normal (50 - 59), low (< 50). One-to-one propensity score matching was performed using demographics, comorbidities, and healthcare utilization. The outcome was development of exudative AMD (H35.32) over 20 years. Risk ratios (RR) were calculated from cumulative incidence; hazard ratios (HR) from Kaplan-Meier analysis. Analyses were completed November 12, 2025.

Results:

Matched cohorts: men low vs normal (n=8,647 each), men high vs normal (n=4,347 each), women low vs normal (n=8,911 each), women high vs normal (n=8,829 each). In men, neither low nor high HDL was associated with progression (RR 0.96 for both; $p > 0.05$). In women, high HDL was associated with reduced cumulative incidence (RR 0.91, 95% CI 0.83 - 0.99, $p = 0.03$), though time-to-event analysis was not significant (HR 0.93, $p = 0.11$). Low HDL showed no association in either sex.

Conclusions:

HDL was not associated with progression to exudative AMD in men. Women with high HDL demonstrated a small reduction in cumulative incidence, suggesting possible sex-specific lipid effects in AMD progression.

B27**Ethan Abizadeh B.S.**

Advisor(s): Lalita Gupta M.D.

Co-author(s):

Predictors for Prolonged Length of Stay Following Inpatient Ophthalmic Surgery**Background:**

As ophthalmic surgery has shifted largely to the outpatient setting, inpatient procedures increasingly involve medically complex patients. However, determinants of prolonged hospitalization in inpatient ophthalmology remain poorly defined. We sought to identify predictors of increased length of stay (LOS) using a statewide database.

Methods:

We performed a cross-sectional study of inpatient ophthalmic surgical admissions in the New York Statewide Planning and Research Cooperative System (SPARCS) from 2018 - 2023. Cases were identified using ICD-10-PCS codes; encounters with LOS >120 days or missing key variables were excluded. Increased LOS was defined as >1 hospital day. Multivariable logistic regression evaluated independent predictors adjusting for demographics, insurance, admission type, region, APR severity of illness and risk of mortality, and diagnosis categories grouped by CCSR.

Results:

Among 4,298 encounters, 57.7% had LOS >1 day. APR severity of illness was the strongest predictor of prolonged hospitalization, demonstrating a marked dose - response relationship. Compared with severity 1, higher severity levels were associated with progressively greater odds of LOS >1 day (severity 2: OR 2.62; severity 3: OR 11.03; severity 4: OR 37.40; all $p < 0.001$). Older age and inflammatory, infectious, oncologic, orbital, and non-ophthalmic diagnoses were also independently associated with increased LOS. LOS strongly correlated with hospitalization cost ($\beta = 0.77$, $p < 0.001$).

Conclusions:

In modern inpatient ophthalmology, length of stay reflects overall medical complexity more than surgical factors alone. Efforts to reduce hospitalization time and cost should prioritize management of systemic illness and coordinated multidisciplinary care.

B28**Mahie Abdullah B.S.**

Advisor(s): Sohaib Fasih M.D.

Co-author(s): -

Comparative Outcomes of AI-Assisted Versus Human-Performed Retinal Imaging for Diabetic Retinopathy Detection: A Propensity-Matched Analysis

Introduction: Artificial intelligence (AI) has emerged as a scalable tool for retinal disease screening, yet its validity relative to clinician-performed imaging remains uncertain. This study compared diagnostic yield and treatment signals between AI-assisted retinal imaging (CPT 92229) and human-performed remote retinal imaging (CPT 92227-92228) in adults with diabetes.

Methods: Data were extracted from the TriNetX Research Network (2021-2025) for adults with diabetes undergoing retinal imaging. Patients were categorized into cohorts based on whether screening was AI-assisted or human-led. To account for baseline differences in demographics and comorbidities, 1:1 propensity score matching was utilized. Primary 3-year outcomes included proliferative diabetic retinopathy (PDR), diabetic macular edema (DME), intravitreal injection, and photocoagulation. Time-to-event analyses utilized hazard ratios (HR) and log-rank tests.

Results: A total of 23,812 patients were initially identified. After matching, two balanced cohorts of 9,488 each were analyzed. Median follow-up was 533 days for AI and 671.5 days for human imaging. AI-based imaging demonstrated non-inferior detection of PDR compared to human screening (0.5% vs. 0.6%; HR 1.05; 95% CI 0.71-1.54; $p=0.805$). However, AI demonstrated a significantly lower incidence of detected DME (1.0% vs. 1.6%; HR 0.728; 95% CI 0.563-0.942; $p=0.015$). Rates for intravitreal injection (0.2% vs. 0.4%; HR 0.705; $p=0.209$) and photocoagulation (0.1% vs. 0.3%; HR 0.568; $p=0.095$) were also lower in the AI cohort.

Discussion: AI achieved non-inferior detection of PDR, but significantly lower hazards for DME may indicate under-identification of clinically meaningful disease by AI screening or reflect differences in care pathways. AI should augment clinician oversight until prospective studies clarify long-term diagnostic sensitivity and longitudinal outcomes.

B29**Mona Khamis B.S.**

Advisor(s): Kristina Derrick M.D.,ScM

Co-author(s): Sofia Perez

Evaluating Dermatology Appointment Access for Infantile Hemangioma Using a Secret Shopper Approach

Background: Infantile hemangiomas (IHs) are common vascular tumors that grow most rapidly in the first 1 - 3 months of life. Early evaluation by dermatology is critical, as timely treatment, especially before 10 weeks of age, can significantly improve cosmetic and functional outcomes and help identify IH-associated syndromes such as PHACES and LUMBAR. Yet long wait times and workforce shortages in pediatric dermatology suggest that timely access may be limited. Real-world data on appointment availability for IH evaluation remain scarce.

Objective: To assess the timeliness and availability of dermatology appointments for a 4-week-old infant with a growing facial IH using a standardized secret shopper design.

Methods: We conducted an observational simulated-patient (“secret shopper”) study of dermatology clinics across the United States. The study was reviewed by the Institutional Review Board and was determined to qualify as quality improvement and therefore exempt. Clinics were identified using publicly available directories, including the Society for Pediatric Dermatology (SPD), International Society for the Study of Vascular Anomalies (ISSVA), and the IHReS Specialist Finder. Using a standardized script, callers requested the earliest available appointment for a 1-month-old infant with a growing facial IH. Each clinic was contacted up to three times during business hours. The primary outcome was time to the first available appointment (days). Secondary outcomes included differences by clinic type (academic vs private practice), geographic region, and Medicaid acceptance.

Results: We successfully obtained first available appointment dates from 181 clinics. Among these, the average wait time to be seen was 38.7 days. Median 18 days, range 0-370 days.

Conclusion: Early dermatology referral is essential for optimal IH outcomes, yet this data suggest substantial delays in appointment availability nationwide.

B30**Sofia Perez B.S.**

Advisor(s): Kristina M. Derrick M.D.,ScM

Co-author(s): Olumide Arigbede, DrPH, MPH

Thromboembolic Adverse Events Associated with Combined Oral Contraceptive Use in Adolescent Girls Aged 12 - 17: A 2005 - 2024 Faers Database Study

Background: Combined oral contraceptives (COCs) are commonly used for hormonal management of acne vulgaris in adolescent girls and women. Although drospirenone-containing COCs demonstrate superior anti-androgenic properties compared to other progestin formulations, concerns exist regarding elevated venous thromboembolism (VTE) risk in vulnerable patient population. Limited evidence exists characterizing VTE safety profiles in adolescents using COCs for acne treatment.

Methods: We conducted a disproportionality analysis of the FDA Adverse Event Reporting System (FAERS) database querying VTE reports in adolescent females aged 12-17 years between January 2005 and December 2024. Six representative COC formulations were analyzed: four FDA-approved products for acne (drospirenone/ethinyl estradiol [Yaz], drospirenone/ethinyl estradiol/levomefolate [Beyaz], and norgestimate/ethinyl estradiol [Ortho Tri-Cyclen, Sprintec]) and two agents used off-label (norethindrone acetate/ethinyl estradiol/ferrous fumarate [Loestrin, Estrostep Fe]). Reporting odds ratios (RORs) were calculated to assess VTE signal strength. Spironolactone, an alternative anti-androgenic therapy, served as a comparator.

Results: Drospirenone-containing formulations demonstrated substantially elevated VTE reporting signals compared to alternative progestin-containing COCs: Yaz (ROR 93.2, n=355 reports), Beyaz (ROR 125.3, n=28) versus Ortho Tri-Cyclen (ROR 10.8, n=9), Sprintec (ROR 31.9, n=4), Loestrin (ROR 26.1, n=13), and Estrostep Fe (ROR 176.0, n=1). In this age group, there were no thromboembolic events reported for spironolactone. These findings are consistent with existing studies published on disproportionality analyses encompassing all age demographics. Consequently, this study indicates an increased risk of VTE associated with drospirenone-containing contraceptives.

Conclusions: This pharmacovigilance analysis confirms the existence of unique VTE reporting patterns that favor non-drospirenone COCs.

B31

Ugwumsinachi Nwaubani M.S.

Advisor(s): Sharon Glick M.D.

Co-author(s): Dr. John McGovern

Representation of Infantile Hemangiomas in Educational Resources: A Content Analysis

Introduction:

Infantile hemangiomas (IH) are the most common pediatric vascular tumor, typically appearing within the first few weeks of life. Despite their prevalence, there is a deficiency of research examining their clinical presentation and management in patients with skin of color (SOC).

Objective:

The authors aimed to quantify the representation of SOC in educational resources for IH.

Methods:

The authors reviewed images of IHs from textbooks and internet-based educational resources. Each image was categorized as non-SOC (Fitzpatrick skin types I-III) or SOC (Fitzpatrick skin types IV-VI). Images were compared to the reported disease prevalence in SOC populations (~40%) and the overall U.S. SOC population (~40%).

Results:

Of 230 unique images, 13 (5.65%) depicted SOC, substantially lower than the 40% ($p < 0.0001$) prevalence estimates. SOC representation between resource types showed no statistically significant difference between the two resource types.

Limitations:

Limitations include nonexhaustive resource selection and image heterogeneity that may affect interpretation.

Conclusion:

SOC is strikingly underrepresented in educational materials on IHs. This deficit reveals a systemic shortfall in reflecting patient diversity. A reflection of the true diversity of patients is necessary in order to enhance diagnostic accuracy, reduce disparities, and ultimately improve outcomes for all children.

B32

Ugwumsinachi Nwaubani M.S.

Advisor(s): Sharon Glick M.D.

Co-author(s): Dr. John McGovern

Community Hair Care Practices and Scalp Health Concerns: A Cross-Sectional Survey of Skin of Color Populations

Introduction/Background:

Hair practices in skin of color communities are culturally rooted and may influence scalp health. The authors aimed to quantify hair care behaviors and practices of residents of central Brooklyn.

Methods:

A community-based, cross-sectional survey (n = 204) was conducted and descriptive statistics summarized prevalence. Chi-square tests with Cramer's V statistically assessed associations between demographic and behavioral variables.

Results:

Of 204 respondents, 86.8% were female and 62.3% identified as Black/African American. 73% of respondents reported hair concerns in the past 6 months. Black/African American respondents reported seeking professional help from dermatologists 10% less than other racial groups. Top reasons for not seeking professional care included; not knowing where to go, not being bothered and trying home remedies. While race-related differences were modest, age strongly correlated with perceived problem severity; 61.5% of younger adults reported severe distress compared to 9.1% of older adults. A weak but significant link was shown between depression and scalp problems.

Discussion:

The results of this study highlight that age and cultural context shape how individuals experience and prioritize scalp health, underscoring the need for tailored care, education and equitable access.

Limitations:

Self-reported, cross-sectional data; missing responses; and small subgroups limited statistical power.

Conclusions:

In this community-based sample, hair concerns were common, yet many participants relied on informal care rather than dermatologic services. Generational differences highlight varying health priorities within the community. Integrating culturally tailored care, and accessible dermatology may reduce disparities and promote healthier scalp outcomes in underserved neighborhoods.

B33**Liora Rahmani B.A.**

Advisor(s): Miriam Lieberman M.D.

Co-author(s): Tatyana Groysman, Meryl Rosen

Axillary Web Syndrome as a Complication of a Dermatologic Punch Biopsy

Axillary web syndrome (AWS) is a condition which involves the development of visible linear bands of firm tissue, commonly referred to as cords, in the axilla and arm. It is often associated with pain and a limited range of motion in the shoulder and arm. AWS is most commonly reported in breast cancer patients who have undergone axillary lymph node surgery, although its exact etiology remains unclear, and cases outside this setting are rare.

We present a case of a 38-year-old female with no history of malignancy, breast surgery, or trauma, who developed AWS following a punch biopsy of a subcutaneous nodule in the right axilla. Histopathology demonstrated suppurative dermatitis. One week after the procedure, the patient reported pain with arm elevation and was noted to have a firm, rope-like plaque along the axilla. Ultrasound showed no evidence of thrombosis or phlebitis. Based on clinical findings, a diagnosis of AWS was made. The patient was treated conservatively with rest, warm compresses, and nonsteroidal anti-inflammatory drugs, with improvement over two weeks.

The presentation of AWS in this patient is unique, as it is the first reported case of AWS in an individual following a punch biopsy. This case highlights the need for further exploration of the pathogenesis of AWS and suggests that its incidence may be higher than currently reported owing to its self-limiting nature. In addition, the case demonstrates the importance of dermatological awareness of this potential complication when performing procedures in the axillary region, as its presentation is not limited to breast cancer patients who have undergone major axillary and breast procedures.