PAFP RESEARCH DAY ORAL PRESENTATION ABSTRACTS

Directory in alphabetical order by presenter

Oral Presentation, Faculty

1. ***Silent Killers: The Impact of medical trauma on health***

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In the past ten years, the understanding of stress and trauma has changed significantly. For instance, in the DSM-V-TR Stressors and Trauma related Disorders are no longer considered anxiety disorders. In the DSM-V-TR, PTSD was placed in a new diagnostic category named "Trauma and Stressor-related Disorders" showing a focus on the disorder as it relating to adverse events. The understanding of trauma being based on fear rather than anxiety is an important distinction which will guide assessment and treatment. In Family Medicine, the Adverse Childhood Experience (ACE) questionnaire has gained notoriety to address stressors and trauma. However, the stress associated with medical conditions and treatments has not been adequately explored. In this presentation, we will review three cases where patients' trauma related to medical events impacted their ability to manage their current health. We will also discuss how family physicians can mitigate the effects of this silent killer on patient's overall health using evidence-based tools to assess, diagnose and aid in the treatment of traumatized patients.

Oral Presentation, Faculty

2. ***Interconception Care Delivery at Well Child Visits: An Innovative Approach to Improve Preconception Health in Pennsylvania***

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Background: Preconception care in advance of pregnancy has demonstrable effects on improving birth outcomes for women and neonates. However, several factors including unintended pregnancy and low postpartum care engagement limit its effectiveness. In the time period following childbirth, the well child visit can be an important opportunity for expanding preconception care. A model of interconception care has been established, piloted and studied by the IMPLICIT Network. In this model, mothers present at well child visits (WCVs) for children age 0-24 months are screened for modifiable risk factors including smoking, depression, multivitamin use and family planning.

Methods: There are 14 Family Medicine sites across Pennsylvania which form the PA collaborative for the IMPLICIT Network. From January 2016 to December 2021, 9,313 mothers were screened at 39,394 WCVs across these sites. Providers offered interventions to mothers who screened positive for any of the four risk factors. IMPLICIT ICC data were documented in the child's medical record. Maternal demographic information and data were extracted, de-identified, and shared using the REDCap database.

Results: From 2016-2021, 9,313 parent/infant dyads representing 39,394 WCVs occurred. Overall, interconception care screening occurred at 80.0% of visits. Specifically, birth mothers were screened for depression (91.4%), smoking (84.0%), contraception use (76.1%) and multivitamin use (56.8%). Across the Pennsylvania collaborative, 65% of mothers screened positive for at least 1 of these 4 risk factors. Interventions to improve these health behaviors were performed in the majority of cases when a risk was identified: depression (91.4%), smoking (84.0%), contraception use (76.1%), multivitamin use (56.8%).

Conclusions: Our findings provide evidence for a practical opportunity to incorporate preconception health as part of well child care to improve maternal health outcomes in Pennsylvania. This presentation will describe the mechanics for data collection and quality improvement.

Oral Presentation, Resident

3. ***Knowledge, Attitude, and Practices of PCPs Regarding Utilization of GAD-7 Tool in Management of Generalized Anxiety Disorder***

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Generalized anxiety disorder (GAD) is a common psychiatric illness that primary care providers encounter in outpatient settings. Generalized Anxiety Disorder 7-Item (GAD-7) screening tools allow physicians to diagnose GAD and classify it based on severity: mild, moderate, and severe. GAD-7 screening tool converts the patient's subjective anxiety level into measurable objective data that primary care providers can use in their practice. This objective data can then be used to track anxiety levels over time and in response to treatment. However, many primary care providers sub-optimally use GAD-7 in their practice. This study aims to determine the knowledge, attitude, and practices (KAP) of GAD-7 usage in the management of GAD by primary care providers in both urban and rural outpatient settings. Study Design: This is a Cross-sectional survey conducted where a self-administered questionnaire was given to Primary care physicians both in the Wellspan urban and rural outpatient clinical settings to assess their KAP of GAD-7 usage in the management of GAD. Results: Of total, 97% of the responding family physicians were knowledgeable that GAD-7 tool is utilized for screening and treatment monitoring of GAD but only 62.7% of the total respondents were extremely likely to utilize GAD-7 screening and monitoring tool. Only half of the respondents stated that if given opportunity their health care organization, clinical setting and clinical management is extremely likely to encourage the use of the GAD-7 tool. Less than a quarter of the total respondents utilize objective score for the future management of GAD with significantly more residents utilizing the objective score for GAD7 compared to attendings ($p<0.05$). Conclusion: There is suboptimal use of GAD-7 despite good knowledge in a large integrated health system in Central Pennsylvania. Further studies are needed to determine the underlying factors that contribute to suboptimal usage of GAD-7 to increase usage in future.

Oral Presentation, Resident

4. ***Intrauterine pregnancy with embedded cervical intrauterine device - A management dilemma***

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Introduction: Long-acting reversible contraceptive methods are known to be highly effective, safe, and popular. However, despite its effectiveness, pregnancy can occur. An essential factor is misplacement or luxation of the device itself. Pregnancy with a retained IUD has multiple risks including, but not limited to, spontaneous and septic abortion, premature rupture of membranes (PROM), placental abruption, preterm delivery (PTD), and chorioamnionitis. Although there is literature on how to approach a retained IUD during pregnancy, an embedded cervical IUD poses unique challenges.

Case: A 21 y/o G2P1001 presents to the emergency room 6 months after IUD placement for intermittent, non-radiating abdominal cramping, missed menstruation, nausea, and vomiting.

Her urine pregnancy test is positive and transvaginal ultrasound significant for an IUD in the lower part of the cervix. Subsequent hCG and ultrasound scans confirm an intrauterine pregnancy. After MFM referral, multiple manual attempts to remove the IUD remain unsuccessful. Ultrasound-guided hysteroscopy is attempted but unsuccessful. Risks and benefits of conization followed by cerclage are considered but deferred. After shared decision making, the IUD is left in place and cervical length reassessed along with anatomic survey. There are a few episodes of vaginal bleeding and microcytic anemia is managed according to standard obstetric practice. Pregnancy remains viable at 25 weeks with routine obstetric care.
Conclusion: Management guidelines are available concerning IUD removal and in situ retention in pregnancy, with removal generally favored early in pregnancy especially when IUD strings can be visualized vaginally. This, however, does not come without complications. The embedded cervical IUD poses distinct challenges to the practitioner. Our case report aims to project light on different management options based on clinician experience and joint decision-making.

Oral Presentation, Resident

5. ***Integration of an Innovative Community Medicine Curriculum***

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Statement of Purpose: The purpose of this study is to evaluate the effectiveness of a novel Community Medicine curriculum. The curriculum is designed to introduce physicians to the concept of addressing the specific needs and challenges of providing healthcare to patients in a rural setting and gaining an elementary understanding of population health. The specific goals of the curriculum included:
- Identify and understand community health needs of our rural area
- Train residents in diversity and inclusion
- Introduce residents to the curriculum and hospital requirements
- Familiarize residents with available community resources
- Orient residents to Family practice staff, faculty, and offices
- Promote camaraderie and communication within inter-professional teams
Methods:
1) A retrospective study was achieved of first year residents (N = 4) who all completed a Community Medicine rotation. The survey evaluated whether the rotation met its objectives; what was liked or disliked about the rotation; and what should be changed or remain the same in the rotation.
2) A review of Pennsylvania Family Medicine Residency program websites was undertaken to identify if the programs include a Community Medicine rotation in their curriculum.
3) A literature review of articles regarding Community Medicine curriculum in Family Medicine Residency Programs was completed.
4) A future survey of Pennsylvania Family Medicine Residency programs regarding Community Medicine curriculum will be completed.
Results:
1) Survey found that all PGY1 (n=4) stated they would "highly recommend" incorporatingthis Rotation permanently in the curriculum.
2)Of the 51 Family Medicine Residency programs in Pennsylvania, 31 programs appear to have A Community Medicine rotation. A future surveyof the PA programs will be undertaken.
3)Literature review found that programs value Community Medicine rotations because they increase their residents' knowledge of available resources.

Oral Presentation, Resident

6. ***Comparable Telemedicine And Office-Based Quality Performance Across 16 Primary Care HEDIS Measures In A Large Integrated Health System***

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Purpose: Telemedicine has been broadly adopted during COVID-19 without clear evidence of its quality in value-based healthcare. Our objective was to compare standardized quality measures between telemedicine and office in a large integrated health system.
Methods: This retrospective cohort study compared graded exposure to telemedicine (office-only, blended, and telemedicine-only) across 16 National Quality Forum HEDIS measures from 03/1/2020 - 11/30/2021. SlicerDicer mined data across 200+ sites in Pennsylvania. A historical 1.5-year (pre-pandemic) baseline for quality performance was established. Chi-squared tests determined statistically significant (P <0.01) differences between exposure groups. Multivariable logistic regression adjusted for the odds of receiving preventive services based on sociodemographic factors and comorbidities.
Results: There was comparable sociodemographic distribution among the 523,874 patients meeting inclusion (409,732 office, 112,199 blended, 4,943 telemedicine). Between highest performing exposure groups, statistically significant differences favored blended-telemedicine in 11 of 16 measures (cardiovascular: blood pressure 7.84%, lipid panel 7.63%; diabetes: HbA1c 6.06%, nephropathy testing 9.98%; prevention & wellness: cervical cancer 12.98%, breast cancer 17.90%, colon cancer 8.80%, tobacco intervention 13.29%, influenza vaccination 10.39%, pneumococcal vaccination 5.77%; behavioral health: depression screening 5.07%) and favored office-only in 2 of 16 measures (cardiovascular care: antiplatelet 6.55%, statin 1.75%). There were insignificant differences for 3 of 16 measures (cardiovascular care: beta blocker 1.08%, P = 0.1741; diabetes: statin 0.93%, P = 0.0406; pulmonary: antibiotics in bronchitis 0.27%, 0.9167).
Conclusion: This study provides early, favorable evidence of telemedicine's quality across a range of standardized primary care performance measures. A blended telemedicine and office approach might promote higher value care.

Oral Presentation, Student

7. ***FMIG Outreach Program to Improve Mammogram Rates***

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Statement of Purpose: To determine if a community outreach initiative improves rate of mammogram completion in our FQHC-LA.
Methods: This is a single-center study approved by the institutional review board. Utilizing the quality metric dashboard, we identified patients who meet screening criteria for their mammogram and have not yet had it completed. These patients were systematically telephoned by student volunteers in our local FMIG chapter. A survey was designed to assess patient demographics, understanding of recommendations, barriers to screening and impact of COVID-19 on their choice/ability to screen. Patients were given resources and information to schedule a mammogram at the end of the phone call.
Results: Our initial list was comprised of 311 women who are overdue for their mammogram based on USPSTF recommendations. Of these 37 women (11.9%) agreed to participate in the

survey questions. Participants reported that major barriers to screening include time/availability (33.3%), transportation needs (19.4%), cost (5.6%) and inadequate understanding of recommendations (2.8%). 25.7% of participants reported that the COVID-19 pandemic has impacted their ability/choice to obtain mammogram screening. 51.4% of participants stated that they would be interesting in scheduling a mammogram after the survey. To date, our rate of mammogram completion has not changed.
Discussion: Data was reviewed over a 6-month period. Low survey participation limited the power of this study. From the collected data, we propose that the clinic can continue to work on patient education on this important screening exam, assess for SDOH barriers and connect patients with services available to overcome said barriers. Future outreach attempts should be tailored to a variety of communication styles.

Oral Presentation, Student

8. ***Primary Care TLC***
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Primary care physicians are in an unique position not only to provide Trauma Informed Care, but also counsel patients in Lifestyle Medicine, and be at the Center of Patient's Health. For the purpose of this presentation, TLC (Trauma Informed Care, Lifestyle Medicine and Center of Patient's Health), is defined as the understanding of the impact of psychological trauma in patients, families, and staff. Here, we seek to integrate knowledge about trauma into family medicine practices, policies, and procedures. To best care for patients, we also incorporate lifestyle medicine in our medical approach. "Lifestyle Medicine" in this context is the use of evidence-based behavioral interventions to prevent, treat, and manage chronic disease. Consequently, in this presentation, we will address how the three components of TLC match the competency-based developmental outcomes (milestones) for family physicians. We will use a case study to illustrate how TLC components can be integrated into family medicine curriculum

Oral Presentation, Student

9. ***Impact of Interprofessional Team Interventions on Diabetes Outcomes***
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Over 34 million American adults have diabetes, costing approximately $327 billion annually. Despite treatment advancements, patient adherence and education remain major barriers to controlling the disease. Our study aims to evaluate the benefits of incorporating clinical pharmacist intervention in the treatment of uncontrolled type 2 diabetes, defined as HbA1c =9%. Patients with uncontrolled diabetes are referred by their primary care providers (PCPs) to the clinical pharmacist to assist with medication management and education based on current treatment recommendations. The goal of this pilot program is to decrease the number of patients in the practice with uncontrolled diabetes by 5% over 12 months.
Patients with HbA1c =9% are identified quarterly by our value-based metric score card provided in our Electronic Medical Record. The front desk contacts these patients to schedule with their PCP, if not seen in 3 months. The PCP initiates a standing order for clinical pharmacy referral. Patients then meet with the clinical pharmacist in various intervals. They undergo medication review, optimization, and treatment counseling. HbA1c is reviewed in quarterly intervals and compared to controls who receive "Best Care" from their PCP alone.

We identified 104 patients in the practice with HbA1c =9% at index (n=29 in intervention group and n=75 in control group), compared to 75 patients at six months (n= 19 in intervention group and n=56 in control group). Among the patients included in a six-month analysis, the mean HbA1c improved by 1.7% in the intervention group and 0.8% in the control group. In addition, 62% of patients in the intervention group achieved HbA1c <9% compared to 40% in the control group.

These preliminary findings suggest the addition of a clinical pharmacist into the interprofessional team can improve care in patients with diabetes. Future studies should investigate its impact on cost savings, emergency department visits, and hospitalizations.