

Department of Family Medicine and Public Health Sciences' 4th Annual [Virtual] Research Day

April 15th, 2020



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School of Medicine

Department of Family Medicine
and Public Health Sciences

This year's Department of Family Medicine & Public Health Sciences Research Day has transitioned to a virtual event due to the current public health crisis facing the world. The coronavirus pandemic has brought the relevance and importance of public health into sharp focus. Our clinical faculty and residents deserve our accolades for being on the front line of patient care in these unprecedented times. It is through the lens of these rapidly evolving, uncertain events that we share with you the scholarly work of our students, trainees, and department. The theme for this year's event – "Preventing Violence" – was selected to align our focus with that of the American Public Health Association's (www.apha.org) theme for 2020. Our keynote panel was to feature three local public health programs whose mission is to prevent violence. In addition, we hoped to share the scholarly work of our MPH students, family medicine residents, faculty, and colleagues within the broader Warrior community in the pursuit of greater and more equitable public health. These presentations highlight the high quality, cutting edge research our department conducts that contributed to our rise to 7th nationally in NIH research funding. Thank you for taking the time to visit our virtual event page. I hope you find our work informative and inspiring, and the resources useful.

Tsveti Markova, MD, FAAFP

Our Vision

The Department of Family Medicine and Public Health Sciences will promote health equity and well-being of individuals, families and communities.

Our Mission

The Department of Family Medicine and Public Health Sciences will improve health and well-being by advancing the science and practice of Family Medicine and Public Health through innovation, interdisciplinary collaboration, and excellence in partnership with our communities.

Our Core Values

*Excellence, Collaboration, Innovation, Integrity
Diversity & Inclusion, Social Justice*

Educational Programs

*Master of Public Health Program
Medical Student Education Program
Family Medicine Residency Program
Transitional Year Residency Program
Preventive Medicine Residency Program*

Research Divisions

*Population Health
Behavioral Sciences*

Research Day Planning Committee

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Abstract Key

	Projects that have been or will be accepted and/or presented at a national conference
	Projects that represent this year’s theme, <i>Preventing Violence</i>
*	Denotes faculty mentor

Oral Presentations

Of all abstracts submitted for the 2020 DFMPHS Research Day, two were selected by the Research Day Committee as excellent overall abstracts. These student authors are awarded with the opportunity to deliver an oral presentation.

Increasing Physician Confidence And Consistency In Controlled Substance Prescribing Via Education And Office Policy

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Department of Family Medicine

Opiate overdose deaths are rising within the United States. Regardless of schedule classification, all controlled substances (CSs) come with misuse risk. In 2017, Michigan legislation was enacted to require prescribers to be in a “bona fide” prescriber patient relationship prior to prescribing CSs. Additionally, patients receiving Schedule II opiates must sign an “Opioid Start Talking” (OST) form which outlines risks of opioids. CDC guidelines recommend that patients on opioids have periodic urine drug screens (UDSs). With multiple levels of institutionalized recommendations, many physicians report concerns about insufficient training in prescribing CSs. The PDSA model (Plan, Do, Study, Act) was used for this quality improvement initiative, which aimed to increase physician confidence and consistency in CS prescribing to 90%. We focused on increasing rates of signed CS agreements, signed OST forms and obtaining UDSs. The prior office CS policy at a community Family Medicine residency clinic was revised to include requirements for an annual UDS, signed CSA and OST (if Schedule II CS) prior to issuing any prescription. Prescribing patterns for a 3-month period prior to office policy revision were analyzed for compliance. Using a presentation during our monthly staff meeting, we educated physicians on state law and our updated office policy. The education included interactive scenarios, a review of state law and institutional mandates. Post-intervention, we reviewed one-month CS prescribing patterns to assess for increased compliance with the updated policy. A survey assessing physician comfort and knowledge in CS prescribing was administered pre and post-intervention. Of the pre-intervention CS prescriptions (n=123), 71% had documented CSAs and 63% had documented UDSs. 36% of the Schedule II opiate CSs prescriptions (n=17) had a completed OST form. Of the post intervention prescriptions (n=47), 74% had documented CSAs and 76% had documented UDSs. OST implementation increased to 40%, albeit the 3sample size was small. Prior to the pre-intervention survey (n=22), 23% of physicians (n=5) reported they strongly felt comfortable prescribing CSs, 36% (n=8) felt they strongly understood state laws and 36% (n=8) felt they strongly understood office policy for prescribing CSs. Post-intervention survey (n=17) of the same physicians showed 41% (n=7) felt strongly comfortable prescribing CSs, 64% (n=11) felt strongly that they understood state laws and 59% (n=10) strongly understood office policy for prescribing CSs. It can be a challenge for physicians to know how to legally and safely prescribe CSs. Our study showed that an education intervention, coupled with a clear CS prescribing policy, can effectively increase physician confidence in prescribing CS. Our method can potentially be used as a model for other clinics. Future direction for our project includes monitoring for long-term efficacy of our intervention, educate physicians and office staff and train MAs to review patient’s charts and assist physicians in following CS office policy. Creating a concise CS office policy and improving consistency in CS prescribing practice may have a positive impact on decreasing CS misuse and prevent patient harm.

Examining The Relationship Between Neighborhood Adversity And Glycemic Control Among Adolescents With Type 1 Diabetes

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Department of Family Medicine and Public Health Sciences

African American youth with Type 1 Diabetes residing in urban communities of the U.S. demonstrate poorer glycemic control. In addition to difficulty adhering to a complex care regimen, glycemic control is influenced by multiple factors. Recent literature highlights the importance of stressors in the social environment, such as one’s neighborhood, on diabetes outcomes. This study examines the relationship between neighborhood adversity and glycemic control among African American adolescents. We hypothesized that higher levels of neighborhood adversity would be associated with poorer glycemic control in African American adolescents (10-16 years) with Type 1 Diabetes. Baseline data from a longitudinal intervention study in Detroit and Chicago were examined. Glycemic control was measured by Hemoglobin A1c (%), which is a measure of an individual’s average blood glucose over the previous two to three months. A percentage greater than 7.5% indicates poor glycemic control in adolescents. Neighborhood adversity refers to a greater proportion of combined socio-economic stressors in the area where one lives. Neighborhood adversity was measured using the Neighborhood Adversity Index (NAI), which is composed of 9 indicators of adversity derived from U.S. Census block group data, such as poverty rate and percentage of vacant homes. Pearson’s correlation demonstrated a correlational relationship ($r = 0.310, p < 0.001$) between HbA1c and NAI scores, suggesting adolescents had greater HbA1c levels when they lived in neighborhoods with greater adversity. A scatter plot was created to help visualize this correlation. Results warrant further study to understand the mechanisms by which higher levels of neighborhood adversity lead to poorer glycemic control in adolescents. For example, youth in neighborhoods with higher adversity may experience more stress, resulting in poorer diabetes care behavior. This study is among the first to explore the relationship between neighborhood adversity and A1c levels among youth with Type 1 Diabetes. One limitation of this study is the use of correlational data. Future studies should investigate the relationship between these variables using a causal design to confirm that living in a neighborhood with greater adversity contributes to elevated HbA1c. Additionally, other factors which might interact with neighborhood adversity such as individual and family stressors, should be explored. Research on interventions to reduce or ameliorate the effects of neighborhood adversity should also be conducted to understand how to best address this critical factor in child health.

Scrolling Presentations

Improving Resident Wellness Through A Formal Wellness Curriculum

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Department of Family Medicine and Public Health Sciences

Physician suicide, depression, and burnout are at an all-time high. A Wellness Curriculum, codeveloped by residents and clinical faculty, is currently being implemented within the Wayne State Family Medicine (FM) and Transitional Year (TY) Resident Programs. This evaluation explores implementation of this curriculum and its impact on resident wellness over a one-year period. The Wellness Curriculum includes: 1) monthly wellness events outside of work, 2) structured wellness breaks (30-45 minutes) during didactic blocks, and 3) a wellness library of books and games. Feasibility and acceptability of curriculum components are measured by 1) attendance and frequency of wellness events and didactic breaks and 2) a log of books and games checked out of the library. At the end of the year, residents used a 0(low)-10(high) Likert scale to rate satisfaction with each component of the curriculum. Residents anonymously completed The Wayne State University Resident Wellness Scale at baseline(T1) and every 3 months thereafter for a year (5 total). The Wellness Scale includes 10 items with response choices of 1(never) to 5(very often) and produces a Total and two subscale (Self-Care and Meaningful Work) scores. Total Score < 3.5 suggests wellness deficiency. Changes of ± 0.4 are considered meaningful. Responses were examined for all residents by sex, cohort, and program. During the 2018-2019 academic year, 9 wellness breaks and 6 wellness events occurred. Two wellness breaks were held outside the hospital and 7 during didactics. Wellness breaks that occurred during lectures had 100% of expected resident attendance, whereas attendance at the two outside events was less (43% and 70%). On average, wellness events were attended by 57% of the residents with conflicting rotations noted as the primary attendance barrier. Additional wellness events were not scheduled due to lack of reimbursement challenges. Six residents accessed the Wellness library, checking out 12 books and 15 games. Residents (n=13; 57%) reported moderately high satisfaction with wellness events (8.85+1.23), breaks (8.38+2.10), and the library (8.62+1.94). The following wellness deficiencies were observed over the course of the academic year: total wellness for males (-0.41) and PGY3 cohort (-0.45) and meaningful work for females (-0.47) and PGY3 cohort (-0.81). Wellness improvements were observed in Self-Care for female (+0.41) and TY (+0.75) residents. Our data suggest that while residents were satisfied with the Wellness Curriculum, modifications are necessary to improve attendance at wellness events and use of the wellness library. In response to this data, wellness events and breaks in the 2019-2020 academic year were tailored based upon resident suggestions. We are also conducting interviews to inform next steps for improving meaningful work for female residents. Finally, we continue to survey resident wellness and satisfaction with the wellness survey. Physicians are more likely to commit suicide than non-physicians. Depression rate among first year residents increase 20% by the end of their first year. Some aspects of this project may be utilized to evaluate wellness in other populations outside of medicine.

Assuring Appropriate Documentation Of Fluid Status In Hospitalized Heart Failure Patients

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In the United States, heart failure (HF) exacerbation is the most common diagnosis among hospitalized patients age 65 and older with an annual cost of over \$21 billion. Heart failure can result in fluid accumulation and retention in patients, the cornerstone of HF treatment is diuresis; thus, closely monitoring fluid intake and output (I's & O's) is critical to tracking the clinical status. Previously, we found that providing education to nursing staff and placing reminder signs in patient rooms increased I&O documentation from 23% to 72 to 79%, respectively. However, over the year following this intervention, I's & O's documentation fell to 20%. This next phase of our quality improvement initiative examines whether nursing education supplemented by the department of cardiology improves the rate of I&O documentation. The hospital chief of cardiology, and the cardiology physician assistant (PA), provided a thirty-minute educational presentation emphasizing the clinical importance of I's & O's documentation, and instruction on accurately collecting this data. This presentation was completed with the nurses on each hospital ward. Initial intervention included disseminating a list of patients each morning with HF on each ward to nursing staff by nurse managers, and visual aid reminders outside the rooms of these patients. Following this intervention, data was collected from HF patients during a one-week period, and compared to a baseline of I's & O's measurements. Intake and output documentation was examined separately. Successful documentation was defined as having a numerical value recorded in the EMR. After implementation the above interventions, I's were successfully documented in 93% of 12 hour shifts and O's were recorded in 65% of shifts over a one-week time period. Accurate documentation of I's and O's is necessary to deliver proper care to HF patients. Documentation of I's & O's before intervention were highly inadequate resulting in subtherapeutic diuresis of heart failure patients, which could potentially contribute to higher readmission rates after discharge. Improvements in accurate documentation will play a significant role in inpatient HF management, decrease readmission rates, and improve overall treatment during the hospital stay. In the short-term, education appears to be an effective intervention to increase EMR documentation of I's and O's. Next steps include examining additional strategies that increase documentation of outputs, and protocols that ensure accurate documentation of fluid status is maintained longitudinally. Approximately 6 million adults in the United States have heart failure, resulting in 11% of all deaths nationally. More than 20% of patients hospitalized with CHF are readmitted within 30 days, and up to 50% by 6 months.² Proper documentation of the I's & O's could result in decreased readmission rates, overall costing savings, and ultimately much better clinical outcomes for HF patients.

How To Teach Health Disparities In A Family Medicine Residency: A Resident-Led Interactive Approach

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Department of Family Medicine and Public Health Sciences

Health disparity is the difference in health outcomes between populations and is closely tied to social determinants of health (SDOH), which include income, demographics, housing, and access to social resources. Family Medicine Residents provide care to socially disparate groups, yet education on health disparities during residency is lacking nation-wide. An interactive didactic series designed to address this deficit may increase resident knowledge and comfort in addressing health disparities with their patients. We designed and are implementing such a curriculum at the Wayne State Family Medicine Residency. Objectives were measured with a survey assessing residents' comfort and confidence screening for and discussing SDOH, as well as their understanding of health disparities, and a quantitative measure of knowledge in the form of a quiz. Then, an interactive curriculum was developed and implemented with primary goals for residents to define and recognize health disparities in a global and local context, understand their impact and significance on health outcomes, and develop skills to begin managing these issues. The curriculum will conclude in June 2020, and residents will be re-assessed for change. All 16 eligible family medicine residents responded to the pre-intervention survey. 50% had prior experience with health disparities in medical school and 19% had on-the-job training. 88% felt health disparities are one of the top 5 most important issues facing medicine today. However, only 19% felt very knowledgeable about health disparities, 31% felt very comfortable discussing it with their peers, and 19% with patients. The mean score on a 10-item quiz about health disparity in the US was 31%, with a high score of 40% and a low of 10%. Eight of the ten subsequently developed sessions have been implemented as of publication. Increasing residents' comfort and confidence in addressing health disparities with their patients is crucial to improving patient outcomes. In addition, social determinants of health are a major public health concern and an aim of the Healthy People 2020 initiative. These often-sensitive topics require an interactive approach and we hope to use our curriculum to reduce the knowledge and skill deficit we identified. In the future, we will implement a curriculum permanently, break down sessions by resident level of training, and continue to involve more faculty from the Public Health Department of Wayne State.

Respiratory Inhaler Education In A Family Medicine Residency Program

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Chronic Obstructive Pulmonary Disease (COPD) is a progressive life-threatening lung disease that affects more than 16 million Americans. Misuse of respiratory inhalers and medication non-compliance increases risk for exacerbations and hospitalizations. This QI project focuses on improving respiratory inhaler education in a family medicine residency program through an educational series, continuing from Plan Do Study Act (PDSA) 1 and 2 completed in 2018/2019 academic year. In PDSA 1/2 we assessed self-confidence level (CL) on inhaler teaching before and after watching general and specific inhaler education videos. We saw a slight increase in self-reported confidence level post intervention. Residents were also given a task to correctly list the proper inhaler steps using a Qualtrics survey. We found that after two educational video session only 22% of residents listed the steps correctly demonstrating that videos alone were not enough to improve resident education, leading to PDSA 3. The purpose of PDSA 3 is to improve family medicine resident knowledge on respiratory inhaler use by providing a two-part hands-on educational series.

Didactic lecture time was scheduled for the educational series that focused on COPD management, hands-on demonstration of common respiratory inhalers and a hands-on practical session. Residents reported their CL on teaching proper inhaler techniques to patients before and after the intervention using a 0-10 (10=very confident) scale. In the first session, we presented a general review of COPD management focusing on the 2 common inhalers that residents were able to practice with. Three weeks later residents attended a practical session for inhaler teach-back where they were given both inhalers and were instructed to demonstrate inhaler technique in a step-by-step fashion to a member of the QI team. The inhalers required 7-8 steps. Residents were graded objectively using a standardized rubric; one point was given per correct step.

Prior to PDSA 3, the average for self-reported CL among residents was 6.2. Post intervention average increased to 9.0. The average score for hands-on practical was 93%. 62.5% of residents scored 90% or greater on the practical. We did not find a commonality among missed steps. Our two-session educational series was successful in increasing resident CL in teaching inhaler use to patients. Across PDSA cycles to date, our work shows that greater gains in confidence and skill were achieved by hands-on compared to didactic and video-based training. We plan to incorporate this educational series into our didactics yearly. Future goals are to investigate how this respiratory inhaler education impacts COPD patients in our family medicine clinic.

Healthcare providers working with patients who use inhaled medications have an essential role in patient education. Further improving resident physician training in this area may minimize common medication use errors and improve patient medication adherence.

Patient Activation Measure As An Assessment Tool for Blood Pressure Control In A Randomized Controlled Trial Of Enhanced Emergency Department Discharge

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AchieveBP is a Randomized Controlled Trial (RCT) that tested the effectiveness of a health education intervention in a population of patients discharged from the Emergency Department (ED) with uncontrolled blood pressure. The RCT was designed based on the Information-Motivation-Behavioral skills model with the assumption that information and motivation will play a role in determining blood pressure control outcomes. Chronic disease management has increased the focus on improving patient activation by addressing knowledge, skills, and confidence that impact clinical outcomes. The Patient Activation Measure (PAM)[®] is a validated tool assessing patient levels of activation according to a scale of (1) least activated to (4) most activated. The levels are described as (1) awareness of responsibility to manage health, (2) confidence in knowledge about health, (3) ability to take medication, or (4) maintenance of health under stress. The primary aim of the study was to determine if enhanced discharge from the ED using a health education kiosk-based intervention would improve blood pressure control. The secondary aim was to explore patient activation. AchieveBP was conducted according to the Consolidated Standards of Reporting (CONSORT) guidelines for patient recruitment, consent, and enrollment. In addition to blood pressure measurements, patients completed a 13- item PAM[®] assessment at baseline with follow-up at 30 days, 90 days, and 180 days. This study addresses only baseline data. 139 patients were enrolled and randomized, with equal distribution between intervention and control groups. All participants were African-American, with a mean age of 47 years. About half were male (n=71, 51%) and half female (n=68, 49%). The majority of patients (n=109, 78%) had at least a high school degree/GED and 22% (n=30) had an Associate degree or higher. PAM[®] scoring was completed with an active sample of 128 patients, about two-thirds (n= 79, 62%) of whom were in level 3 or level 4, action/maintenance levels indicating they perceive they had the ability to take and maintain action regarding their BP. Over a third of patients (n=49, 38%) were scored at lower levels, reflecting knowledge gaps and limited self-management skills. In preliminary analysis it appears that about one-third of patients could be candidates for additional interventions regarding their blood pressure control. PAM[®] could thus help identify patients who would benefit from primary care linkage. As acknowledged in Healthy People 2030 and the 2017 American College of Cardiology/American Heart Association Guidelines for the Prevention, Detection, Evaluation and Management of High Blood Pressure in Adults, African-American patients remain at high risk for uncontrolled blood pressure and could thus benefit from additional research regarding patient activation and motivation.

Beyond Timing And Counting Prenatal Care Visits: Assessment Of Prenatal Care Quality In A Cohort Of Pregnant Black Women In Metro Detroit

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Beyond timing and counting visits, there has been little attention to the quality of prenatal care. Quality has primarily been evaluated through focus groups, audit indicators, checklists, observations, and exit interviews. To better evaluate quality of prenatal care, Heaman et al developed a theoretically grounded measure distinct from satisfaction measures. The Quality of Prenatal Care Questionnaire (QPCQ) was developed and validated initially on Canadian and later Australian samples. However, there are no current published studies of its use, or of any other quality assessment, in U.S. populations, much less in Black women. Our objective is to determine the internal consistency reliability of the QPCQ in a sub-sample of participants enrolled in an ongoing R01 study involving pregnant Black women. A subsample (n=113) of Black women recruited for a longitudinal cohort study at prenatal care sites in metropolitan Detroit, MI and Columbus, OH completed the Quality of Prenatal Care Questionnaire by mothers within 8 weeks postpartum. It included 46 items (5-point Likert responses) divided into 6 subscales. Descriptive statistics were used to summarize the sociodemographic characteristics and to determine subscale means and standard deviations. An internal consistency reliability of the QPCQ six subscales was assessed using Cronbach's alpha. The mean gestational age at enrollment was 17.4±6.5 weeks. The majority of the women had less than a high school education (53%), described their current financial situation as "Have enough to get by (53%), and had a household income of \$10,000-40,000 (50%). The QPCQ had a mean score of 192 ± 30 (range 46-230). The QPCQ subscales showed acceptable internal consistency: information sharing (9 items, mean 38.1±6.3, Cronbach's $\alpha=0.95$); anticipatory guidance (11 items, mean 43.9±8.5, Cronbach's $\alpha=0.85$); sufficient time (5 items, mean 18.9±2.7, Cronbach's $\alpha=0.89$); approachability (4 items, mean 8.2±3.0, Cronbach's $\alpha=0.53$); availability (5 items, mean 21±3.8, Cronbach's $\alpha=0.92$); support and respect (12 items, mean 50.6±8.9, Cronbach's $\alpha=0.96$). Except for the "approachability" subscale, with a Cronbach's α of 0.53, our results were similar to published findings on internal consistency reliability for the QPCQ from Canadian and Australian samples. We plan to use this instrument in identifying factors related to higher quality prenatal care. Black women are at the higher risk for adverse pregnancy outcomes (e.g., preterm, birth) and lower rates of timely prenatal care initiation and lower quality of prenatal care compared to White women. Using a reliable instrument to measure prenatal care quality has the potential to identify protective factors to improve maternal and child health among Black families.

Poster Presentations

Translating an Efficacious Illness Management Intervention For Youth With Poorly Controlled Asthma To Real World Settings

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Urban low-income adolescents with asthma are at risk for frequent emergency department (ED) visits and also poor asthma management, a potentially modifiable factor in reducing disparities. EDs present an opportunity for referrals for behavioral health services to improve asthma management. Electronic referral portals have been shown to improve both quality of care and patient outcomes. However, use of these portals by healthcare providers is variable. The purpose of the study was to explore barriers and facilitators to the use of an ED-based electronic referral portal for high risk urban asthmatic adolescents to a community-based agency providing home-based asthma education services. Six urban pediatric ED healthcare providers participated in semi-structured individual interviews. Interview development and subsequent coding was based on the Theoretical Domain Framework (TDF), an implementation framework consisting of 14 domains of behavioral determinants including cognitive, affective, social and environmental influences. Two ED providers conducted interviews and coded the transcribed interview data with Nvivo v12 using directed content analysis. Transcripts were independently coded to consensus with acceptable inter-rater reliability (weighted kappa=0.75, 97% agreement). Four TDF domains were relevant for understanding portal use: Environmental context/resources, Social influences, Reinforcement, Memory attention and decision processes. Environmental context/resources emerged as a barrier to portal use when it was explained that time constraints secondary to heavy workload and high volumes lead to forgetting to make referrals. Reinforcement was frequently identified as a facilitator as participants reported the need for reminders to help remember to use the portal, such as EMR-generated prompts, signage in the ED, and physician champions. Optimism about the usefulness of the portal to connect eligible families with care also emerged as a potential facilitator to its use. TDF helped elucidate several important barriers and facilitators to ED providers' use of a referral portal to behavioral care for high-risk asthmatic youth. Healthcare researchers can use the TDF to guide an evaluation of provider practices as well as both cognitive and environmental determinants of behaviors that can affect patient outcomes.

Recruitment Of Minority Families To Behavioral Clinical Trials: Identifying Hard-To-Recruit Families

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Minority youth with type 1 diabetes (T1D) are at risk for poor illness management and suboptimal glycemic control. Despite this, almost no clinical trials have targeted this high-risk population. In light of barriers to enrolling minority families into clinical trials, information is needed to characterize level of effort needed to effectively conduct such outreach and to understand the characteristics of families who are hardest to enroll. The study purpose was 1) to describe the level of effort needed to enroll urban African American adolescents with T1D and their parents into a clinical trial testing an ehealth intervention targeting illness management and 2) to investigate differences between families who were "hard-to-recruit" versus "easy-to-recruit" during initial recruitment and enrollment. Hard-to-recruit (HTR) was defined as those whose initial recruitment letter was returned due to an incorrect address, who had disconnected/incorrect phone numbers or who no-showed to their initial recruitment visit. The study was conducted at five Midwestern pediatric diabetes clinics in Detroit and Chicago. Participants were 127 African American adolescents with T1D. Mean youth age was 13.4 years and parent age was 42.4 years. 53% of youth and 89% of parents were female. Mean youth HbA1c was 11.4%. On average, 7.3 contacts (phone calls, texts, letters) were needed to enroll families. HTR families (N=44, 35%) required almost twice as many contacts ($p < .01$). 17% of the sample also required a face-to-face contact from research staff during a diabetes clinic visit in order to successfully enroll them. HTR families were not significantly different from ETR families on diabetes characteristics (duration of illness, insulin regimen, or HbA1c). Parent-reported baseline family characteristics including level of disorganization in the home and diabetes-related family conflict also did not differentiate HTR from ETR families. No significant differences were found for most demographic factors (youth age, caregiver age, or caregiver education). However, HTR families had significantly lower annual family income than ETR families (\$27,700 vs \$37,600, $p < .05$). Findings demonstrate the high level of outreach efforts required by research staff to recruit urban high-risk minority families into clinical trials. The hardest to reach families are characterized by barriers to enrollment related to poverty and may require novel approaches in order to increase their participation in research.

An Analysis Of Barriers To Clean Water Accessibility And Affordability In Detroit Communities Of Low-Ses And Correlated Health Outcomes

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As urban cities continue to make strides in the development of novel water and wastewater technologies and infrastructure, there has been a paradoxical rise in the prevalence of water and sewerage affordability issues in corresponding communities. Prior studies have emphasized the issue of water affordability in rural and impoverished communities, but there has been inadequate research delving into social determinants of water accessibility and the resulting public health disparities due to water related disease in urban households. This study seeks to address this gap in data through an analysis of financial and environmental factors that influence water affordability while also assessing the negative health outcomes associated with water insecurity. Using a retrospective cohort design, interviews and surveys are being conducted with Detroit residents with similar socioeconomic and demographic statuses that have reported or are currently experiencing water shutoffs connected to their difficulty with affording municipal water and sanitation services. The data is concurrently analyzed qualitatively and quantitatively to determine thematic frequency and significance of environmental, economic, and social risk factors as they correlate to clean water accessibility, proper waste disposal and the health outcomes on individuals, households and the public. The results of this ongoing study will provide substantial guidance for further studies to identify health risks faced by vulnerable populations and communities, as well as proposals for the creation of evidence-based policies to alleviate the burden of clean water access and affordability. Additionally, without proper diligence to these findings, we expect the magnitude of associated health risks to increase for urban citizens who are water insecure and cannot properly manage household sanitation.

The Impact Of Food Insecurity On The North End Community

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According to the United States Department of Agriculture, 11.8% of households in the United States reported food insecurity at some point in the year of 2017. The need to improve coordination among food program resources is a challenge in the North End neighborhood (48202) of Detroit, where 38.1% of households noted as participating in food assistance programs. The purpose of this field study was for a team of students in a Master's in Public Health course to collaborate with Breakers Covenant Church of the North End community, to develop a resource guide of the neighborhood food support resources available to them. Krieger's Ecosocial Theory was used to guide our project. Functional health illiteracy is a silent barrier towards accessing resources and making positive health care decisions. Difficulty in accessing food resources can be due to difficulty in reaching food services by phone, the posting of inaccurate hours of service and location, and most resources having limited weekly hours. The Urban Health Equity Assessment Response Tool (HEART) was utilized to strategize a plan to address the food inequities within this community. The student team completed a community needs assessment and identified the food insecurity, lack of healthy food options, and lack of a community food support resource. This project is ongoing; therefore, a final evaluation of this evidence-based project has not yet been completed. Field work by the student team, confirmed six food support resources accessible to the North End. All sites provided food at no cost. These establishments were visited to confirm operating hours, range of support resources, and requirements for participation, which was then added into a resource guide for the North End population. Over 2,000 individuals of the North End now have access to this resource guide highlighting the food aiding organizations within the community. Evidence-based projects such as this can provide public health professionals with the opportunity to collaborate with other disciplines and community leaders to empower those who are food insecure.

Rumination Links Negative Family Interactions To Poor Sleep Quality Among Older African American Adults

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Sleep disturbances increase with age and conflictual interactions among family members can negatively impact sleep quality. However, less understood are the mechanisms by which negative family interactions impact sleep. Drawing from the Perseverative Cognition Hypothesis, which states that repeated cognitive representations of a stressor perpetuate physiological responses to that stressor, we proposed that daily rumination (i.e., repetitive and intrusive negative thoughts) might be an intermediary for the association between negative interactions among family members and diminished sleep quality. Data were drawn from the Health among Older Adults Living in Detroit (HOLD) study, an ongoing project on healthy aging among older African American adults ($N = 109$, $M = 69.6$ yrs., $SD = 8.22$, range 50 - 89). Surveys administered at the beginning of the study were used to capture the frequency of negative family interactions experienced in the past 30 days. Global and daily subjective sleep quality were measured using both the Pittsburgh Sleep Quality Index (PSQI) and daily diaries collected over five days, respectively. Daily diaries were also used to assess rumination about adverse events over the same five-day period. In line with the Perseverative Cognition Hypothesis, rumination significantly mediated the association between negative family interactions and daily sleep quality ($b = -.20$, $SE = .11$, 95% CI [-.458, -.025]), but not global sleep quality ($b = .05$, $SE = .04$, 95% CI [-.010, .132]). That is, negative interactions with family members led to poorer daily sleep quality through daily rumination. Results held after controlling for yearly income, education, and chronic health conditions ($b = -.19$, $SE = .11$, 95% CI [-.436, -.021]). Maintaining positive interactions with close others is essential for healthy aging. The present study suggests that negative interactions can be detrimental to health among older adults by disrupting sleep quality. Further, our findings point to rumination as a potential intermediary for the association between negative interactions with family members and daily sleep quality. The current evidence enriches the growing literature suggesting that perseverative cognition can be detrimental to healthy aging by prolonging stress responses and disrupting health behaviors. Communities and clinical practices may benefit from developing interventions geared towards educating older adults about the implications of negative interactions on health and health behaviors.

Reducing Overreporting Of Hospital-Acquired Clostridium Difficile Infection By Increasing Accuracy Of Labeling Results and Decreasing Unnecessary Testing: A Quality Improvement

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Clostridium difficile infection (CDI) is a diarrheal illness caused by a bacterium that can be life-threatening. Lowering rates of hospital-acquired CDI (HACDI) is a common institutional goal because it prevents illness and the associated monetary cost, but this focus has led to increased rates of testing and overdiagnosis. In 2018 and 2019 Ascension Providence Rochester Hospital was considered “far from target” for HACDI by the National Health Safety Network, which is concerning because hospitals in the bottom quartile lose 1% of all discharge reimbursement funds from Medicare. A quality improvement initiative was recently launched to address this concern. The critical first step of this process is to review internal records for accuracy of reported HACDI cases. Hospital policy for CDI Testing and the Infectious Disease Society of America definitions of HACDI were applied to determine whether HACDI cases at our hospital were (1) confirmed, (2) mislabeled or (3) indeterminate. Of the 34 reported cases of HACDI from 2018-2019, 16 were confirmed, 18 were mislabeled, and 2 cases were indeterminate. Mislabeled cases were due to inaccurate diagnosis and inappropriate testing. Inaccurate diagnoses were made when patients staying in the rehab unit were labeled ($n=3$), when patients had diarrhea on the day of admission indicating a non-hospital acquired CDI ($n=2$), and when laboratory testing ruled-out HACDI ($n=8$). Cases that showed inappropriate testing ($n=2$) were due to laxative use within 48 hours of testing. The two indeterminate cases were due to a delay in testing on a comatose patient and incomplete documentation. Establishing an accurate baseline metric and appropriate labeling system is essential for reducing HACDI. Our analysis showed 53% of HACDI cases from 2018-2019 were inaccurately reported, leading to a falsely high rate and significant financial penalty. Our next steps are to examine the impact of appropriate-testing educational interventions and use of an algorithm we developed to assist the infection control team in reviewing cases for errors.

Intimate Partner Violence Experience, Substance Use, And Perceived Stress
Among Pregnant Black Women: The Biosocial Impacts On Black Births (Bibb) Study
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Intimate partner violence (IPV) is associated with lower levels of psychological well-being among pregnant women. Data regarding the mediation effects of substance use including cigarette smoking, alcohol drinking, and marijuana use during pregnancy on the associations between exposure to IPV and psychological well-being among pregnant Black women are lacking. The purpose of this study was to examine the mediation effects of the most common forms of maternal substance use during pregnancy (i.e., cigarette smoking, alcohol drinking, and marijuana use) on the association of IPV experience with perceived stress among pregnant Black women. A sample of 203 Black women from metropolitan Detroit, MI and Columbus, OH were recruited between 8-29 weeks gestation. Women were asked about their IPV experience before pregnancy; substance use during pregnancy; and perceived stress during pregnancy. Results indicated that women's exposure to IPV during the year prior to pregnancy was positively associated with cigarette smoking and marijuana use but not alcohol use during pregnancy after controlling for maternal age, level of education, marital status, and gestational age at data collection. IPV experience during the year prior to pregnancy was also positively associated with higher levels of perceived stress after controlling for covariates. Marijuana use during pregnancy significantly partially mediated the associations of exposure to IPV prior to pregnancy and perceived stress during pregnancy among pregnant Black women. Clinicians should screen for exposure to IPV against women, substance use, and psychological well-being and provide the appropriate counseling and referrals for pregnant Black women.

An Examination And Analysis Of Measures Of Self-Reported Medication Adherence In African American Emerging Adults With Asthma In An Urban Setting

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The Detroit Young Adult Asthma Project is a technology-based intervention for African American Emerging Adults (AAEA) with asthma that are prescribed asthma controller medications. One research goal is to increase medication adherence from baseline to 12-month. This requires measuring adherence both subjectively and objectively. The use of self-report measures poses obstacles for data reliability and validity. As a way to measure self-report in "real time", participants are asked to respond to daily text messages tracking medication adherence at baseline, three months, six months, and twelve months. The Doser, a tracking device which measures doses of medication administered over a seven-day period, is attached to a participant's inhaler at baseline, six months, and twelve months. In addition, puff count of participants' controller inhalers is collected at the beginning and end of that seven-day period to determine adherence at baseline, six months, and twelve months. Lastly, participants are asked to self-report their medication adherence over the past four weeks during the computer-assisted interview at the baseline, one-month, three months, six months, and twelve months. To date, 130 participants have completed baseline. All responded to one or more text messages and of those that completed six months, 92.5% (n=86) responded to at least one text. At baseline, only 24.6% (n=32) had medications that were compatible with the Doser and only 17.7% (n=23) had valid data, and at six months, only 12.9% (n=12) had valid data. At baseline 82.3% (n=107) completed the puff count data and 79.6% (n=74) at the 6-month data collection. Self-report measures from the computer-assisted interview had the greatest response rate. At baseline a minimum of 98.35% (n=128) had a valid response and 98.9% (n=92) at six months. Self-report measures are difficult for many reasons. The Doser tracking device is becoming obsolete as inhaler designs advance. There are issues with the level of missingness for objective measures (Doser & puff count) of adherence compared to subjective measures (computer-assisted interview & text messages) which have lower levels of missingness, but may be affected by social-desirability and recall bias. Self-report measures are used widely throughout public health research. Using both objective measures, such as puff count, in addition to subjective self-report measures would provide greater response success and potentially reduce costs for asthma related research compared to other measures, such as the text messaging.

Mozeb

Development Of A Text-Messaging Intervention To Reduce Sugar-Sweetened Beverage Consumption By Preschoolers As Part Of Stage 1 Treatment For Pediatric Obesity

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The prevalence of overweight and obesity among preschoolers is higher now (35%) than it has been in nearly a decade, which is concerning because excess weight tracks from early childhood to adulthood. The recommended Stage 1 treatment (Prevention Plus Intervention; PPI) for pediatric obesity includes pediatrician-delivered motivational counseling to collaboratively set goals with caregivers on diet and activity behaviors that are increasing a child's obesity risk. Substantial barriers exist to delivering PPI, suggesting the majority of preschoolers with overweight/obesity are not receiving treatment. We are adapting PPI for mobile health delivery (mHealth Prevention Plus Intervention; mPPI-P) to improve its implementation and reach. In mPPI-P, caregivers receive 1-month of automated text messages between motivational sessions to provide support and reinforcement that is tailored to caregiver-reported facilitators and barriers to behavior change goals. Our initial development work focuses on the PPI recommendation to reduce preschooler consumption of sugar-sweetened beverages (SSB) because previous studies have found this behavior to be relatively modifiable as well as a key risk factor. To use a human-centered approach to inform content development for the text-message exchanges. Ten caregivers of overweight/obese preschoolers from low-income backgrounds were asked to identify relevant barriers and facilitators in reducing the number of SSBs their preschooler consumed daily from a list of 28 options. Semi-structured qualitative interviews were conducted to gain contextual information about barriers and facilitators caregivers endorsed and provide insight on how a month of automated motivational interview-tailored text messages can be customized for this population. Interviews were coded to consensus by two coders using the Framework Matrix Method. The top 5 facilitators identified by caregivers included wanting children to be healthier, to avoid serious health problems, to get necessary vitamins and nutrients, to avoid cavities or damaging permanent teeth, and to expand preferences for healthier choices like milk and water. The top 5 barriers included other people giving SSBs to the child when the caregiver is not around, the child complaining or having a tantrum if SSBs are taken away, availability of SSBs in the home, anticipated difficulties of removing SSBs from the home, and caregiver liking SSBs. Caregivers described the optimal frequency of text message exchanges as either once weekly or daily. This information will be important in tailoring messages to the needs of the targeted population in their efforts to reduce preschooler SSB intake and subsequently obesity. Obesity-related comorbidities and complications are a significant threat for the growing number of children with overweight and obesity. mHealth is a promising solution for addressing this challenge and maximizing the likelihood preschoolers with obesity get the care that is recommended to change their weight trajectories.

The Implications Of Adherence To The Heart Failure (Hf) Clinic On Readmission Rates To The Hospital.

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Heart failure (HF) is a complex clinical syndrome characterized by the reduced ability of the heart to pump and/or fill with blood. HF is a global pandemic and placing a considerable burden to the health-care system, responsible for costs of more than \$39 billion annually in the USA alone. Reducing rates of readmission for HF patients was identified as a quality improvement priority at Ascension Providence Rochester Hospital in 2019 as the current readmission rate (18.8%) exceeded the readmission target (15.10%). Our goal was to reduce 30-day readmission rates by > 5% through optimal medical and lifestyle management. We aimed to achieve this goal by increasing patient attendance at the HF clinic post discharge specifically by calling patients. In the year prior to our intervention, HF clinic follow up was 14.9%. We followed the PDSA model (Plan, Do Study, Act) for this quality improvement initiative. Our team included five residents in collaboration with the Ascension Heart Failure Clinic Nurse Practitioners (HFC NP) and IT. Residents met with HFC NP to discuss current procedures and opportunities for modifications to improve clinic attendance rates and discovered there was no formal communication system in place for post discharge follow up. To address this gap in care, resident physicians used a script and personally made the calls to the HF patients within 1-2 days after discharge to ensure a follow-up appointment was scheduled and remind them about this appointment. The intervention was implemented over a 3-month period. Attendance at follow-up visits was confirmed by HF NP and readmission rates determined by review of the electronic medical record. From September to December 2019, 12 patients were admitted and treated for HF exacerbation. Among the 8 who were discharged, 5 (63%) attended post-discharge clinic visits as prescribed and none of these patients were readmitted within 30 days. All patients who failed to attend their post-discharge clinic visit (n=3) were readmitted within 30 days. Patient barriers to follow up included lack of transport, frustration with too many appointments, and feeling as though attendance was not necessary because of access to home care workers or living in a nursing home. Systems barriers included inability to identify patients hospitalized for HF over the weekends and no protocol for documenting follow-up calls. Calling HF patients in the days immediately after their discharge for exacerbation improved follow-up at HF clinic and in turn, reduced rates of readmission. Moving forward we would like to implement a sustainable system for follow up calls rather than having residents assigned. In addition, our next PDSA cycle will focus on developing protocols to address patient barriers to attending follow-up visit prior to discharge and creating a template to document follow-up phone calls to promote continuity of care. Heart failure is the single most frequent cause of hospitalization in persons 65 years. Simple protocols like phone calls following discharge to promote continuing of care may reduce costs associated with CHF readmission and subsequently improve patient quality of life.

Cervical Cancer Screening Rate Disparities Among Male And Female Residents

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Cervical cancer is the second most common cancer among women worldwide. Disparities exist between male and female physicians in cervical cancer screening rates, with female physicians completing more screenings than males. Discomfort of male physicians with completing pap testing is one hypothesized source for this disparity. Residency is an ideal time to address discomfort with pap testing. Through medical chart review, we found that in one-month, female residents at Rochester Academic Family Medicine Center (RAFMC) completed nearly 4 times as many cervical cancer screenings as male residents. The purpose of this quality improvement initiative was to examine 1) whether an interactive educational intervention increased comfort level with pap testing among male residents and 2) changes in rates of cervical cancer screenings completed by residents following the intervention. The educational intervention included review of the USPSTF pap screening guidelines, online video with step-by-step instructions, and demonstration via pelvic mannequin. Residents then practiced pap techniques on the model. Fifteen residents (8 males) completed the intervention. Changes in resident comfort and confidence with completing pap smears was assessed pre/post intervention. The knowledge of screening guidelines was assessed with a 4-item post-intervention quiz. Also, a survey was given with a rating scale asking the likelihood of NOT referring female patients out for cervical cancer screening using a 0 (strongly disagree) to 9 (strongly agree) scale. Responses to quiz and the scale were examined by resident sex. 11 residents completed pre-intervention survey and quiz (6 males), 11 residents completed post-intervention survey (7 males) and 10 completed quiz (7 males). A review of electronic medical record was completed to reassess disparity in cervical cancer screening. Prior to intervention, mean likelihood of not referring out of the office was 5 out of 9 for males vs 9 out of 9 for females. Following intervention, the mean increased to 6 out of 9 for males indicating increased comfort in performing pap smears and less likelihood in referring out. Passing rate for the post-intervention knowledge quiz was higher for female (100%, n=3) than male (n=7; 71%) residents. In the month following the intervention, 58% (n=7) of cervical cancer screenings were completed by female residents and 25% (n=3) were completed by male residents. We found improvement in comfort and confidence level of male residents after intervention. However, increased resident knowledge and comfort did not equate to more equitable distribution of screens completed by male and female residents. Next steps for continuing to improve equity of cervical cancer screening in our clinic include: a) understanding barriers to male residents' comfort and b) assess female patients' reasons, and preferences regarding receiving Pap smears from male physicians. If cervical cancer is detected early, the 5-year survival rate is 92%. Focused interactive and knowledge training could increase male residents' comfort performing Pap smears which may be beneficial for other programs' curriculum.

Assessing And Improving Continuity Of Care Utilizing Care Teams Within A Family Medicine Residency Clinic

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Continuity of care (CoC) leads to quality patient care by providing long term health care from a primary care physician (PCP). As a resident run clinic, CoC is difficult to maintain as resident schedules vary, resulting in scheduling conflicts with patients. One solution to this challenge is creation of resident care teams (CT). CT assignments allow for seamless transitioning of patient care between residents familiarized with the patient for improved CoC. In our clinic, residents are assigned to a CT upon entering residency and each CT consists of a first, second, and third year resident. Our clinic did not have a process to assign patients to a CT. Chart review in the month prior to beginning our quality improvement initiative revealed 55% (n=173) of chronic care patients had already been assigned to a CT and within that group, 69% were seen by their PCP and 6% by another member of the CT. The purpose of this quality improvement project was to improve CoC by increasing the number of chronic care patients assigned to a CT and utilization of the CT to schedule follow-up appointments by > 50%. Plan-Do-See-Act (PDSA) quality improvement methodology was utilized. For PDSA cycle one, we placed posters in the clinic halls and resident lounge to remind residents to review and update the patient's CT assignment during follow-up care visits. In PDSA cycle two, posters were placed by the check-out staff to facilitate their scheduling follow-up appointments with a member of the patient's CT if an appointment could not be scheduled with the patient's PCP. The same chart review procedures were applied at the conclusion of both PDSA cycles to evaluate change. Specifically, chronic care patients seen within a 1-month period were coded as 1) assigned vs. not to a CT and 2) if assigned, then "seen by PCP," "seen by other member of CT," or "not seen by CT member. In the month after PDSA cycle 1, the number of patients assigned to a CT increased to 74% (n=146) and the majority of this group were seen by their PCP (76%) or another member of the CT (3%). Following PDSA cycle 2, the number of patients assigned to a CT was stable (73%, n=230) but decreases were observed in the number seen by their PCP (66%) or another member of the care team (5%). The most frequent reason the staff was unable to schedule patients within the CT was that no member of the CT was in clinic during the requested follow up time. In conclusion, our interventions led to more patients in the clinic assigned to a CT. It is unclear why our intervention initially led to a decrease in patients seen by non- PCP or CT providers but then returned to a pre-intervention level. In the future, if we were to explain CT functioning to new and established patients they'd be able to prompt the front desk staff at checkout as to which resident physician is in their CT if their PCP is unavailable for their next visit. CoC can lead to decreased patient turnover between residents, less frequent patient handoffs and comfort to patients in minimizing the anxiety of seeing multiple providers.

Effects Of Socioeconomic Status On Social Support, Perceived Stress, And Inflammation In The Aftermath Of A Petrochemical Accident

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Low socioeconomic status (SES) has been consistently linked to a variety of poor physical health outcomes. One potential reason for these associations, as suggested by the Reserve Capacity Model, is that individuals from low SES backgrounds have less available interpersonal and psychological resources to cope with stressful situations, which, in turn, take a toll on biological processes implicated in health, such as systemic inflammation. Leveraging data collected before and after a petrochemical explosion, this study aimed to test the associations between SES and biobehavioral responses to the explosion. Data were derived from 124 participants ($Mage = 55.9 \pm 16.1$, 69.4% female, 29.0% White) living next to a petrochemical complex where the explosion occurred in 2005. At baseline, participants self-reported SES (i.e., education, income) and perceived stress and provided a blood sample to assess inflammatory markers (i.e., C-reactive protein [CRP], interleukin-6 levels [IL-6]). Perceived stress and inflammation markers were also assessed at post-explosion as well as received and provided social support. Individuals from higher SES backgrounds reported receiving (but not providing [$b = -.01, p = .92$]) more social support ($b = .18, p = .046$) after the explosion than their lower SES counterparts. High-SES individuals also reported a smaller increase in perceived stress than low-SES individuals ($b = -.25, p = .004$) after the explosion. Moreover, SES was negatively associated with post-explosion IL-6 ($b = -.23, p = .004$) but not with CRP ($b = -.02, p = .80$), after controlling for baseline IL-6 and CRP. Received and provided social support and perceived stress did not statistically explain the associations between SES and post-explosion inflammatory markers. These results did not change after controlling for sociodemographic covariates and objective exposure experiences. Findings from this study elucidate how individuals from different SES backgrounds respond variably to an unexpected and acute stressor (i.e., explosion) in terms of received and provided social support, perceived stress, and inflammation. Future studies may benefit from examining the stress and inflammatory responses to acute natural stressors as potential biobehavioral mechanisms linking SES to mental and physical health outcomes. SES is one of the fundamental causes of health and illnesses in nearly every society. Understanding the complex mechanisms through which SES contributes to health may provide important implications for alleviating health disparities across SES groups.

Observation Status Patient Discharge Optimization In The Setting Of An Academic Residency Program

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There are two types of admission categories that patients can be placed on when entering the hospital. It is the responsibility of the admitting physician to select which is appropriate for a particular admission based on the presenting condition, diagnosis, severity and possible time it would take to improve in order to be safely discharged. Observation is one such category and their length of stay is usually less than 48 hours based on the previous mentioned criteria. Beyond this period their stay is not reimbursed and the cost is usually absorbed by the hospital. Often times there is a rush to convert these patients into an inpatient status to prevent this problem. We followed the PDSA model (Plan, Do, Study, Act) for this quality improvement initiative. We worked closely with the multidisciplinary rounding (MDR) team to understand criteria for observation status and hospital's barriers to discharging a patient more optimally. In phase 1 of our trial, knowledge gaps of residents and attendings were surveyed. Hospital data on observation patients were reviewed. After reviewing survey data, education was provided through multiple brief lectures. In phase 2 of our trial we looked to improve observation status discharge time by anticipating the needs of observation status patient's admission. An elective was completed in which a resident would take principle role for managing only observation patients further identifying barriers and implement the strategies to optimize management and discharge. Overall the hospital has identified 13 areas that make up the delay in discharges of patients in observation. The number one being delays in rounding by physicians; roughly accounts for 90%. For the month of December 2019, 60 patients were admitted under all combined hospital services to observation status. The average hospital stay approached or exceeded 48hrs of stay. During the month of January 2020, a 2-week elective was conducted to manage observation exclusively with the goals to optimize discharge management and discharge. Nine patients were seen, medically managed and discharged with an average hospital stay of 24-48hrs of stay. Direct intervention has been shown to improve observations discharge by improving coordination and making rounding more efficient during high volume months. The emphasis on a possible elective rotation should be made. This will not only improve workflow for the inpatient team but may also add to overall cost savings. Future expansion of the study may look into observation discharge time and readmissions, or observations admission diagnosis that result in readmission. To the patient admitted to observation status, they are charged hourly. The insurance being accessed during this time has higher deductibles and copays to the patient. From a hospital's perspective, an observation gives less reimbursement for the same usage of hospital resources such as beds, diagnostic equipment, staff and specialty care. This becomes problematic during high census periods where the more severely critical patient's care can become impacted.

Following Active Surveillance Protocol In Patients With Low-Risk Prostate Cancer

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Active surveillance (AS) is the preferred initial option for patients with low risk prostate cancer (i.e. Gleason score ≤ 6 , PSA < 10 ng/ml, and stage $\leq T2a$, LPC) since it is unlikely to be life-threatening. Immediate surgery or radiation provides no clear survival benefit while often leads to significant side effects like impotence and incontinence. However, AS requires patients to undergo regular office visits with periodic testing. National Comprehensive Cancer Network (NCCN) recommends testing PSA no more than every 6 months and prostate biopsy no more than every 12 months. Studies suggest significant number of patients on AS are not followed up according to AS guidelines. We compared AS patient compliance to NCCN AS monitoring guidelines by reviewing patients' medical records. White and Black patients (n=221) with newly diagnosed low-risk PC on AS identified through a population based cancer registry were surveyed at baseline (4 months after diagnosis) and at 2 year follow-up. 186 medical records reviewed and confirmed the AS protocol and compliance. Patient self-reported data were then compared with medical records data. Of the 186 patients who initially chose AS, 35 switch to active treatment (surgery or radiation) while 151 remained on AS at 2-year follow-up. Of them, 55.2% (n=90) were guideline-concordant of having at least three PSA tests and one prostate biopsy during 2-year period. Patients are more likely guideline-concordant for PSA testing than guideline-concordant with prostate biopsy (76.7% vs. 66.9 %, respectively, p=0.041). Majority of patients on AS in our sample follow practice guidelines, but there is significant variation in the proportion of men on AS that meet guideline recommendations for follow-up PSA testing and repeat biopsy. This can be unsafe for patients because they are not receiving proper AS monitoring. These data highlight the need for further patients and providers education on the requirement of follow-up to ensure safety of AS. This can be unsafe for patients because they are not receiving proper AS monitoring. These data highlight the need for further patients and providers education on the requirement of follow-up to ensure safety of AS.

The Relationship Between Caregiver Feeding Styles, Childhood Obesity, And Dietary Quality In Preschoolers From Low-Income Households In Detroit.

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With a prevalence rate of 13.9%, obesity among preschoolers from low-income backgrounds in Detroit persists. Among families from low-income backgrounds, preschoolers appear at greater obesity risk if their caregivers report Authoritarian (high demands and no consideration for the child's eating desires) or Indulgent (little to no structure around eating behaviors) feeding styles and lower obesity risk if their caregivers report Authoritative feeding styles (reasonable nutrition demands and responsive to children). An emergent literature suggests caregiver feeding styles may also impact preschooler weight status by the types of foods children consume (dietary quality). This literature is limited and has focused primarily on Hispanic families. The purpose of this secondary data analysis is to examine the relationship between caregiver's feeding style, preschooler obesity, and preschooler dietary quality in a primarily African-American population. Caregiver-preschooler dyads (N=33, 88% African American) were recruited from Detroit WIC clinics. Caregivers completed the Caregiver Feeding Style Questionnaire (CFSQ) and used the Block Kids Food Screener to report on preschooler diet. Chi-squared analyses were conducted to examine associations between preschooler 1) obesity status and 2) average weekly intake of fruits, vegetables, whole grains, protein, dairy, saturated fats, and added sugar. Lastly, we visually made comparisons between preschooler dietary intake, based on the caregiver's feeding style, and the USDA age-based recommendations for the aforementioned food groups. Preschooler obesity status was not associated with caregiver feeding style or preschooler dietary intake. Preschooler daily added sugar intake was within recommended limits irrespective of caregiver feeding style. Preschoolers whose caregivers reported authoritarian, indulgent, and uninvolved feeding styles met recommendations for daily fruit intake. Across caregiver feeding styles, preschoolers were not meeting age-based recommendations for vegetables, whole grains, protein, and dairy. Only preschoolers whose caregivers reported an authoritative feeding style exceeded recommendations for daily saturated fat intake. Our findings suggest that caregiver feeding style may not be related to obesity status or dietary intake among preschoolers from low-income and primarily African American backgrounds. Findings that preschoolers were not meeting recommendations for vegetables, whole grains, dairy and protein are surprising because families were receiving nutrition counseling and vouchers to purchase foods in these groups as part of their WIC participation. Future research is needed to examine whether these patterns are replicated with a larger sample. Studies should also focus on identifying strategies that are acceptable to all caregivers no matter their feeding style that can help to increase preschooler intake of foods that are important for child development. This line of research stands to make a significant public health impact because it focuses on a population that is at high risk for obesity and because WIC is a nationally-based program that serves approximately 2.5 million preschoolers.

A Tale Of Two Countries: Study Prospectus For Understanding The Role Of Acculturation In Substance Abuse Treatment For Residents Along The U.S. – Mexico Border

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Reducing substance abuse rates globally is a WHO Sustainable Development Goal. The number of individuals reported as problem users has held steady at 27 million since 2008; Mexico's drug use rate, however, increased by 87% between 2006 and 2013. Mexico's "sister cities" along the U.S. border carry some of the highest rates of substance abuse, but the epidemiological studies focused on this phenomenon have been few. With this in mind, we intend to study the role that mobility and immigration play in the risk of developing a substance use disorder among those seeking treatment along the Mexico border. This information will inform the design of culturally sensitive evidence-based practices in treatment, as well as help identify risk factors in order to implement preventive measures. Our study of individuals in treatment centers near the U.S.-Mexico border will survey participants' migration history, motivations for seeking treatment, and their treatment progress. We will focus on behavioral factors in retention and readmission in treatment centers particularly along the northern border in order to inform public education initiatives to reduce recidivism. We anticipate the study to illuminate the causes of the causes, allowing for an understanding of the effects of seemingly peripheral factors that assisted in the progression of the participants' use of substances. Consideration of socioeconomic implications of drug use in Mexico such as migration, violence and effects of the drug trade, as well as the cultural implications of medicinal traditions will be assessed. Additionally, the motivation for seeking substance abuse treatment will be analyzed to determine effective, culturally sensitive, and evidence-based resources for adaptation in treatment centers. The response to conflict along the U.S.-Mexico border – especially in circumstances involving illicit substances – is often militant: troops are deployed and walls are built. While aspects of such responses are necessary, they are not holistic and do not fully address the social and physical challenges experienced by those facing substance use disorders. Without also considering physical and mental health, the cycle of violence, drug use, and the resulting trauma may remain uninterrupted.

2020 Department of Family Medicine and Public Health Sciences Awards

The Department of Family Medicine and Public Health Sciences is pleased to announce the 2020 Student Awards in Public Health, Primary Care and Family Medicine. These students reflect our commitment to excellence in research and clinical practice.

*2020 John B. Waller, Jr., DrPH and Menthele (Mikki) Waller
Endowed Scholarship for Masters in Public Health Students*



Deja Wilson

*2020 Excellence in Public Health Award from the U.S. Public Health Service (USPHS)
Physician Professional Advisory Committee Award, United States Public Health Service*



Raven Batshon

*2020 Student Family Medicine/Primary Care Research Award,
North American Primary Care Research Group (NAPCRG)*



Shayla M. Patton

WSU Violence Prevention Resources

Student Organizations

Active Minds at Wayne State University is a mental health organization on college campuses which aims to eradicate the stigma of mental illness through increasing awareness and educating students. Contact: [CAPS](#)

Half the Sky aims to substantiate the ancient Chinese proverb that women hold up half the sky by turning oppression into opportunity for women worldwide. Contact: ft7920@wayne.edu and [online](#)

If/When/How at Wayne Law is a national non-profit network of law students, professors, and legal professionals committed to fostering the next wave of legal experts for the reproductive justice movement. Contact: savannah.main@wayne.edu and on [Facebook](#)

Sigma Sigma Rho is a sorority that welcomes every culture, emphasizes the importance of being aware of every individual's background to create a diverse, safe environment, and brings awareness of Domestic Violence to our community across all cultures. Contact: waynepresident.sigmasigmarho@gmail.com

SKY@Wayne is a humanitarian student organization dedicated to creating a stress-free zone for students of all backgrounds by offering tangible tools for stress relief which enhance physical and emotional health. Contact: SKYatWayne@gmail.com and on [Instagram](#)

The Listening Party aims to create unity among students within the Detroit community by using music as an outlet to discuss local public health issues. Contact: thelisteningpartytlp@gmail.com and on [Instagram](#)

WARRIOR; SUICIDE PREVENTION operates within the WSU Suicide Prevention student and community board to help spread information on suicide prevention and mental health resources. Contact: ck0732@wayne.edu, on [Instagram](#), [Facebook](#), and [Twitter](#)

WSU Students Demand Action is a network of nearly 5 million supporters across the US committed to gun violence prevention. Contact: WSUStudentsDemand@gmail.com, [online](#), and on [Twitter](#)

On Campus Services

Wayne State University Police Department (WSUPD) patrols campus and the surrounding neighborhood 24/7, 365. Call if you witness a crime on or near campus or need help in case of an emergency on or near campus: [313-577-2222](tel:313-577-2222) or pick up a Blue-light emergency phone

Safe Walk program: A WSUPD service providing a police escort to your destination. Contact: [313-577-2222](tel:313-577-2222)

Office of Equal Opportunity addresses complaints involving unlawful discrimination or harassment. Contact: [313-577-2280](tel:313-577-2280)

Counseling and Psychological Services (CAPS) is dedicated to providing counseling and psychological assistance to WSU students. Contact: [313-577-3398](tel:313-577-3398)

CARE [Community * Advocacy * Referral * Engagement] Reports are a service of the Dean of Students Office used to assist and support WSU students of concern, address stress from academic work, relationships or other aspects of life while on campus. Contact: [313-577-1010](tel:313-577-1010) or [submit a Student Care Report](#)

Training Opportunities

Rape Aggression Defense (RAD) is an interactive training program that provides a number of helpful self-defense techniques to protect women and men in the event of an attack.

Active attacker preparedness training program is an opportunity to learn actions that will help you remain safe in the event of an active shooter.

Administrative Policies and Procedures

[Workplace Violence](#)

[Sexual Assault](#)

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Thank you to Dr. Tsveti Markova, our department chairperson, for bringing us together in celebration of our scholarly work.

Thank you to our faculty and research partners for their willingness to share their scholarly work.

*Finally, we look forward to seeing you next year!
Until then, be well and be Warriors for Public Health!*

Save the Date...

5th Annual DFMPHS Research Day

Wednesday, April 21st, 2021
8:00 AM- 12:30 PM
Margherio Conference Room
Mazurek Education Commons