

Name	Grad year	Project title	Mentor	Conferences/outputs
Lizzeth Alarcon	2019	Language fluency testing amongst residents	Christine Cheston (pediatrics)	STFM 2019
James Carter	2019	Using med of color in preconception outcomes using "Gabe"	Brian Jack (DFM)	
Chandler Christophe	2019	Understanding cost challenges to implementation of a transition clinic for correctionally involved people (CSCHC)	Sara Schlotterbeck	
Katrina Ciraldo	2019	Narcan training at South Boston - assessing knowledge & attitudes	Heather Miselis	2 staff narcan trainings at SBCHC
Mateo Eckstat	2019	Addition of azithromycin ppx at time of unscheduled cesarian	Ron Iverson (OB)	Abx protocol, epic changes on L&D
Madeline Haas	2019	Grappling with race and ethnicity in TOLAC calculation at BMC	Somphit Chinkham (OB)	Conference presentation 2018
Khai-El Johnson	2019	Understanding cost challenges to implementation of a transition clinic for correctionally involved people (CSCHC)	Sara Schlotterbeck	
Julia Randall	2019	Palliative care systemic review	Suzanne Mitchell (DFM)	Attended Pall Care & Equity conference
Adi Rattner	2019	Access to postpartum LARC at South Boston	Suzanne Mitchell (DFM)	
Milan Satcher	2019	Understanding cost challenges to implementation of a transition clinic for correctionally involved people (CSCHC)	Sara Schlotterbeck	
Katherine Standish	2019	Design, implementation and evaluation of BU FM Residency Scholarship Curriculum	Rob Saper (DFM)	STFM 2020, Published in Family Medicine 2021
2020				
Adam Chamberlain	2020	Advance Directives in Primary Care, A QI Project	Eric Hwang (CS FM0)	
David Corner	2020	Postpartum contraception at CSCHC and GRMDC	Jordana Price (Rosie FM)	
Alex Gast	2020	Vulnerability of Acute Care Hospitals to Sea Level Rise and Storm Surge	Ari Bernstein at Harvard Center for Climate,	

			Health, and the Global Environment	
Elena Hill	2020	Labor After Cesarean (LAC) Documentation on L&D: A Quality Improvement Study	Cardenas, Lilia MD, Somphit Chinkham CNM (OB)	Manuscript BMJ Open Quality 2022 ; STFM 2020, NAPCRG QI 2019, Epic smartphrases & LAC documentation
Jennifer Leahy	2020	Primary care-behavioral health co-visits at Bedford VA	Dr. Schirpani (VA)	STFM 2019 poster
Christina Marmol	2020	1 Key Questions for contraception & unintended pregnancy at CSCHC	Suki Tepperberg (DFM)	
David McCarthy	2020	Resident Support Group: Caring for Caregivers in Training	Carol Mostow (DFM)	
Claire Paduano	2020	A qualitative evaluation of the BMC Complex Care Management program	Caroline Morgan (DFM)	
Christian Rose	2020	Anxiety Follow-Up via MyChart in Young Adults at SBCHC	Rob Saper (DFM)	
Caroline Royer	2020	Connecting Diabetic Patients at East Boston NHC to Clinic Resources: A QI Project	Karin Leschly (EB FM)	
Talia Singer-Clark	2020	Postpartum contraception at CSCHC and GRMDC	Jordana Price (Rosie FM)	
Kelsey Thomas	2020	Resident LARC Training at GRMDC	Jennifer Trieu (Rosie FM)	
2021				
Sam Gonzalez	2021	Cognitive Load Burden and Resident scheduling: Aligning Learner and Patient incentives	Kate Standish	Med Ed Day presented
Howard Laney	2021	Describing unmet social needs based on a universal SDoH screener at CSHC	Megan Sandel (Pediatrics)	STFM 2020, 2021
Rohini Rau-Murthy	2021	Integrative Health in Primary Care	Christine Ferrell-Riley	
Jennifer VanderWeele	2021	Contraceptive Access and Unintended Pregnancies during the COVID-19 Pandemic at an Urban Federally Qualified Health Center	Suki Tepperberg / Kyla Biegun	STFM 2021 presented
Gabriel Lopez	2021	EBNHC QI Initiative: CHC Prescriber Feedback on Asthma QI Effort	Karin Leschly	

Christina Pindar	2021	Study of Infant Preterm Birth and Low Birth Weight Across Family Medicine-affiliated Community Health Centers	Katherine Stsandish	STFM 2021 presented
Brianna Barbosa-Angles	2021	Qualitative study BACO CCM patients	Caroline Morgan (DFM)	
Julian Gonzalez	2021	HTN management via telehealth at Roslindale	Jennifer Triu	
Carolyn Arnold	2021	The Relationship Between Federal Housing Assistance and Uptake of Cancer Screening Among Low-Income Adults	Pollack CE	Published manuscript in JGIM 2022
Alison Presti	2021	Chart Review OBOT best practices	Marielle Baldwin	STFM 2021 presented
Mike Winer & Heather Ross	2021	Telehealth Buprenorphine management for patients with Opioid Use Disorder during the COVID-19 pandemic	Marielle Baldwin	
2022				
Ka Yi Li (Kiki)	2022	Development of a Refugee and Immigrant Health Concentration in an Urban Family Medicine Residency Program	Avra Goldman	STFM 2022; North American Refugee Health Conference 2022 Implementation of immigrant health curriculum
Victor Roy, Anuka Das, Meghna Srinath, Ryan Narciso	2022	Shadow Pandemics: Integrating Social and Health Needs through Integrated Virtual Care in a Neighborhood facing Structural Vulnerability Amidst COVID-19	Sara Schlotterbeck	STFM QI 2021
Kelly Carreiro	2022	Interdisciplinary Group Visits for Weight Management	Keri Sewell	Conducted weight management groups
Corey Costanzo	2022	Medical terminations - provider survey of interest, comfort, need for resources/training	Jennifer Trieu	STFM 2022
Mallika Sabharwal + Claudia Ma	2022	Assessing the impact of the COVID-19 pandemic and telehealth on contraception encounters at South Boston community health center	Isabella Brout	STFM 2021
Lisa Fleisher	2022	Pre/post evaluation of bimanual exam teaching among med students	Mari Bentley	
Candice Hu + Emily Geldwert	2022	QI Project: Implementation of Guidelines for Chronic Opioid Pain Management	Mekkin Lynch	Implementation of improved opioid prescribing documentation and workflow at SBCHC

2023				
Megan Anderson, Gerianne Connell, Jeremy Weiser	2023	Assessment of LGBTQ+ Inclusive Primary Care Practices	Dr. Jacky Cheng	STFM 2023
Stephanie Adcock	2023	Impact of Outpatient Primary Care Electronic Inbox Management Training on Resident Comfort with Inbox and Message Review Time	Dr. Tringale + Dr. Williams	STFM 2022; Resident training on inbox management; starting manuscript post-graduation
Samuel Cohen	2023	PCP-APPT: Integrated Psychiatry and Primary Care	Dr. Duncan and KGB	
Emily Regier	2023	Effective Linkage to SDOH Resources in a Community Health Center	Dr. Jennifer Trieu	
Maalika Banerjee	2023	Writing for the AAFP : A "Meta" View on Adapting Guidelines for Journal Publication	Dr. MaryAnn Dakkak	Manuscript in press
Ruchi Shah	2023	Yoga MAT Study: provider-led recruitment of SUD patients for a Yoga intervention	Dr. Marielle Baldwin	
Camille Singh	2023	Increasing Provider Comfort in Medication Abortion Care, Post Roe v Wade Reversal	Dr. Juliana Castedo	STFM 2023
Mihoko Tanabe	2023	Changing the paradigm from acute care to disease prevention: Findings from a preliminary baseline assessment in Lesotho	Dr. Brian Jack	Publishing in Lesotho Medical Journal
Vishal Dasari	2023	Understanding Barriers to Primary Care Utilization in Chennai, India	Dr Sarita (Chennai, India)	Implementing primary care promotion/outreach based on findings

2020 Class

Vulnerability of Acute Care Hospitals to Sea Level Rise and Storm Surge

Alex Gast

Abstract

Given the growing likelihood of more destructive Atlantic hurricanes due to climate change and the history of hospital incapacitation after hurricane landfalls, we analyze risks to healthcare delivery and access for hospitals that serve populous areas on the United States Atlantic and Gulf Coasts from hurricane-induced storm surge and sea level rise. We combine a probabilistic hurricane model, storm surge inundation predictions, and roadway network data to find that just over half of all coastal metropolitan statistical areas (MSAs) will have at least one flooded hospital if struck by a category 1 storm whereas a category 4 storm puts at least 1 hospital at risk in nearly 80% of MSAs. Population-weighted impacts from a category 2 storm were high in MSAs with high relative risk for hurricane strike (e.g., Miami-Fort Lauderdale-West Palm Beach, FL) as well as in MSAs less prone to hurricane landfall (e.g., Boston-Cambridge-Newton, MA-NH). Sea level rise of up to 2.64 feet increased the number of hospital beds at risk by over 90% in several MSAs. Between 14 and 100% of roads within 1 mile of hospitals were flooded by category 2 storm surge among the 10 MSAs with the most affected transportation networks. These findings illustrate previously undescribed risks to hospital-based healthcare delivery in some of the most populous areas of the United States. They suggest that storms of lower intensity can have outsized impacts on healthcare delivery and access, particularly in places where hurricane strikes are less likely today but are increasing due to climate change.

Labor After Cesarean (LAC) Documentation on L&D: A Quality Improvement Study

Elena Hill

Advisors: Cardenas, Lilia MD, Somphit Chinkham CNM (OB)

Background: In 2016, the cesarean rate in the United States was 31.9% - more than double the rate the WHO recommends to reduce maternal and neonatal mortality. Most women who have had previous cesarean deliveries are eligible to have a labor after cesarean (LAC), but only 11.9% of American women in 2015 had a vaginal birth after primary cesarean section (pLTCS). Previous studies show that the majority of women had already decided about the mode of birth before they started a subsequent episode of prenatal care. Hence, providing women with the information about LAC soon after birth may help women adequately prepare for future pregnancy and birth.

Methods: The purpose of this QI study was to assess whether more robust LAC documentation on Labor and Delivery (L&D) improves patients' understanding of their option for future LAC. Our 3-part intervention included: 1) documentation of the surgeon's assessment of LAC feasibility in the operative note, 2) inclusion of written patient LAC education in discharge paperwork, and 3) documentation of pLTCS and need for future LAC counseling in the hospital discharge summary. We implemented these changes on L&D starting January 2019. We interviewed via phone 40 women who underwent pLTCS at Boston Medical Center in 2017 prior to our intervention and then again one year after our intervention. Survey questions included questions about women's understanding of

the indications for their surgery, their perception of their own involvement in the decision making process, whether or not they had received LAC counseling from a provider either in the hospital or at a post partum visit, and whether or not they would pursue a LAC with a future pregnancy. We also surveyed obstetric providers about the culture of LAC counseling both prior to and after our intervention.

Results: 44% of charts contained all 3 components of documentation after one year. Pre-intervention, more women recalled having had a conversation with their provider both in the hospital setting (35% > 52% respectively) and at their post-partum visits (27% > 52% respectively). Rates of women opting for LAC in future pregnancies were unchanged/decreased after the intervention (65% > 50% respectively). Provider knowledge/confidence around LAC counseling significantly increased after the intervention and providers universally stated that LAC counseling has become much more a part of post-partum care in the hospital over the past year.

Conclusions: Interventions to improve documentation of LAC counseling improves the consistency with which providers incorporate LAC counseling into routine post-partum care and may be a feasible and effective first step in the ultimate goal of empowering women to pursue LAC in future pregnancies.

Evaluation of Co-visits Between Family Medicine Residents and Mental Health Clinician Trainees at a Boston VA Hospital.

Jennifer Leahy

Advisor: Dr. Schirpani (VA)

Purpose:

Family Medicine (FM) residents from Boston Medical Center (BMC) complete their behavioral health training in the second year as part of an inter-professional team in the Primary Care Behavioral Health Department at the Edith Nourse Rogers Memorial Veterans Hospital (Bedford VA) in Bedford, Massachusetts. This study aims to assess the peer-to-peer partnership between FM residents and mental health (MH) clinician trainees in providing integrative mental health care to veterans.

Methods:

Study design: Program development project. Setting: Bedford VA. Intervention: We will create a program to standardize co-visits between the FM residents and MH clinician trainees. Co-visits are defined as a session conducted with both a FM resident and a MH clinician trainee for the purpose of integrating psychiatric, medical and therapeutic care. Participants: 22 (16 control, 6 exposed) FM residents from BMC Family Medicine Program that have completed their behavioral health rotation during the second year of residency at the Bedford VA and 7 MH clinician trainees at the Bedford VA, all of whom will undergo the intervention. Measures/Main Outcomes: Pre- and post-intervention online survey assessing demographic variables, co-visit experiences, and quality of co-visit feedback between providers. Pre- and post-intervention results will be compared to determine the effects of the intervention.

Results:

Initial survey is currently in progress with results expected in January 2019. Based on the initial survey results, we will plan the intervention from February 2019- June 2019, with post intervention results expected in July 2019.

Conclusions:

Prior to the intervention, we anticipate that the frequency of co-visits will be minimal (less than 3 a rotation) and peer-to-peer feedback not occurring. Post-intervention we anticipate increased frequency of co-visits and peer-to-peer feedback between FM residents and MH clinician trainees, and increased quality of peer-to-peer feedback.

“One Key Question” and Contraceptive Counseling at Codman Square Health Center

Christina Marmol, MD

Advisor: Suki Tepperberg

Background:

There continue to be high rates of unplanned pregnancy in women in the Boston area. Improved access to contraceptive care has been shown to lower rates of unplanned pregnancy, yet many women still lack contraception. Previous literature has identified various barriers to contraception access and receipt including confidentiality, patient-provider relationship building, same day access, and limited visit time.

To address this problem, Codman Square Health Center implemented the “One Key Question” (1KQ) intervention in 2016. The intervention added a new screening question, “Do you want to be pregnant in the next year?”, to integrate reproductive counseling into the primary care visit. However, since its implementation, little is known about rates of contraceptive counseling and prescriptions in patients at Codman Square Health Center.

Methods:

This case series reviewed 51 patient charts from among all Codman Square Health Center patients with delivered pregnancies in 2019. We divided the cases into planned and unplanned pregnancies. We reviewed all of the visits from the year prior to pregnancy diagnosis for 1KQ administration. From the unplanned pregnancy group, we also looked at rates of contraceptive counseling and contraceptive prescriptions. For those in the unplanned pregnancy group that received both counseling and prescriptions, we identified the reason for contraceptive failure.

Results:

Among all cases, there were 51% unplanned pregnancies. 1KQ was asked to 85% of patients (90% in the planned pregnancy group, 80% in the unplanned pregnancy group). For those with unplanned pregnancies who answered “no” to 1KQ, 86% received

contraceptive counseling. For those unplanned pregnancies who both answered “no” to 1KQ and received counseling, 78% were given prescriptions for a contraceptive method. Contraceptive failure resulting in pregnancy was noted most frequently with OCPs (50%), followed by DepoProvera (29%), patch failure (7%), Ella as bridge to tubal ligation (7%), Nexplanon placed in early pregnancy (7%).

Conclusions:

Rates of 1KQ use, contraceptive counseling, and contraceptive prescriptions are high among women with delivered pregnancies at Codman Square Health Center. Further investigation is needed into rates of contraceptive counseling and prescriptions in non-pregnant populations at Codman and in populations at the health center prior to the 2016 implementation of 1KQ.

Resident Support Group: Caring for Caregivers in Training

David McCarthy, MD

Advisor: Carol Mostow

Background and Objectives: Medical resident burnout is associated with more frequent medical errors and decreased patient satisfaction, along with increased rates of provider depression and substance use disorder. At the same time, residents have reported dissatisfaction with the support services provided. Residency programs have taken a wide array of different approaches to protecting the mental health of providers, yet there is little evidence about the impact of these approaches on resident wellbeing. The BMC Family Medicine resident support group is the cornerstone of a multifaceted and evolving wellness program. We collected resident perceptions of the support group with the goal of better informing how we use support group to promote the wellness of our residents.

Methods: An online survey (Qualtrics) was sent to current residents from all classes. Survey questions were based on wellness curriculum evaluations published by other residency programs, along with input from fellow residents and the support group faculty facilitator Carol Mostow. Surveys consisted of a combination of multiple choice and free-response questions. Participation in the survey was voluntary and residents were not required to answer all of the questions.

Results: 22 of our 40 residents (55%) responded to the survey. More than half of respondents felt that our residency support group positively impacted information sharing (17 of 18, 94%), job satisfaction (11 of 18, 61%), personal support (14 of 18, 78%), building and maintaining relationships with peers (17 of 18, 94%), and developing a sense of community and belonging (16 of 18, 89%). Across all categories of impact for support group that residents were surveyed on, with 1 representing strongly negative and 5 representing strongly positive, the average response was 4.1 (standard deviation 1.05).

Conclusions: The vast majority of responding residents had very positive reflections on support group with few exceptions. While the generalizability of these findings are limited by the small sample size, the results and write-in responses from the survey were helpful in structuring the BMC wellness curriculum for the second half of the 2019/2020 academic year. The project was submitted to the

Schwartz Center for the 2020 Corman IMPACT Honors that celebrates healthcare members who are making a transformational impact by creating programs or initiatives that promote compassionate, collaborative care within their organization or system.

A Qualitative Evaluation of the BMC Complex Case Management Program

Claire Paduano MD

Advisor: Caroline Morgan-Berchuck MD

Background & Objectives: There is a subset of complex patients, often termed “super-utilizers,” who account for a disproportionately large percentage of health care utilization and costs. Often super-utilizers are vulnerable in that they have multiple chronic medical conditions, mental health illness, substance use disorders, are of lower socioeconomic status, lower educational level, and/or are elderly. A recent common strategy to decrease health care costs has been to enroll these patients in complex care management programs, such as Boston Medical Center’s (BMC) BACO Complex Care Management program - in which multidisciplinary teams provide increased access, case management, patient education, and social services with the dual aim of improving patient outcomes and decreasing health care utilization. While these programs are widespread, research has failed to convincingly demonstrate cost savings or improved quantitative outcomes. We aim to improve our understanding of the outcomes of BMC’s complex care management programs. Understanding that quantitative data such as utilization rates may not capture the full breadth of patient outcomes, we use a qualitative approach in this study.

Methods: We conducted 9 individual 30-60 minute semi-structured interviews with patients who have completed the BMC complex care management program, using a set of open-ended questions about topics including personal and life experiences, community observations, and suggestions and needs required for future success. These interviews were transcribed and coded in NVivo qualitative data analysis software using a grounded theory approach.

Results: Preliminary results show that patients reported high satisfaction, positive relationships with their care management teams, and in particular appreciated the team’s availability, non-judgmental approach, and assistance with material needs. They suggested areas for improvement as extending services to a greater number of patients in need, strengthening supports for mental health and substance use treatment, and further tailoring services offered based on individual needs and goals.

Conclusions: These results suggest that the positive impact of complex care management services may not be fully captured by outcomes such as readmission rates or ED utilization. Future research should focus on patient centered outcome measures to better evaluate the efficacy of complex care management programs.

Anxiety Follow-up via MyChart In Young Adults at SBCHC

Christian Rose, MD

Advisor: Robert Saper, MD MPH

Background & Objective(s):

Anxiety disorders develop in 6.9% of females and 2.5% of males during young adulthood and are predictive of anxiety disorders and major depressive disorder within in the following 10 years. The GAD-7 is a brief and well-validated measure for detecting and monitoring anxiety disorders. The goal of this QI study is to review current performance of GAD follow up in young adults at South Boston Community Health Center (SBCHC) and trial use of EPIC MyChart GAD-7s to improve follow up.

Methods:

This is a QI project during which chart review was performed of young adult patients (age 18-30) who carry a diagnosis of GAD and who received primary care in the Family Medicine Department at SBCHC within the last year (Feb 2019 - Feb 2020). Those with co-morbid uncontrolled depression (PHQ-9 >9) or without online patient portal (“MyChart”) access were excluded from the QI intervention. The QI intervention included electronic invitation via MyChart to fill out a GAD-7s, and based on their responses, offer of telemedicine appointments with their PCP. Additionally, the free meditation app “Smiling Mind” was recommended to all patients, regardless of response.

Results:

Of those charts reviewed, 83.9% of patients had an active MyChart account, 19% had controlled anxiety (GAD-7 <4), 51.6% had co-morbid depression, and 35.5% had uncontrolled co-morbid depression. The average number of months since last GAD-7 was 7.6.

In the intervention group, Among the 15 patients meeting inclusion criteria for QI intervention, 33.3% had controlled anxiety, 26.7% had controlled co-morbid depression, average months since last encounter was 2.7, and average months since last GAD-7 was 9.7 (range 0-39). Prior treatment included SSRIs (86.7%), benzodiazepines (13.3%), and behavioral health referrals (53.3% with 50% attendance).

Within 2 weeks of intervention, 53.3% read the MyChart GAD-7 request, while only 20% responded. 33% of respondents had controlled anxiety symptoms (GAD <4). Of those who responded, only 1 participant opted for telehealth follow up, during which both SSRI prescription and BH referral were provided.

Conclusions:

MyChart could become a useful tool in re-engaging young adult patients with anxiety disorders if use is promoted at the health center. This intervention may be broadened to other age groups and conditions, as well as to utilize more MyChart features to improve follow up. A provider champion designated as responsible for ensuring timely, appropriate follow up would help with implementation.

Title: Connecting Diabetic Patients at East Boston NHC to Clinic Resources: A QI Project

Name: Caroline Royer, MD

Advisor: Karin Leschly, MD

Background: Many community health centers have implemented quality improvement projects to improve the health of socially disadvantaged patients with diabetes mellitus. Such interventions have included hiring community health workers to provide group diabetes education and cooking/exercise classes, developing culturally-sensitive materials, and one-on-one sessions focusing on behavior change. The results have been mixed but generally favor tailoring interventions to patients' cultural backgrounds and one-on-one interactions with highly trained personnel over a prolonged period of time.

Aim: At East Boston Neighborhood Health Center, in which 70% of patients identify as Hispanic and 68% have either public health insurance or are uninsured, our aim was to create a low-effort, high-value intervention for patients with uncontrolled diabetes (a1c > 9%). We planned to implement the intervention clinic-wide by July 2019.

Methods: Our 15-person team comprised nurses, pharmacists, medical assistants, medical providers, mental health social workers, a nutritionist, a population health specialist, and a front desk administrative assistant. We used driver diagrams to develop change ideas, and those ideas that were deemed to be of the lowest effort but highest value were identified. Our team created a quick but effective survey administered by medical assistants, the majority of whom hail from similar cultural backgrounds as our patient population, to patients who arrived in clinic with last a1c > 9%. We used Plan-Do-Study-Act cycles and revised the survey eight times. Our final survey was short (nine questions with Yes/No answers) and identified patients with mental health, nutrition, transportation, medication, and nursing educational needs.

Results: Between November 2018 and June 2019, the survey was administered to 42 patients on Family Medicine Team 1, eighteen of whom received the survey more than once. Eighty-three percent of patients screened positive for at least one need. The most (55% of surveyed patients) indicated a need for nutrition education. Forty-five percent of patients screened positive for mental health services, 43% for nursing education, 36% for pharmacy services, and 26% for transportation assistance. Follow-up was most successful with nutrition; 83% of patient encounters with a nutrition need received an appointment and 47% of these appointments were attended by the patient. Regarding mental health, 68% of patient encounters indicating a need were given a warm hand-off or scheduled follow-up and the show-rate of scheduled follow-up appointments was 40%. Only 43% of encounters with an identified nursing need received either a warm hand-off that day or a scheduled nursing appointment and the majority did not attend a scheduled follow-up. Those encounters indicating transportation or pharmacy needs had the lowest clinic follow-through; only 5% of potential pharmacy interventions appear to have been acted on, and 20% of encounters with a transportation need resulted in outreach to the patient on transportation options. We did not expand the survey clinic-wide; the turnover of the family medicine nurse manager and later the COVID-19 pandemic made this endeavor very difficult.

Conclusions: We created a quick, low-effort intervention that identified patients with uncontrolled diabetes who would benefit from available clinic resources. Our quantitative results demonstrate that the vast majority of patients with uncontrolled diabetes could benefit from additional services provided by trained professionals. The data also illustrate that work needs to be done to ensure that those patients who screen positive are appropriately connected to resources. The input from our medical assistants, the majority of whom are of a similar cultural background as our patients, was invaluable. An unexpected benefit was feedback from medical assistants that they felt much more valued as team members and more motivated to provide care.

Title: Post-partum Contraception: CSHC and GRMDC**Authors: David Corner, MD and Talia Singer-Clark, MD****Background:**

Rapid repeat pregnancy is associated with increased maternal and neonatal morbidity. One third of US pregnancies, however, are conceived fewer than 18 months after a previous birth. Long Acting Reversible Contraception (LARC) methods have nearly four times the odds of achieving an optimal birth interval than women using a barrier or no method yet only 6% of women in the US used LARC in the 3 months after delivery. This project investigates the effect of postpartum visit timing on LARC uptake in both Codman Square Health Center and Greater Roslindale Medical and Dental Center.

Methods:

Chart review was completed on 86 postpartum patients to investigate the contraceptive choices made by women prenatally and in the postpartum period as well as their postpartum visit timing.

Results:

The median age of the population was 29 with an interquartile range of 9. 45.3% of individuals were primiparous, and 54.7% were multiparous. The rate of LARC uptake in postpartum period was 33%. Of the 35 women who desired LARC in the prenatal period, only 57% ended up receiving LARC in postpartum visit, with a mean postpartum visit time of 4.0 weeks after delivery. Of the 43% of women who desired LARC but did not receive it in the postpartum period, the average postpartum visit time was 4.6 weeks after delivery.

Conclusions:

A significant cohort of women who desire LARC prenatally are not receiving them postpartum, however use of LARC in this population is higher than national average. It remains unclear at this time whether timing of postpartum visits is associated with LARC uptake and a further appropriately-powered study is needed.

Title: Resident LARC Training at Greater Roslindale Medical & Dental Center**Kelsey I Thomas****Advisor: Jennifer Trieu****Objectives:**

Family planning is a core competency of family medicine practice, however family medicine residents nationwide desire more training in long acting reversible contraceptives (LARC). As a new residency training site, it was unclear whether the Boston Medical Center family medicine residents at the Greater Roslindale Medical and Dental Center (GRMDC) were doing enough procedures to

reach competency in LARC management. We aimed to determine how many LARCs are placed at GRMDC annually, what percentage of LARCs are placed by residents, and whether residents are reaching competency in LARC management.

Methods:

Billing data from the GRMDC electronic medical record (EMR) was analyzed from the year prior to any resident presence at the clinic (2015-16), and the following four academic years (2016-2020). Specifically, we assessed the number of times each provider billed for placing/removing an IUD or placing/removing/swapping a Nexplanon. This data was then compared to individual resident procedure tracking data (New Innovations website) to verify procedure totals. Further investigation was completed with chart review of individual cases.

Results:

Initial data verification showed inconsistencies in EMR billing data compared to individual procedure logs, with the billing data consistently underestimating the total number of procedures completed. Further chart review of individual cases identified provider billing errors as well as problems with the data sampling procedures. The billing data that was collected showed that over the last five years, there have been an annual average of 17.6 Nexplanon insertions, 13.8 Nexplanon removals, 24.8 IUD insertions, and 10.8 IUD removals at GRMDC. The percentage of devices managed by residents increased over that time, and in the past year residents managed 86% of Nexplanon insertions, 100% of Nexplanon removals, 77% of IUD insertions, and 100% of IUD removals. Of the three residents that have completed their residency training at GRMDC, EMR data showed only one reached competency in Nexplanon removal and insertion, none reached competency in IUD insertion, and two reached competency in IUD removal. This is contradicted by New Innovations data for one resident, which indicated sufficient procedures to reach competency in Nexplanon removal and insertion.

Conclusions:

Billing data is easily accessible but its accuracy is limited by provider practices and sampling procedures. EMR billing data indicate that the first two years of graduating residents at GRMDC did not reach competency in the management of LARCs, however this is contradicted by procedure log data. Over the last five years an increasing percentage of LARCs were managed by residents. Further investigation is needed to determine the most accurate method for obtaining resident procedure data.

2021

Resident Burnout, Cognitive Load, and Split Day Clinic Sessions: Results from a Pilot of a Novel Schedule Paradigm
Sam Gonzalez

Faculty advisor(s): Kate Standish, Rob Saper, Lindsay Corse

Purpose/Background:

In residency training extraneous cognitive load (ECL) has been identified as a potential contributor to fatigue and burnout. ECL is the cognitive load from the delivery of, or design in which learning experiences are encountered by learners. This study aimed to assess resident report of the effects of split-day resident schedules (AM inpatient rotation, PM continuity clinic) on ECL, burnout, satisfaction with academics and clinical performance. Using survey data from year 1, a novel scheduling paradigm was piloted and follow-up survey data collected to determine its effects on the above studied factors.

Methods:

We administered an online cross-sectional survey to FM Residents in an opposed 3-year Family Medicine program, in an urban underserved setting with offsite continuity clinics. The survey included closed- and open-ended, and likert-type scale responses regarding opinions on burnout, clinical duty completion, participation in didactics/education activities, and opinions on split-day and other clinic scheduling schemes. A novel piloted schedule paradigm to optimize Resident learning environment was reviewed and ratified by a majority of residents and implemented following feedback from survey data from year 1.

Results:

33 residents responded (82.5% response rate, 12 PGY-1, 11 PGY-2, 10 PGY-3). Among residents, 47% reported split-day clinic schedules had a significant impact on burnout (vs. 34% neither significant nor insignificant, and 19% insignificant). 95% of residents reported having ever missed noon conferences due split-day clinic sessions, and 89% of these respondents reported missing noon conferences at least half of these days. 69% reported inability to complete of clinical responsibilities to their satisfaction due to split-day clinic sessions, and 65% of respondents reported this occurring on at least half of these days. 90% reported missing learning opportunities due to split-day clinic sessions, with 65% of these residents stating it occurred at least half of these days. 53% were interested in alternative scheduling paradigms for residency, with 37.5% of unsure, and 9% not interested.

In year 2 following initial survey data, a novel scheduling paradigm constructed to mitigate factors identified in initial survey was piloted. Following 6 months of implementation of the novel schedule residents were again surveyed, 35 responded (83.3% response rate, 12 PGY-1, 12 PGY-2, 11 PGY-3), to the year 2 survey. Following implementation survey data show increased resident attendance at noon conference (53% positive), Increased resident ability to complete clinical responsibilities to their satisfaction (53% positive). Additionally, a majority of residents reported a positive effect on both inpatient and outpatient clinical training experience (70% positive and 50% positive respectively). Resident feedback following implementation of the piloted scheduling paradigm supported continued implementation and optimization of piloted schedule (65% in favor) as well as expansion to other areas of curriculum (64% in favor).

Conclusions:

Residents reported split-day clinic session scheduling for rotations contributed to burnout, ECL, is a barrier to learning, and can affect completion of clinical duties. A piloted schedule paradigm to optimize Resident learning environment was reviewed and ratified by a majority of residents and implemented following feedback from survey data from year 1, with survey data regarding its effects showing a largely positive effect on various indices of increased engagement and decreased extraneous cognitive load due to sub-optimal task sequencing and scheduled clinical duties when compared to prior years. Inferring a connected mitigation of resident burnout that is mediated by these factors.

Further work is currently ongoing to optimize and determine if this novel model of clinic scheduling can further mitigate burnout and improve resident training through increased participation in didactic and clinical learning opportunities.

Describing unmet social needs based on a universal SDoH screener at CSHC Howard Laney

Purpose:

Screening for social needs is expanding in primary care, but the effect of screening on health and social outcomes is not known.

While awaiting more data, health centers can use screening data to understand social needs and target interventions. This project

uses the results of universal social needs screening in primary care to describe a population of patients who are food insecure, housing insecure, or both food and housing insecure, in order to target next steps to address social determinants of health.

Methods

Primary care patients at one urban Federally Qualified Health Center in Boston were asked to complete a social determinants screening. Demographic data and screening results were uploaded to a registry in compliance with the Boston University Medical Center IRB. In order to focus on the area where it would be plausible to offer interventions, analyses were limited to the ten zip codes with the most patients. Descriptive statistics were generated for the entire sample and for those experiencing the defined social needs. Two-sample t-tests were used to test for associations between continuous covariates and social needs, and chi-square tests were used to test for associations between categorical covariates and social needs. Odds ratios (OR) and their 95% confidence intervals (CI) were obtained from simple logistic regression models to quantify the association between social needs and the predictors of interest.

Results

Between March 2019 and February 2020, 8242 patients were screened. 6723 were from the ten most populous zip codes and included in the analysis. 1340 (19.9%) were experiencing food insecurity, 754 (11.3%) were experiencing housing insecurity, and 394 (5.9%) were both food and housing insecure. For each measure of resource insecurity there was no association with racial or ethnic identity. Those with male gender identity had 1.22 times the odds of housing insecurity compared with female gender identity (95% CI: 1.05-1.42), and had 1.37 times the odds of combined housing and food insecurity (95% CI: 1.11-1.67). Zip code was associated with housing insecurity ($p < 0.01$) and food insecurity ($p < 0.01$). Those who were housing insecure had 5.83 times the odds of being food insecure (95% CI: 4.98-6.84).

Conclusions:

Data from a universal screening demonstrated prevalence of social needs and suggested associated risk factors to help target future interventions. Other health centers may model this work to understand their own social needs.

Presented: STFM 2021.

Contraceptive Access and Unintended Pregnancies during the COVID-19 Pandemic at an Urban Federally Qualified Health Center

Jennifer VanderWeele

Faculty Advisors: Dr. Tepperberg, Dr. Tringale

Background:

Reproductive health services have been limited during the COVID-19 pandemic, which has especially affected marginalized and vulnerable communities and intensified existing health disparities. The aim of this study is to measure contraceptive access and unintended pregnancies at an urban federally qualified health center during the COVID-19 pandemic as compared to before the pandemic.

Methods:

This study took place at an urban community health center that serves a predominately Black and low-income population (88.8% of patients are Black/African American and 72.8% are at or below the federal poverty level). Data was collected from the health center's electronic medical record via de-identified data pull, laboratory records, and chart review. Data was compared during the COVID-19 pandemic (3/16/20-12/16/20) with the two years prior to the pandemic (3/16/18-12/16/18 and 3/16/19-12/16/19). Outcome measures included number of contraception prescriptions (pill, patch, ring, emergency contraceptive pill), number of long-acting reversible contraception procedures (Depo-Provera administration, Nexplanon insertion, Nexplanon removal, IUD insertion, IUD removal), number of positive pregnancy tests, pregnancy intention (as defined by the patient at her prenatal appointments), and pregnancy outcome.

Results:

In-person provider visits decreased by 59% in 2020 compared to the 2018-2019 average, while total provider visits increased by 17% with telemedicine. Total contraception procedures and prescriptions decreased by 36% in 2020 compared to the 2018-2019 average, while the proportion of various contraceptive methods remained stable except for depo administration and emergency contraception prescription which both decreased from 2018 to 2019. Positive pregnancy tests decreased by 27% in 2020 compared to the 2018-2019 average, with a 19% decrease from 2018 to 2019 and an 18% decrease from 2019 to 2020. The percentage of unintended pregnancies in 2020 (52%) was unchanged from the 2018-2019 average (53.5%).

Conclusions:

Contraception provision decreased during the COVID-19 pandemic but at a lower rate than the decreases of in-person visits. Despite the decrease in contraception provision, the rate of unintended pregnancies did not change significantly. Limitations of this study include data collected from only a single health center, validity of data limited by accuracy of provider documentation and billing, and data completeness limited by unknown pregnancy intentions, indeterminate pregnancy outcomes, and ongoing pregnancies at time of chart review. Next steps include trending outcomes over time to correlate outcomes with COVID positivity rate and health center operations, expanding data collection to other community health centers, and comparing findings to national trends in pregnancy rates, abortion rates, and birth rates.

Conferences:

Yes, gave poster talk at 2021 STFM Annual Spring Conference.

EBNHC QI Initiative: CHC Prescriber Feedback on Asthma QI Effort

Gabriel Lopez

Faculty advisor: Dr. Karin Leschly

Background:

Asthma is a chronic inflammatory disorder impacting the lives of children, adolescents, and adults. Several epidemiological and toxicological studies have demonstrated an association between exposure to air pollutants and respiratory effects. Located near Boston's Logan International Airport, East Boston Neighborhood Health Center (EBNHC) has sought to implement quality improvement (QI) interventions aimed at improving providers' adherence to updated asthma management guidelines. Changes in electronic health record's (EHR) default (such as albuterol refill settings) is a common nudge design implemented to voluntarily bring clinical practice in line with desired standards. These efforts were coupled with providing some Family Medicine (FM) provider's with feedback on their prescribing habits in efforts to change prescribing trends towards better asthma controller therapy whenever clinically indicated. It is unclear if making EHR changes or providing providers with albuterol prescribing feedback will be understood and accepted.

Methods:

A voluntary, brief, 14-question survey of FM providers (Attendings, Physician Assistants, Nurse Practitioners, Residents) was created to assess general awareness of: the recently updated asthma management guidelines, EBNHC's QI interventions, and to also gauge providers' interest on receiving feedback and their preference on how best to receive that feedback.

Results:

There were a total of 28 of possible 49 respondents across three FM clinic sites (East Boston, Winthrop, South End). Two-thirds were extremely or very aware of the current QI projects EBNHC is undertaking but only about 50% were aware of the asthma QI project in particular. Most (82%) were either extremely or very familiar with updated single maintenance and reliever therapy for asthma management 82% respondents were aware of the new albuterol refill default EHR preferences. A large majority (86%) of providers were either extremely or very interested in receiving feedback/data on their personal prescribing habits. Those in favor of feedback felt it would improve patient care and adherence to evidence-based practices. Those against receiving feedback cited time constraints most often. About 48% preferred either internal electronic messaging or telephone encounters but only one respondent preferred a virtual format such as Zoom. Approximately 57% preferred this feedback occur quarterly and be given by either the Medical Director, Clinical Pharmacist, or a Preceptor.

Conclusions:

EBNHC FM providers are very aware of the current asthma management guidelines and QI efforts, are largely open to receiving feedback on prescribing habits, and would prefer feedback be evidence-based, actionable, take place quarterly, and given by a clinic leader or subject expert.

Study of Infant Mortality Rate Across Family Medicine-affiliated Community Health Centers

Christina Pindar

Advisor: Katherine Standish

Background & Objective

The infant mortality rate (IMR) is a key marker of maternal and child health and is determined primarily by gestational age at birth and birth weight. Mortality is higher among Black and Hispanic than white infants in the United States. At Boston Medical Center (BMC), a large safety net hospital system serving predominantly Black and Hispanic patients, over half of patients receive prenatal care from family medicine physicians at BMC community health centers. While some factors affecting preterm birth rates are distinct between the health centers, for example, the racial makeup of the patients they serve, some factors are consistent, such as provider training and prenatal care protocols. Thus, this study endeavors to better understand the rates of preterm birth and low birthweight at each health center, as well as differences between health centers. This will allow us to assess if any racial disparities in the IMR are ameliorated by similar models of prenatal care, hypothesizing that the disparities will persist despite similar models of care.

Methods

This is a retrospective cohort study of ~7,200 hospital birth records, which include prenatal care site, birth weight, and gestational age at birth, from January 2018 – December 2020. A logistic regression will be used to assess the effect of the independent variable, prenatal care site, on the outcome variables, birth weight and gestational age at birth. All patients who received care at a family medicine-affiliated prenatal care site and delivered at Boston Medical Center will be included.

Results

Rates of preterm and low birth weight by neighborhood differed by 2-4% in Boston Public Health Commission data. This data was utilized as a proxy for rates of preterm birth and low birth weight at each health center. Therefore, it was determined that to detect a difference of at least 2% in rates of preterm birth and low birth weight between health centers, at a power of 80% and $\alpha=0.05$, a sample size of >7,000 patients would be required.

Conclusions

We expect to see a difference in both preterm birth rate and low birth weight between health center sites. The expectation is that this study can serve as a foundation for future studies to better understand the reasons why differences exist in the rates of preterm birth and low birth weight between health centers, despite patients receiving similar prenatal care and delivering at the same tertiary care site.

Carolyn Arnold

Wong MS*, Arnold CM*, Roberts ET, Pollack CE. "The Relationship Between Federal Housing Assistance and Uptake of Cancer Screening Among Low-Income Adults." *J Gen Intern Med*. 2019 Jun 13. doi: 10.1007/s11606-019-05037-z. *Co-first authors.

Background: Despite the large scale of U.S. Department of Housing and Urban Development (HUD) programs and widespread recognition that housing is an important social determinant of health, the influence of housing assistance on healthcare use has scarcely been studied.

Objective: To examine, using nationally representative data, whether housing assistance is associated with receipt of age- and sex-appropriate cancer screening, and whether levels of neighborhood disadvantage affect that relationship.

Methods: We used National Health Interview Survey (NHIS) data (2004-2012) linked to HUD administrative data to assess the association of housing assistance with receipt of up-to-date cancer screening. Comparison groups were modeled using (a) propensity score matching and (b) a quasi-waitlist of individuals eligible for but not currently receiving HUD assistance. Multivariable logistic regressions assessed binary cancer screening outcomes across housing groups, controlled for age, sex, race and ethnicity (non-Hispanic White, non-Hispanic Black, Hispanic, other), education (<high school, high school, >high school), income-to-poverty ratio, employment status (employed, unemployed, out of work force), marital status (married vs. unmarried), insurance source (public, private, or uninsured), and usual source of care (has usual source vs. no usual source).

Results: There were no significant associations between receipt of housing assistance (current vs. future housing assistance groups) and screening for colorectal cancer (N=1,384, aOR 0.74, 95% CI 0.23-2.39), breast cancer (N=1,251; aOR 0.74, 95% CI 0.23-2.43), cervical cancer (N=2,028; aOR 0.91, 95% CI 0.40-2.05). Sensitivity analyses did not show significant changes by including those with prior cancer diagnosis, limiting to those with a usual source of care, or accounting for neighborhood disadvantage.

Conclusions: There does not appear to be a strong association between housing assistance and the proportion of low-income adults screened for cancer per USPSTF recommendations. Further research should assess more proximal factors to better understand the mechanism between housing and health.

Utilization of Harm Reduction Strategies at One Resident-Led Office-Based Addiction Treatment Center

Alison Presti MD

Purpose: Harm reduction strategies are a key part of reducing morbidity and mortality for people with substance use disorder, however, existing research shows low rates of implementation. As residency programs increase addiction training opportunities, ensuring evidence-based practices are taught and implemented will ensure future providers follow such guidelines post-residency. This quality improvement project aims to assess the rates of implementation of these harm reduction strategies at one family medicine resident office-based addiction treatment (OBAT) clinic.

Methods: South Boston Community Health Center (SBCHC) is an urban federal-qualified health center that serves the South Boston community. SBCHC's population consists of a largely under-served and under-represented population, including 40% below the Federal Poverty Line. It is also associated with Boston Medical Center (BMC), the largest safety net hospital in New England, and is staffed in part by family medicine residents. In 2019, the BMC family medicine residency started its own resident-run OBAT clinic. In this study, we analyzed all patients (n=22) receiving suboxone at SBCHC's resident-run OBAT clinic from 8/1/2020 to 12/31/2020. Specifically, we measured the proportion who have received evidence-based harm reduction strategies, including a) screening for infectious diseases (HIV, hepatitis B and C, syphilis, and tuberculosis), b) vaccinations (Hepatitis A and B and tetanus (Tdap)), c) disease prevention (pre-exposure prophylaxis for HIV (PrEP)), d) disease treatment (Hepatitis C), e) prescription of Narcan, and f) engagement in counseling. We then used this data to identify areas for improvement and develop patient and provider materials such as informational sheets, checklists and reminders to help increase rates of implementation.

Results: We evaluated 22 individual patients that are being cared for by the 12 family medicine residents at SBCHC OBAT clinic. There were varying rates of implementation of these harm reduction strategies. Rates of screening labs ranged from 82% screening for hepatitis C, and 77% screening for HIV down to 18% tuberculosis screening. For vaccinations, 45% of patients were vaccinated

for hepatitis A and B and 77% were up to date on Tdap vaccine. Additionally, 59% of patients were engaged in counseling, 55% were sent prescriptions for Narcan and no patients were on PrEP for HIV prophylaxis.

Conclusions: Harm reduction strategies are an evidence-based way to reduce morbidity and mortality for people with substance use disorder. At SBCHC's resident OBAT clinic, there were varying rates of implementation of these harm reduction strategies with particularly high rates of screening for hepatitis C and HIV and low rates of screening for TB and low rates of PrEP prescriptions. Through the implementation of patient and provider materials such as informational sheets, checklists and electronic medical record reminders we plan to increase rates of implementation of harm reduction strategies.

2022

Ka-Yi Li (Ki-ki)

Advisor: Avra Goldman

Development of a Refugee and Immigrant Health Concentration in an Urban Family Medicine Residency Program

Boston Medical Center is the primary and largest hospital serving immigrant and underserved communities in Massachusetts. Family physicians not only serve as first points of contact for many newly arrived refugees and immigrants, but play an important role in providing culturally informed primary health care for this increasingly diverse and socially complex community. With the creation of a "Refugee and Immigrant Health Concentration" in the family medicine residency program, we aim to cultivate skills and competencies in the care of these populations. Through didactics and continuity clinics, residents will explore unique challenges encountered by refugee and immigrant patients during their transition to life in the U.S. These special challenges include past trauma, gender-based violence, problems related to climate justice, and other psychosocial stressors affecting their lives. As this knowledge and experience is incorporated in residents' continuity clinics and inpatient experiences, they will gain further understanding of the specific needs of these individuals. They will also learn of the impact of these issues on their well-being. Through this training, our residents can become skilled and effective advocates for these patients and work with them to overcome the barriers they encounter in becoming part of American society.

Presented at;

- 1) STFM conference
- 2) North American Refugee Health Conference

Shadow Pandemics: Addressing Social Determinants amidst COVID-19 at a CHC

Residents: Dr. Anuka Das, MD, MPH; Dr. Ryan Narciso, MD; Dr. Victor Roy, MD, PhD; Dr. Meghna Srinath, MD, MPH

Faculty advisor(s): Dr. Sara Schlotterbeck, MD

Abstract

Background:

COVID-19 has exacerbated pre-existing social vulnerabilities facing patients in historically resource-denied communities. In many neighborhoods, community health centers (CHCs) are at the frontlines of responding to these social needs such as housing and food insecurity. Yet increased pandemic-related demands as well as the rapid emergence of new care models involving telehealth have challenged CHC capacity to effectively and equitably address social determinants at a time of growing vulnerability.

Objectives:

We aimed to use mixed methods at a CHC in a neighborhood disproportionately impacted by COVID-19 to 1) map and assess how social determinants screening processes were affected by the pandemic, 2) understand barriers that providers experienced with connecting patients to essential social needs and 3) create, administer and evaluate a pilot provider training intervention to address housing insecurity.

Methods:

In Phase 1, we used observations, informational interviews, and process mapping to understand the workflow of social needs screening at a CHC. In Phase 2, we used an online tool (Qualtrics) to administer and analyze survey data from family medicine providers regarding experiences with patients' social needs. In order to address the gaps identified in the survey, in Phase 3, we partnered with our community health worker (CHW) to create a training module on addressing housing insecurity. We presented the training to family medicine residents and analyzed pre- and post-training survey data to assess effectiveness in expanding provider knowledge.

Results:

In Phase 1, our efforts revealed that there were significant variations and gaps in practice around screening for social needs at our CHC. Gaps in screening to care linkage for patients were driven in large part by a shortage and high turnover of community health workers. In Phase 2, our provider survey (n=20) demonstrated that a) the high burden of social needs amongst our patients were largely shared verbally with providers, rather than using the paper screener, b) providers did not feel integrated with the social care team and did not have familiarity with available resources to provide patients once a need was identified, and c) providers desired additional training, specifically around housing insecurity (62.5%). In Phase 3, our pre-training (n=7) and post-training (n=5) surveys with resident providers receiving the pilot training showed increased familiarity with available housing resources and increased confidence in triaging different types of housing concerns to CHWs.

Conclusions:

Providers demonstrated a desire for up-to-date training to better link their patients to social resources. Brief clinic trainings on social services at a CHC have the potential to improve provider confidence and better integrate care. Physicians can learn from CHW

expertise and care models including interdisciplinary teams should be explored. Tackling social determinants at the health center level is a complex challenge, with many gaps and opportunities for solutions - from screening to linkages to care.

1. Presented as Virtual Poster at STFM Conference on Practice & Quality Improvement, September 2021

Interdisciplinary Group Visits for Weight Management

Kelly Carreiro, DO

Faculty Advisor: Keri Sewel

Obesity accounts for significant increased risk of morbidity and mortality in the United States. The Obesity Medicine Association (OMA) defines obesity as a “chronic, relapsing, multi-factorial, neurobehavioral disease, wherein an increase in body fat promotes adipose tissue dysfunction and abnormal fat mass physical forces, resulting in adverse metabolic, biomechanical, and psychosocial health consequences.” The prevalence of obesity in Massachusetts was 24.2 - 29.2% in 2020. Prevalence is multifactorial and influenced by factors including access to care, socioeconomic means, race, and personal medical history. Many studies have shown that obesity is associated with other medical problems including type 2 diabetes, cardiovascular disease, cancer and gallbladder disease. Using a systems approach, our pilot study aimed to focus on social/group dynamics and individual behavior by providing an interdisciplinary group model care for obesity. Other studies have proven this model to be effective in other group populations. We propose that using similar methods in a small cohort group of individuals within the Melnea Cass Family Medicine Clinic, that we are able to achieve significant improvement in biomarkers of health, such as weight and blood pressure. Intervention was accomplished using an interdisciplinary model that includes nutritional counseling, medical support and social support. A randomly selected group of up to 16 individuals were recruited for the study with inclusion criteria of adults age greater than 17 with BMI greater than or equal to 30. Data measures were gathered at baseline and interval periods, including weight, blood pressure and post-questionnaires regarding quality of life. The results of our pilot study were widely inconclusive with lack of attendance as the largest limitation. In conclusion, more studies need to be done with an increased number of participants to further investigate if this model is appropriate and effective in this population.

Title: Identification of Barriers in Providing Medical Termination of Pregnancy Services in the Ambulatory Setting

Authors: Corey Costanzo, DO, MPH, MS; Jennifer Trieu, MD; Julianna Castedo, MD

Purpose: In the United States, approximately half of pregnancies are unintended. A significant proportion of these unintended pregnancies occur in underserved areas that have the least access to contraception and family planning services. Medication termination of pregnancy has been shown to be a safe option that can be managed safely in an ambulatory setting. The goal of this study is to identify barriers that may prevent healthcare providers from offering this care in an urban community health center.

Methods: A cross-sectional study will be conducted in an urban community health center to identify barriers to ambulatory medical termination of pregnancy. Participants will include 8 family medicine physicians, 1 family medicine physician assistant, 6 family medicine resident physicians, 1 internal medicine physician, 3 pediatric physicians, and 2 pediatric resident physicians. All participants provide primary care and reproductive health services to patients at a CHC look-alike affiliated with an urban safety net hospital. The health center primarily serves 45% Medicaid insured patients and 34% of all patients are reproductive aged females assigned at birth. Measure/main outcomes: An online survey will be used to identify and quantify personal belief, educational, and

logistical barriers to offering and managing medical termination of pregnancy. Data will then be analyzed to identify most to least impacting barriers.

Results: We will present descriptive statistics to quantify barriers, including percentage breakdown of personal belief, educational, or logistical barriers, or another previously unidentified component.

Conclusion: The findings of the study will allow stakeholders to specifically address the barriers that pose the greatest challenges to providers. Identifying the most impactful barriers can then inform the adjustment of protocols, optimization of operations, and recurrent educational opportunities. Through this work, access to safe medical termination services for patients in the ambulatory setting will be improved. Future research can reassess provider comfort after study driven interventions are implemented to continually improve access to robust family planning services in the community health center.

Contraception access during the COVID pandemic at South Boston Community Health Center

Mallika Sabharwal and Claudia Ma

Advisor: Mekkin Lynch

Background

In multiple countries rates of contraceptive care have decreased during the COVID-19 pandemic. The switch to primarily telehealth encounters may have further exacerbated known disparities in contraceptive access in the United States. This study will assess rates of contraception encounters and unplanned pregnancies at a community health center during the COVID pandemic when most clinic visits were conducted via telehealth and be compared to the year prior to the pandemic when clinic visits were in person.

Methods

Data will be collected via abstraction from electronic medical records of patients with female sex assigned at birth between the ages of 15 and 45 at a federally qualified health center in an urban underserved area in the northeast. The clinic serves about 16,500 patients, 24 percent of which identify as a racial or ethnic minority. We will compare rates of contraception clinical encounters and unplanned pregnancies during the pandemic (March 2020 to February 2021) and pre-pandemic (March 2019 to February 2020). Contraception encounters include clinic visits for education, counseling, prescriptions, or procedures. Using diagnosis codes, we will measure contraception encounters (IUD, nexplanon, depo provera, pill, ring) and unplanned pregnancies (with a textual search for planned vs unplanned).

Results

Nearly 9,000 patients at the health center identify as female with about 3,500 between the ages of 15 and 45. Results will be reported following February 2021 when data collection of the number of contraception encounters for clinic telehealth visits and

unplanned pregnancies during the pandemic will be complete. These rates will be compared between in person visits pre-pandemic and telehealth visits during the pandemic.

Conclusions

The goal of this study is to understand the effect the COVID-19 pandemic and transition to telehealth has had on the provision of contraception in an urban underserved population based on a comparison of contraception clinical encounters and number of unplanned pregnancies prior to the pandemic versus during the pandemic. Based on results, target interventions may be designed to improve patient outreach and contraception counseling efforts via telehealth encounters.

Title: Beyond Fruitful: Validating a Guide to the Bimanual Exam

Lisa Fleischer, PGY3

Mari Bentley, MD PhD, Melissa Wong, MD

Background

The bimanual exam is a clinically validated model to estimate gestational age in early pregnancy [1,2,3,4]. It is performed by placing one hand on the lower abdomen, and the other hand inside the vagina to palpate the uterus from above and below. In pregnancy as the uterus grows, practitioners can use various landmarks to estimate the age of the pregnancy. For example, if the uterus is palpated above the pelvic brim, this indicates that a pregnancy is beyond 12 weeks gestational age. Likewise, a uterus that reaches the level of the umbilicus is approximately 20 weeks gestation. Another commonly used tool for teaching clinicians how to evaluate the size of the uterus is by comparing the uterus to various fruit sizes. A 2001 study by Margulies et al developed a guide to compare the sizes of widely available fruits such as lemons, pears, juice oranges, navel oranges, and grapefruits and paired each fruit with a corresponding gestational age, ranging from non-pregnant uterus sizes to up to 12 weeks gestational age [5].

In low resource settings or in practices where ultrasound is not readily available, bimanual exams act as the gold standard for gestational age confirmation [4,6,7]. This physical exam maneuver is often used in combination with the first day of the patient's last menstrual period in order to determine the gestational age of a pregnancy. In all clinical settings, bimanual exams are low risk, cost-effective, and critical components of comprehensive reproductive healthcare.

Study Rationale

Despite the worldwide use of the bimanual exam in early pregnancy, the didactic information for learning bimanual exams is extremely limited, if not absent from the medical literature [2,3,4]. As two notable examples, *Bates' Guide to Physical Examination and History Taking* says nothing about examining the uterus during early pregnancy [8], while *Williams' Obstetrics* has only the following text devoted to the bimanual exam in early pregnancy:

"During bimanual examination, it [the uterus] feels doughy or elastic. At 6 to 8 weeks' menstrual age, the firm cervix contrasts with the now softer fundus and the compressible interposed softened isthmus—Hegar sign. Isthmic softening may be so marked that the cervix and uterine body seem to be separate organs. By 12 weeks' gestation, the uterine body is almost globular, with an average diameter of 8 cm.

... Bimanual examination is completed by palpation, with special attention given to the consistency, length, and dilatation of the cervix; to uterine and adnexal size; to the bony pelvic architecture; and to any vaginal or perineal anomalies. ...

... Gestational age can be estimated with considerable precision by appropriately timed and carefully performed clinical uterine size examination that is coupled with knowledge of the last menses. Uterine size similar to a small orange roughly correlates with a 6-week gestation; a large orange, with an 8-week pregnancy; and a grapefruit, with one at 12 weeks (Margulies, 2001)." [9]

While this description outlines the pertinent findings on a bimanual exam, it does not tell the reader where to place the hands and fingers in order to perform the size estimation. It also does not provide a methodical approach to the bimanual exam. Although such specifics may seem excessive to the practiced clinician, these texts are widely recognized as introductory sources in medical education, and new learners may find such a description of a complex exam to be lacking sufficient detail.

A lack of specific instruction in how to perform bimanual exams is not the sole barrier to competency for medical students. In ideal educational circumstances, students would be able to learn the theory of the bimanual exam and apply their learning to exams in patient encounters under the supervision of advanced practitioners. However, this is not always feasible. These exams are often uncomfortable for patients who may prefer to avoid sensitive exams by learners. In addition, the highly intimate nature of these exams can cause discomfort for learners as well. A 2007 study by Siwe et al surveyed students' emotions surrounding bimanual exams and found that teaching pelvic exams using a combination of standardized patients and didactic instructors decreased learner distress, increased "[eagerness] to try [performing the exam] again," and increased learner success in palpating the uterus and ovaries [14]. Bimanual exams are also difficult to learn and teach because by nature of pelvic anatomy, the exam occurs in a blind pouch where teachers and learners alike are not able to visually observe movements of the examiner. For all of these reasons, having a thorough, detailed text that reviews each step to the bimanual exam is sorely needed in gynecologic medical education.

At Boston University School of Medicine (BUSM), Dr. Mari Bentley and others developed a detailed guide with stepwise instruction in how to assess the pregnant uterus and cervix.¹¹ This text has been used to train medical students and residents at BUSM and Boston University Medical Center (BMC). The accuracy of the guide's content was validated by faculty who are experts in bimanual exams of the pregnant uterus. In order to validate the use of the guide as a teaching tool, a well-established approach is to assess its utility for new learners [12,13,14,15,16].

STUDY OBJECTIVES AND HYPOTHESES

Our study will examine the use of the guide among the least experienced learners, specifically third year medical students, who we will survey over the course of their clerkship in Obstetrics and Gynecology. We will evaluate the impact of the guide on the students' perception of the bimanual exam in terms of their perceived comfort, confidence, and anxiety surrounding performance of the exam and in their ability to assess the position and size of the uterus and the position of the cervix.

Primary Objective

To determine if use of the text "Sizing the Gravid Uterus" is associated with improved

confidence in determining **size** of the pregnant uterus.

Secondary Objectives

1. To determine if use of the text "Sizing the Gravid Uterus" is associated with improved confidence in determining **position** of the pregnant uterus and cervix.
2. To determine if a correlation exists between participants' overall comfort with performing bimanual exams on pregnant patients and increased exposure to the text "Sizing the Gravid Uterus."
3. To determine if a correlation exists between participants' confidence in determining the **size** of the uterus on bimanual exam and increased exposure to the text "Sizing the Gravid Uterus."
4. To determine if a correlation exists between participants' confidence in determining the position of the uterus and cervix on bimanual exam and increased exposure to the text "Sizing the Gravid Uterus."

METHODS

Third year medical students will be approached at the beginning of their clerkship in Obstetrics and Gynecology. Students will be informed of the study and the requirements of enrolled subjects to complete a survey during the first week of the clerkship and a second survey within one week of the last clinical day of the clerkship. Students already have access to the reference "Sizing the Gravid Uterus" as part of their routine clerkship resources on Blackboard.

All emails from study staff will be sent to the entire cohort of medical students undergoing their OBGYN clerkship during that block. This means that there is no way for study staff to identify which students have completed the surveys, nor which survey belongs to which student. The surveys are constructed such that email addresses are NOT be linked to participants' responses.

For our data analysis, our primary analysis will be a comparison of proportions using data obtained from our surveys. In particular, we will compare the proportions of participants who answer "agree" or "strongly agree" when asked if the text "Sizing the Gravid Uterus" was valuable in teaching participants how to determine the size of the uterus and the position of the uterus and cervix. We will also perform a comparison of proportions of participants who answer "agree" or "strongly agree" when asked if the text was valuable in improving overall comfort in performing exams and in perceived confidence with determining the position of the cervix and uterus and the size of the uterus. Finally, we will compare the participants' answers to the above questions and determine if there is an association between the number of minutes spent reading the text during the clerkship and the proportion of participants who answered "agree" or "strongly agree" with the questions above.

RESULTS/CONCLUSIONS

This study is ongoing with end date for data collection of May 2023.

Implementation of guidelines for chronic opioid pain management

Candice Hu, Emily Geldwert

Faculty advisors: Marielle Baldwin, Mekkin Lynch

Background –

Nearly 500,000 people died from an opioid overdose between 2009 - 2019. Despite the rise of synthetic opioids, 28% of overdose deaths still involve an opioid prescription and prescription-involved deaths were more than 4x higher in 2019 than in 2009. Due to the known risks of chronic opioid pain management, there has been increasing discussions of tighter monitoring and standardization of care at SBCHC. CDC has developed universal precautions¹ for office-based practice that standardize chronic opioid management in outpatient settings that will serve as a guideline for our practice.

Objective –

Our goal is to standardize workflow of chronic opioid pain management and improve adherence to CDC universal precautions.

Methods –

We reviewed current prescribing habits of Family Medicine (FM) providers at South Boston Community Health Center (SBCHC) via data extraction on ochin chronic opioid registry. With the data, we assessed area of improvement via discussion with FM nursing staff and attending provider. Based on needs assessment, we created a dot phrase to standardize documentation of risk stratification of patients and plan for monitoring. We then reviewed patient panel with individual providers to implement the dot phrase. Finally, we started patient outreach with patients not in compliance with CDC guideline on urine drug screen (UDS) and advise them to present to clinic for urine sample. We analyzed the number of patients with up-to-date urine UDS before and after intervention using ochin chronic opioid registry.

Results –

We created a dot phrase and performed individual patient panel review for 46% of all patients in SBCHC FM clinic who are on chronic opioid pain medication. We were able to improve the number of patients with up-to-date UDS from 46% to 62%.

Conclusions –

It is beneficial and less stressful for care teams and patients when there is a standardized workflow to monitor and provide chronic opioid refills. Standardizing workflow involves creating a way to effectively communicate key information (eg, indication, risk level, medication monitoring frequency) across healthcare team. Patients are often willing to comply with monitoring requirements when clearly stated. SBCHC has newly hired a chronic pain nurse and our goal is to work with her to reevaluate patient risk level using more objective tools (eg. DIRE screen), monitor quality of care, eg. naloxone prescription, concurrent benzodiazepines and provide very close monitoring if a downtitration process is initiated.

Title : Assessment of LGBTQ+ Inclusive Primary Care Practices at Community Health Centers

Megan Anderson, MD, Gerianne Connell, MD, Jeremy Weiser, MD

Faculty Mentor: Jacklyn Cheng, MD, MPH

Background: Historically, the healthcare system has pathologized and developed practices that oppress people who identify as LGBTQ+. Although improvements have been made to better protect LGBTQ+ patients, there continue to be barriers to equitable healthcare access, leading to health disparities. Boston Medical Center (BMC) has been designated an LGBTQ+ Healthcare Equality Leader by the Human Rights Campaign, but BMC's reach goes beyond our hospital and the BMC GenderCare Center.

Objectives:

1. Complete a needs assessment of each Community Health Center (CHC) that residents work at regarding LGBTQ+ inclusive healthcare practices.
2. Use needs assessment results to guide CHC-specific implementations to promote equitable and inclusive care for patients

Methods:

Developed a brief cross-sectional survey (up to 12 questions) for patient-facing clinic staff. The survey was distributed to East Boston Neighborhood Health Center (EBNHC).

Results: 31 responses from clinic staff, which included medical assistants, registered nurses, advanced practitioners, residents and attendings. Most staff felt comfortable providing care to patients who identify as LGBTQ+. Most staff felt comfortable asking patients their sexual orientation, gender identity and knew how to enter into the medical record. Most staff did not feel equipped to provide gender affirming care (GAC) but most are interested in becoming competent. In addition to formal gender-affirming training, staff wanted clinic workflows/smart sets on GAC. They noted the clinic does not routinely check gender and sexual orientation on registration, have LGBTQ+ affirming signage in public spaces, or have mandatory trainings on LGBTQ+ primary care. Several staff members offered to be clinic champions and promote furthering LGBTQ+ inclusive care.

Conclusions: The cross-sectional survey assessed patient-facing staff members on various metrics of LGBTQ+ inclusive primary care. Based on survey results, clinics can increased LGBTQ+ inclusive primary care through more standardized collection of sexual orientation/gender identity data, making clinic space more inclusive for sexual/gender minorities, prioritize staff trainings and identify LGBTQ+ champions amongst staff.

Please also provide the following information (not to be listed publicly):

1. Presentations
 - a. STFM, Work in Progress, Poster Presentation. 2023

Impact of Outpatient Primary Care Electronic Inbox Management Training on Resident Comfort with Inbox and Message Review Time

Stephanie Adcock

Faculty Advisors: Charlie Williams, MD, Stephen Tringale, MD

Background

Since the advent of the electronic medical record and associated patient portal, the electronic inbox is a frequently cited source of physician stress and burnout, particularly within primary care. However, there are currently no published curricula on electronic inbox management.

Objective

This QI project aimed to decrease Family Medicine residents' inbox-related stress and improve their efficiency by training incoming interns in inbox management.

Methods

This project was performed in a large, urban safety net hospital and affiliated federally qualified health centers. The program's 12 incoming family medicine residents attended a 1-hour training on inbox management during their intern orientation. Their self-reported burnout levels and inbox efficiency were compared to family medicine residents who had not received the training. Resident burnout was measured via questions adapted from the Professional Burnout Index. Resident efficiency was measured via turnaround time for lab results and patient calls.

Results

Overall residents reported high levels of inbox-related burnout, with 54% responding “agree” or “strongly agree” to one or more measures of inbox-related burnout pre-intervention. Residents cited the high volume and never-ending nature of the inbox as primary sources of anxiety. Median pre-intervention turnaround time for results was 7.5 days. Post-intervention, there was no statistically significant difference in self-reported burnout or inbox efficiency between the intervention and control groups.

Conclusions

Residents experience high levels of inbox-related burnout and anxiety, driven primarily by high volume of inbox messages. Median resident turnaround time for lab results was 7.5 days; clinic expectations ranged from 24-48h (clinics without inbox triage) to 3-5 days (clinics with triage). The impact of this delay on patient care is unknown. Residents cited patient care concerns as a driver of guilt and anxiety around the inbox. In its initial cycle, this intervention did not significantly change resident stress or efficiency. Small sample size and high rates of missing EMR usage data for interns limited data interpretation. Resident feedback on the initial training highlighted ways to improve it; future study would also improve sample size. While it is unclear whether this intervention achieved its aims, it is very clear that the inbox contributes to resident burnout and that residents are unable to keep up with the volume of inbox messages within the current systems. Systems-level changes are required to address inbox volume and improve patient safety.

Conferences

2022 STFM Work In Progress Poster

2023 BMC FM Grand Rounds

Effective Linkage to SDOH Resources in a Community Health Center

Emily Regier, MD

Faculty advisor: Jennifer Trieu, MD

Background: There is strong evidence that social determinants of health (SDOH) have a significant impact on health outcomes. Community health centers (CHCs) serve populations of patients with high rates of SDOH needs and are thus ideal settings to intervene. Available data suggest that most CHCs in the US screen patients for SDOH needs, but there is less evidence on whether patients who screen positive are effectively linked to resources, and almost no evidence on whether these efforts improve health outcomes.

Objective: Evaluate current practices at the Greater Roslindale Medical and Dental Center (GRMDC) for screening patients for SDOH needs and linking them to resources and identify opportunities for improvement.

Methods: 1) Examined electronic health records of all patients seen for provider visits for a week to confirm whether they were screened for SDOH needs. 2) Examined electronic health records of all patients who screened positive for SDOH needs in March 2023 to determine whether they were referred to the clinic's community health worker (CHW) for follow up. 3) Analyzed data on patients referred to CHW in fall 2022 to determine whether they received resources to address the needs that prompted the referral.

Results: 1) Of the 406 patients seen for a provider visit during the week examined, 89% were screened for SDOH. The majority of patients who were not screened at their visit that week had been screened at a previous visit. 2) Of the 29 patients who screened positive for SDOH in March 2023, 18 received a handout about potential resources, 8 were connected to the CHW immediately (via warm handoff or message sent after the visit), 3 were connected to the CHW several weeks later (via outreach by the clinic pop health team), 4 had already been connected to the CHW at a prior visit, and 14 were not connected to the CHW. 3) All of the patients referred to the CHW in fall 2022 received some assistance with the needs that prompted the referral. Transportation was the highest-yield area for referral.

Conclusions: GRMDC screens patients for SDOH needs at a high rate. GRMDC is somewhat effective at linking patients who screen positive to additional resources, but there is room for improvement in this area. Most patients who are referred to the clinic's CHW for a positive screen are successfully connected to resources. Possible next steps for interventions include streamlining the process for tracking this information, reducing the number of patients who screen positive who are not connected to the CHW, and evaluating the utility of providing handouts about SDOH resources.

Writing for the AAFP: A “Meta” View on Adapting Guidelines for Journal Publication

Maalika Banerjee

Faculty advisor: Maryann Dakkak, MD

Abstract:

Background: There are updated guidelines and recommendation for management of osteoporosis. ACOG published a review of the guidelines, and AAFP has not yet adapted these for practice. It is important to deliver practice-changing knowledge on osteoporosis management as a practice guideline for Family Medicine physicians.

Objectives: The objectives are to deliver updates on management of osteoporosis, as referenced from the ACOG Bulletin, for Family Medicine Physicians in a succinct, practical way for journal publication in AAFP.

Results: Key points of practice include the following points. Firstly, bisphosphonates, for up to five years orally or three years intravenously, are first-line therapy for osteoporosis. Secondly, denosumab injections every six months improve bone density more quickly than bisphosphonates, although bone density improvements fade within months after discontinuation unless bisphosphonates are started. Thirdly, parathyroid hormone analog therapy for up to two years

dramatically improves bone density and reduces fractures but requires subsequent bisphosphonate use to maintain benefit. Lastly, one year of treatment with romosozumab, a sclerostin-binding analog, followed by one year of alendronate reduces fracture risk more than two years of alendronate therapy alone.

Conclusions: Various medications exist to treat osteoporosis, with the bisphosphonates remaining at the forefront, as evidenced by past guidelines. Other populations may benefit from other, newer modalities for treatment as outlined in the published article.

Publication History:

This piece was submitted to AAFP for publishing, and will be published in the June 2023 issue. No link provided as of yet.

Yoga MAT Recruitment Intervention

Ruchi Shah

Advisor: Marielle Baldwin

My role in the Yoga MAT study will focus on increasing participant recruitment at South Boston Community Health Center (SBCHC) in both the Family Medicine and Adult Medicine departments. The baseline intervention, Intervention A, will continue to be the standard recruitment procedures used by the Yoga MAT staff. They will receive the names of patients with at least one prescription of BUP or METH from the CDW. They will mail a recruitment letter to the patients, wait 5 days, and then follow up with phone calls. Patients contacted through the CDW pull may or may not be contacted via my two recruitment strategies, Interventions B and C. Approximately 11 patients from South Boston Community Health Center are mailed a letter each week via the CDW pull. There will be a period of 4 weeks between a patient being contacted via the CDW pull and Intervention B and C.

I will share both interventions via a 10-15 presentation at one of the weekly morning Zoom Provider Meetings in each department prior to implementing the interventions. These meetings are intended for attending physicians and resident physicians. However, due to the demands of resident physician schedules, the majority of resident physicians are unable to attend. Instead, I will present Intervention B and C to the South Boston Community Health Center resident physicians during one of our protected Wednesday afternoon didactic sessions, where attendance is mandatory. Similarly, I will meet with the medical assistants (MAs) to present the interventions and their roles prior to implementing the interventions. The specific MA role in Intervention B will be created collaboratively, meaning that the MAs will decide upon the practice that is best suited to their workflow.

Intervention B will occur in both Family Medicine and Adult Medicine departments at SBCHC. Intervention B aims to decrease barriers that providers are likely to face when introducing patients to the Yoga MAT study: time and access to informational materials. The OBAT team, which is composed of a nurse (RN) and medical assistant (MA), will generate a list of OBAT patients who have appointments in either department in the upcoming 2 weeks. I will then edit the “notes” section of each patient’s appointment to say something along the lines of “MA pls include Yoga MAT materials”. This will prompt the rooming MA to include the Yoga MAT flyer with the patient facesheet in the basket outside the exam room door. Providers will then have the Yoga MAT flyer in hand when they enter the room, which will serve as a reminder prompting them to introduce the study to the patient. In addition, if the patient is interested in learning more about the study, the provider can give them the Yoga MAT flyer in hand rather than having to leave the

room to search for it. I will be accessing the patient's chart to retrieve contact information, including address and phone number, which will then be entered into REDCap by either myself or another member of the Yoga MAT team.

Intervention C will occur in Family Medicine only. It aims to decrease barriers that patients are likely to face in signing up for the study: reaching out to the study team by phone on their own time. If a patient expresses interest in participating in the study, then they can be assisted in one of two ways: 1) having their provider assist in making the phone call to the Yoga MAT study or using the QR code on the flyer to complete a survey asking for contact information, or 2) having the provider request an MA to assist the patient with the phone call or QR code while they are still in the exam room. If the provider is unable to assist the patient themselves, they will ask the MA in person to come assist the patient or send them a message via the OCHIN chat function with the request. The provider is able to tell if the OCHIN chat message has been read; if it has not been read, the provider should go seek out the MA in person. I will also create a templated "staff message" in OCHIN to providers to be timed to be sent out 1-3 days prior to the day that they will have an OBAT patient on their schedules who is eligible for the Yoga MAT study as a reminder. I will do this at the same time that I am editing the "notes" section in Intervention B and C. During the Adult Medicine Provider Meeting that I will be presenting Intervention B at, I will explicitly mention that providers/MAs in this department are not to assist patients with using the QR code.

For both Intervention B and Intervention C, I will reach out to the provider via the chat function in the SBCHC EMR (OCHIN) informing them that the Yoga MAT flyer will be placed in the basket outside the exam room door after editing the "notes" section of the patient encounter so that the provider is informed in advance of the visit. I will also follow up with the provider via the chat function after the patient encounter to ask if: 1) the Yoga MAT flyer was placed in the exam room basket by the MA 2) if the patient was interested in participating in the study. Specifically for Intervention C, I will also ask the provider if the patient was assisted in signing up for the study and if they were assisted by an MA in signing up while they were in the exam room. This data regarding interventions that were implemented would be recorded in an Excel sheet with the following options and the correct one would be marked off:

Intervention B

- Yoga MAT flyer was included in the exam room basket
- Provider didn't talk about study with patient
- Provider discussed study with patient and patient was not interested
- Provider discussed study with patient and patient was interested
- Provider discussed study with patient and patient wasn't sure. Yoga MAT staff should follow-up

Intervention C

- Yoga MAT flyer was included in the exam room basket
- Provider didn't talk about study with patient
- Provider discussed study with patient and patient was not interested
- Provider discussed study with patient and patient was interested
- Provider discussed study with patient and patient wasn't sure. Yoga MAT staff should follow-up
- Provider helped patient contact study via QR code

- MA helped patient contact study via QR code
- SBCHC staff helped patient contact study but were unsuccessful. Yoga MAT staff to follow-up.

I will be comparing 3 different implementation strategies through my project. The first will be comparing the baseline intervention, Intervention A, of recruitment letters sent via the CDW pull to Intervention B; the second will be comparing the Intervention A to Intervention B and C; the third will be comparing Intervention B to Intervention C. Intervention B will be implemented in for a total of 6 months in the Adult Medicine department. Intervention C will be implemented in the Family Medicine department for 6 months as well. We will start the clock at the time the intervention is fully approved. We will revisit if there has not been adequate recruitment in the 6 months.

Changing the paradigm from acute care to chronic disease management: Findings from a preliminary baseline assessment in Lesotho

Mihoko Tababe

Faculty advisor(s): Dr. Brian Jack

In Lesotho, health care is delivered primarily on an emergency basis. Transforming clinical practice to address chronic health issues before they become acute is a priority. The Lesotho-Boston Health Alliance (LeBoHA) aims to establish a Center of Excellence (COE) in Team-Based, Community-Oriented Primary Health Care (PHC) that addresses disease prevention, health education, and chronic disease management. The project will be implemented at Motebang Hospital in Leribe District, in its Outpatient Department (OPD). The objectives of this preliminary baseline activity was to learn about the current patient flow and documentation processes in OPD, to identify ways to decompress OPD and facilitate continuity of care for patients with chronic illnesses. The activity primarily consisted of key informant interviews (KIIs) with OPD staff to learn about their work, documentation processes, and challenges to providing care, and elicit their recommendations on how to better address chronic illnesses. Patients were also informally observed in different areas of OPD to see where they were sent, and what interactions occurred in the various sections of OPD. Fifteen OPD staff participated in the KIIs from Registration and Patient Flow, Triage, Tuberculosis Screening, Eye Clinic, HIV Clinic, the Lab, and the Pharmacy. Common challenges that were raised by key informants included inadequate numbers of staff and space to address current patient volume, lack of time for medication and other counseling, malfunctioning equipment or unavailable supplies, and gaps in care coordination. Key informants requested improvements in all of these areas to be able to provide continuity of care. The most promising for the project was that a well-functioning HIV Clinic exists within Motebang Hospital, supported by global HIV/AIDS funding. The HIV Clinic uses an electronic medical record (E-register), which enables continuity of care, employs data entry and IT staff for support services, and can even e-prescribe to the OPD Pharmacy that is experiencing its own challenges around supply chain management and medication counseling. If this system is expanded to include other chronic diseases, this is expected to improve care continuity for patients, as well as enhance communications across the patients' care teams in OPD. Overall, there was much interest from staff in OPD to streamline processes and create a means to decongest the department. Findings and recommendations from this

activity have been fed into more formal scoping and priority identification exercises that are underway around the development of a COE in community-oriented PHC.

I will be spinning my report submitted to LeBoHA into an article for the *Lesotho Medical Journal*.

Understanding Primary Care Perspectives and Improving Access in India

Vishal Dasari, MD, MPH

Faculty advisor(s): Dr Sarita Vinod, Dr Laura Goldman

Background

Indian healthcare is primarily specialty and hospital based as predominantly out of pocket payments make healthcare financially inaccessible to patients. Patients generally do not seek regular care, only seeking it when they fall sick, further increasing costs. Incentivizing utilization of primary care would ease the financial burden and improve well-being.

Objectives

To understand current perspectives on primary care in India, what patient priorities are when they seek care, and to implement strategies to incentivize primary care utilization.

Methods

Survey of patients and attendants who present to Vinita Hospital, in Chennai, India, and who attend health camps organized by healthcare and governmental organizations in Chennai.

Evaluating primary and specialty care visit number changes after implementation of resultant strategies.

Results

Of 189 patients surveyed over 2.5 months, 56% stated they would not seek regular care, and further fewer from primary care physicians. 80% of patients stated a preference for seeing a specialist. 73% of patients stated that the most important factor in their seeking care was the physician/provider whom they would be seeing, and their relationship with them. 85% of patients stated they would prefer in-person visits over telemedicine. 32% stated they were interested in regular check-ups if care could be provided at home. Increasing physician perceived accessibility through video PSAs and health-camp presence showed an increase in primary care appointments by 18% and 31% in specialty care appointments.

Conclusions

Personal relationship with their provider was by far the most important factor in patients seeking care. Aside from making healthcare more financially accessible (via for example corporation healthcare bundles incentivizing primary care), increasing perceived familiarity with the physicians/providers has the potential to encourage primary care utilization in Chennai. Further, home visits rather than telemedicine have a much greater potential effect on improving regularity of patient healthcare visits.