2022 Scholarly Activity and QI Work
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Zach Carlson MD
Grayson Cobb MD
Mallory Koula MD
Michelle Metcalf MD
Kathryn Walicki DO

KALISPELL
Genevieve Birang DO
Shannon Rossio MD
Kayla Whitmore DO

Class of 2022
Class of 2022 Grand Round Presentations

Missoula – Friday Morning Medical Conference

Zach Carlson: Case Studies in Hyponatremia

Grayson Cobb: Demystifying Capacity Evaluation

Mallory Koula: Food as Medicine

Michelle Metcalf: Reproductive Health Potpourri

Kathryn Walicki: Menopause: Review of Symptomatic Treatment Options

Nick Zakovich: Examining Healthcare Systems, A Global Perspective

Kalispell

Genevieve Birang: Pathogenesis, diagnosis, and treatment of Narcolepsy

Shannon Rossio: Intimate Partner Violence

Kayla Whitmore: Trauma Informed Care
PUBLICATIONS

**Project Title:** Promotion of Provider Knowledge and Comfort Surrounding Gender Affirming Hormone Therapy

**Details of the project:** Created a Google Doc, meant to be a living document, with resources on multiple aspects of transgender care but focused mainly on counseling and prescription of gender affirming hormone therapy for patients over the age of 18.

**Outcome:** Multiple residents, including the author, did reference this document during the several months after the link was first made available. Overall, confidence in both counseling patients and in prescribing hormone therapy did increase after this document was made available.

**Reflections:** Transgender medicine is a complex and growing field, and it is impossible to do it justice in one project. The goal of this project was to aid practitioners in a field of medicine that has no current set rules or regulations, and ideally this document will continue to be updated by other residents in the coming years.

**Date project completed:** Google doc made public February 2022; final survey sent out May 2022.
Conference Presentations

**Project Title:** Friday Morning Medical Conference - Case Studies in Hyponatremia

**Details of the project:** I decided to cover this topic after a rural rotation at a critical access hospital where I struggled to provide adequate medical care for multiple patients with hyponatremia due to the limited resources in that setting. My talk started with a case study and then used it to review appropriate treatment for hyponatremia as well as some of the challenges that occur in low-resource settings.

**Outcome:** Talk given successfully with a very positive reception from various rural physicians who attended.

**Reflections:** Overall I appreciated the opportunity to take a deep dive on how to properly manage hyponatremia with limited resources. I’m happy to report that as a result of my talk, some rural hospital pharmacies are now stocking Desmopressin in case they need it for a patient with hyponatremia.

~Date project completed: 9/24/2021

Participated in Research

**Project Title:** Process improvement of controlled substance prescribing at a FQHC in Montana.

**Details of the project:** In my PGY-2 year, I became frustrated by the challenges related to prescribing controlled substances safely at our clinic and decided to make this the focus of my quality improvement project. First, I administered a survey, which identified six different methods that were being used to document controlled substance prescriptions. The information from this survey was then used to design a new workflow that eliminated the potential for medical errors by ensuring all employees were using the same “smart phrase” to document controlled substance refills.

**Outcome:** Yet to be determined at the time the project was completed.

**Reflections:** This project gave me the opportunity to work as a member of a team to achieve a common goal. Throughout the year I worked on this, we had numerous meetings and were constantly refining our process. Ultimately I was very happy with the outcome and felt like we were able to generate meaningful changes that both improved the process for our providers and decreased the likelihood of medical errors for our patients.

~Date project completed: April 2021

**Project Title:** Process improvement of controlled substance prescribing at a FQHC in Montana.

**Details of the project:** Following the changes made in my PGY-2 QI project, I had a keen interest in seeing if we were able to make any lasting changes throughout my PGY-3 year. To figure this out, after 6 months with the new workflow in place, I administered a survey to providers to determine if they were still using the new workflow. The survey also assessed their level of satisfaction with the new process as well.

**Outcome:** Overall, most providers were using the new workflow and the number of unique forms of documenting a controlled substance refill had reduced from six to two. Additionally, most providers were satisfied with new process, noting it was less time consuming and much easier.
Reflections: Though I wished that all providers had continued to use the workflow we created, old habits die hard and I was relatively happy that most had continued using the new workflow. One challenge that occurred was that less than half of our clinics providers responded to the survey, so there was some potential for bias.

Date project completed: May 2022.

TEACHING/PRESENTATIONS

Presentation title: Foot and Ankle Injuries

Brief summary of presentation: Discussed the clinical presentation, work-up and treatment for common injuries of the foot and ankle.

Date presented: May 2020

Presentation title: BPH Pearls

Brief summary of presentation: Reviewed a recent ABFM article on Benign Prostatic Hyperplasia and summarized the key takeaway points and clinical pearls from the article.

Date presented: July 2020

Presentation title: Dermatology Jeopardy

Brief summary of presentation: Created a game based on “Jeopardy” that was used to provide a review of common dermatologic conditions and their treatments.

Date presented: December 2021

Presentation title: Cardiac Point of Care Ultrasound.

Brief summary of presentation: Guided residents and faculty through the basics of obtaining appropriate cardiac views using an ultrasound machine. Time was also spent discussing how to use the information provided in these various views to provide more effective patient care.

Date presented: March 2022
**CONFERENCE PRESENTATIONS**

**Project Title:** Demystifying capacity evaluation: Making capacity evaluation approachable for every provider: Friday Morning Medical Conference

**Details of the project:** I chose this subject because of lack of comfort with evaluating capacity in patients. I felt my training had been limited on this subject and I frequently saw other attendings recruiting consultants for this evaluation when I felt it should be in our wheelhouse.

**Outcome:** Completed

**Reflections:** I think capacity evaluation should be more emphasized in undergraduate and graduate medical training. I discovered that it is a very nuanced subject that is more complex than I originally anticipated and that we should be further trained on it to feel more comfortable.

~Date project completed: 11/2021

**TEACHING/PRESENTATIONS**

**Project Title:** Does Continuity Affect Patient Care? An Evidence Based Analysis of Continuity in Primary Care. All Staff Meeting. Partnership Health Center.

**Details of the project:** I presented at the All Staff Meeting at Partnership Health Center on the evidence for why continuity matters in the primary care setting. I volunteered for this presentation because, as an intern, had very little continuity with my patients and felt their care was suffering because of it.

**Outcome:** Completed. The data for benefit for continuity in primary care, while limited, is compelling.

**Reflections:** This project further reinforced my desire to pursue broad spectrum family medicine and encourage that continuity of care with a primary care physician is a viable alternative to disjointed specialty driven care as well.

~Date project completed: 03/10/2020


**Brief summary of presentation:** Presented at journal club to the residency program and to various attending physicians. I chose this subject because many of my patients were utilizing a fairly unproven therapy for treatment of their mental health disorders. I wanted to be better able to advise them.

**Date presented:** 02/20/2020

**Presentation title:** Acute Kidney Injury: Initial Evaluation and Treatment. Didactic Presentation. Family Medicine Residency of Western Montana.

**Brief summary of presentation:** Didactic presentation at FMRWM.
~Date presented: 07/08/2020

**Presentation title:** Introduction to POCUS. Introduction to Family Medicine. Family Medicine Residency of Western Montana.

**Brief summary of presentation:** Teaching the intern class basics of point of care ultrasound

Date presented: 07/15/2020

**Presentation title:** Tremor in Primary Care: Differential Diagnosis of Tremors and First Line Therapies. Didactic Presentation. Family Medicine Residency of Western Montana.

**Brief summary of presentation:** Taught quick evaluation and algorithm for tremor.

~Date presented: 04/07/2021

**Presentation title:** The moral determinants of health. JAMA, 324(3), 225. Journal Club Presentation. Family Medicine Residency of Western Montana.

**Brief summary of presentation:** Journal club presentation at FMRWM

~Date presented: 07/02/2021

**Presentation title:** Introduction to POCUS. Introduction to Family Medicine. Family Medicine Residency of Western Montana.

**Brief summary of presentation:** Teaching the intern class basics of point of care ultrasound

~Date presented: 07/15/2021

**Presentation title:** Steps per day and all-cause mortality in middle-aged adults in the coronary artery risk development in young adults study. JAMA Network Open, 4(9). Journal Club Presentation. Family Medicine Residency of Western Montana.

**Brief summary of presentation:** Journal club presentation. I chose this subject because it gave a tangible, non-time based physical activity target for patients to decrease mortality.

Date presented: 09/16/2021

**OTHER**

**Project Title:** Addressing Contraception in Primary Care Clinic Without Gender Bias. Quality Improvement Project Abstract. Family Medicine Residency of Western Montana.

**Details of the project:** This was a quality improvement project to attempt to better balance the burden of contraception on men and women.

**Outcome:** Completed.
Reflections: This was effective at changing my behavior and limiting gender bias in who I place the burden of contraception on.

Date project completed: 05/15/2021

Project Title: Increasing direct sign-out between inpatient and outpatient setting. Family Medicine Residency of Western Montana, Missoula, Montana

Details of the project: I chose this project because I felt patient errors were happening at the time of discharge and I felt one of the likely sources of that was lack of direct communication between discharging provider and the next level of care.

Outcome: Completed.

Reflections: This will be an ongoing challenge if I participate in inpatient medicine again and I will continue to strive for thorough discharges to optimize outpatient care.

Date project completed: 05/13/2022
**CONFERENCE PRESENTATIONS**

*Project Title: MSK POCUS*

*Details of the project:* Helped prepare and present on musculoskeletal POCUS at the MAFP conference.

*Outcome:* While both preparing and giving this presentation I was able to spend time learning more about indications and applications of POCUS for musculoskeletal issues.

*Reflections:* Reflecting back on residency, I was initially excited to incorporate more POCUS into my clinical practice. This did not end up being the case. I think some barriers to this were time limitations in the clinic and the hospital as well as general loss of motivation throughout residency. I am hoping that I can still learn and build on these skills post-residency and possibly incorporate them into my clinical practice.

~Date project completed: Jan 2020

*Project Title: Food as Medicine*

*Details of the project:* I was able to take a culinary medicine elective during residency and I found it very informative. I have been able to incorporate some of the teachings into my clinic practice and wanted to share this approach with others.

*Outcome:* I think I was able to deliver a concise summary on the culinary medicine perspective as well as some of the challenges that exist with trying to incorporate this approach.

*Reflections:* I am hopeful that I can continue to bring pieces of what I have learned into my clinical practice after residency. I would like to keep food, nutrition and culinary medicine in the forefront of my mind when I am counseling patients on healthy habits.

~Date project completed: May 2022

**TEACHING/PRESENTATIONS**

*Presentation title: Novel Male Hormonal Contraceptive Options*

*Brief summary of presentation:* During the beginning of my 2nd year I was able to attend the Society for Family Planning conference (virtual). It was at this conference that I learned about some of the most recent research out there about male hormonal contraception options and studies that have been done. I created a presentation on this as a part of my RHEDI curriculum to share with classmates during our Wednesday afternoon didactics.

*Date presented:* Oct 2020

**OTHER**

*Project Title: Integrative Medicine Self-Study*

*Details of the project:* I have always had an interest in integrative medicine and whether it has a role in primary care. Unfortunately our residency does not offer an incorporated curriculum on this topic. I took a 2-week elective during my 3rd year to spend time researching some of the possible applications of integrative medicine into primary care.

*Outcome:* Increased knowledge about what exists in our Missoula community and what may or may not be evidenced based for patients.

*Reflections:* I think that integrative medicine has the potential to benefit patients who are open and even prefer complementary or alternative methods. I would like to do more training sometime in the future whether it’s through the Andrew Weil Center for Integrative Medicine or even a potential fellowship.

~Date project completed: June 2020
CONFERENCE PRESENTATIONS

Project Title: Reproductive Health Potpourri

Details of the project: This was a 1hr long discussion at St. Patrick Hospital on a topic one was passionate about during the course of residency. Since I have an interest in reproductive health, I chose to do my presentation surrounding this topic.

Outcome: Successful dissemination of most recent literature on a variety of reproductive health topics including COVID in pregnancy, updates in contraception and self-managed abortion.

Reflections: I really enjoyed my topic and hope that made my presentation somewhat interesting to those who attended. I did have some more questions at the end that we did not have time to answer so looking back I would probably discuss less content and leave more time for discussion.

Date Completed: January 2022

Project Title: Meningitis & Diagnostics

Details of the project: This was a 1hr long presentation done at Community Medical Center for all pediatric providers and residents. I discussed a meningitis case I saw while rotating on inpatient pediatrics. After I discussed the patient case, I went into detail about different imaging modalities and longterm outcomes.

Outcome: Successful dissemination of most recent literature on workup and followup on children with meningitis

Reflections: I do feel like I learned a lot while researching this topic. It also gave me a lot of insight on sensitivity of different imaging modalities that can be used to diagnose meningitis.

Date Completed: November 2020

TEACHING/PRESENTATIONS:

Complications in Abortion

Summary: This is a simulation day for both the staff at Blue Mountain Clinic and the FMRWM RHEDI residents where we myself, along with co-resident Katie Walicki, have four simulations on complications in abortion including perforation, hemorrhage, syncope and over sedation.

Presented: Spring 2022

Prenatal Care: BPP and Fetal Biometry

Summary: This was a FMRWM hands-on didactic where I taught how to use ultrasound to calculate biophysical profiles and fetal biometry in pregnancy

Presented: Winter 2022
Amoxicillin for Children with CAP Journal Review
Summary: This was a presentation for Journal Club at St. Patrick Hospital where data is presented on an article of interest and discussion around if this would lead to practice change.
Presented: Winter 2022

Skin Conditions During Pregnancy
Summary: This was a FMRWM didactic presentation on how to identify and treat a variety of skin conditions that can happen in pregnancy
Presented: Winter 2021

Primary Care Approach to Inflammatory Arthritis
Summary: This was a FMRWM didactic presentation on how to workup and treat inflammatory arthritis conditions
Presented: Spring 2021

Toxic Shock Syndrome
Summary: This was a case presentation to the inpatient resident team at St. Patrick Hospital. We discussed differential diagnoses, approach to workup and treatment
Presented: Winter 2021

Corticosteroids and Adverse Events Journal Review
Summary: This was a presentation for Journal Club at St. Patrick Hospital where data is presented on an article of interest and discussion around if this would lead to practice change.
Presented: Fall 2020

Ethical Dilemmas
Summary: This was a presentation for Journal Club at St. Patrick Hospital where we discussed a case where multiple ethical principles were at odds with each other and how we would move forward with a difficult situation
Presented: Summer 2020

Urticaria
Summary: This was a FMRWM didactic presentation that was more self study based. A handout was created on common skin conditions and associated pictures. Residents then completed a quiz at the end of the handout review
Presented: Spring 2020
Antibiotics and Risk of Cardiovascular Events in Women Journal Review

Summary: This was a presentation for Journal Club at St. Patrick Hospital where data is presented on an article of interest and discussion around if this would lead to practice change.

Presented: Winter 2020

Trauma Evaluation

Summary: This was a hands-on presentation I led at our fall wilderness weekend at Tally Lake in Montana. Presentation included primary and secondary trauma evaluation in the wilderness

Presented: Fall 2019
CONFERENCE PRESENTATIONS: Flathead AAMA Conference

**Project Title:** Intimate Partner Violence

**Details of the project:** Presentation on IPV for medical assistants

**Outcome:** Provided insights on screening for IPV and assisting survivors of IPV

**Reflections:** Medical assistants are often the first point of contact for patients in the clinic and serve a vital role in identifying patients who are experiencing intimate partner violence. This presentation focused on raising awareness of IPV among medical assistants and providing them with a framework for helping patients affected by IPV.

~**Date project completed: April 10th, 2021**

TEACHING/PRESENTATIONS: Logan Health Medical Conference

**Presentation title:** Suicide Prevention

**Brief summary of presentation:** Taught methods of suicide prevention to medical professionals at Logan Health in Kalispell, MT

**Date presented: May 24th, 2021**
FMRWM SCHOLARLY WORK

Name: Katie Walicki, DO

CONFERENCE PRESENTATIONS

Renal and Bladder Ultrasound Presentation

_Details of the project:_ I presented a PowerPoint and instructed a hands-on POCUS demonstration for the 2021 MAFP Conference in Whitefish, MT. I presented on renal and bladder ultrasound techniques including how to identify hydronephrosis and free pelvic fluid, among other topics.

_Reflections:_ POCUS is an essential skill that can be utilized by family physicians, even those that do not practice in emergency rooms or other critical care settings. Creating a presentation and instructing others in ultrasound techniques helped bolster my own POCUS skills.

~_Date project completed:_ 1/29/2020

Gallbladder Ultrasound Presentation

_Details of the project:_ Similar to the above, I presented a PowerPoint and lead a POCUS instruction on the gallbladder during the FMRWM POCUS Course. The presentation included general gallbladder anatomy as well as ultrasound findings that indicate gallbladder pathology.

_Reflections:_ As I stated above, this project improved my ultrasound knowledge as well as my skills. This project also increased my confidence in using ultrasound as another tool during clinic.

~_Date project completed:_ Spring 2020

Menopause: Review of Symptomatic Treatment Options

_Details of the project:_ This was my Friday Morning Medical Conference presentation. I chose this topic because I was not confident discussing the expected course of menopause and the treatment options for menopausal symptoms with my patients.

_Reflections:_ Menopause treatment is a complicated topic with a complex history that impassions patients and providers alike. I am now more comfortable counseling my patients about the natural course of menopause/peri-menopause and what to expect during this time. I would like to continue researching SERMs, testosterone, and other non-traditional treatment options to better understand what to offer my patients.

~_Date project completed:_ 3/11/2022

TEACHING/PRESENTATIONS

Multisystem Inflammatory Syndrome in Children

_Brief summary of presentation:_ This was a presentation that I gave to attendings, residents, and medical students during my inpatient pediatric rotation. I discussed the characteristics, diagnostic criteria, long-term complications of, and proposed treatments for MIS-C. I presented this information during the earlier stages of the COVID-19 pandemic when MIS-C was an evolving syndrome. My presentation was inspired by a patient I cared for during my inpatient pediatrics experience.
**Date presented:** 12/11/2020

**RHEDI Complications**

**Brief summary of presentation:** This was a case-based presentation at Blue Mountain Clinic that I lead with Michelle Metcalf, R3. We discussed and practiced management of abortion care complications including uterine perforation, vasovagal syncope, hemorrhage, and over-sedation. This presentation was given to RHEDI residents, attendings, and Blue Mountain Clinic staff.

**Date presented:** 5/18/2022

**OTHER**

**OMT Curriculum – Fascial Distortion Model**

**Brief summary of project:** I worked with Travis Kinane, R1, to organize an OMM didactic on a certain osteopathic manipulation technique called the Fascial Distortion Model. We invited an outside osteopathic instructor to teach this session.

**Outcomes:** This presentation will hopefully allow for continued expansion of learning opportunities within our osteopathic curriculum.

**Date:** 5/20/2022
Name: Kayla Whitmore, DO

TEACHING/PRESENTATIONS

Presentation title: Burn Baby Burn

Brief summary of presentation: Presented during wilderness weekend, this presentation was on different types of burns that one can sustain in the wild and discussed prevention and treatment of said burns.

Date presented: Fall 2019

Presentation title: Chronic Kidney Disease

Brief summary of presentation: This presentation covered chronic kidney disease, how to stage based on KDIGO guidelines, and when to refer to nephrology. Discussed the various types of renal replacement therapy (ie dialysis) and what labs need monitoring in ESRD. Lastly, various medication to use and avoid in chronic kidney disease were presented.

Date presented: Spring 2020

Presentation title: Cancer presentation

Brief summary of presentation: Case based presentation to cover relevant information for the family medicine provider on Leukemia and Lymphoma. This included diagnostic criteria, initial laboratory work up, patient presentation, and long term monitoring for consequences of cancer/treatment. Additionally, provided 5 board questions at the end of the presentation.

Date presented: Fall 2020

Presentation title: Reproductive Health Jeopardy

Brief summary of presentation: I developed a jeopardy style learning presentation on STI, preventing pregnancy, abortion care and legal rights around reproductive issues. I created 5 questions for each topic and provided the research/resources behind the correct answers for the questions.

Date presented: Spring 2021

Presentation title: Hypertensive Urgency/Emergency

Brief summary of presentation: This presentation was case based presentation on Hypertension urgency and emergency. Diagnostic criteria of both were covered as well as how to treat these illnesses with use of prn oral and IV medications and the indication for inpatient treatment.

Date presented: Fall 2021

Presentation title: Acute Dyspnea
**Brief summary of presentation:** This was a case based inpatient hospital presentation, walking through the history, presentation, and laboratory findings for acute dyspnea, that ultimately ended up being a COPD exacerbation. The differential for acute dyspnea in the hospitalized patient was discussed

**Date presented:** Fall 2021

**Presentation title:** Trauma informed Care

**Brief summary of presentation:** This was a self-led learning opportunity for residents at FMRWM. I collected resources in various media routes (books, videos, podcasts) that would cover goals of identifying what trauma informed care is, how one can screen for trauma, and how one can implement trauma informed care into their practice.

**Date presented:** Fall 2021

**OTHER** (other work not in the above categories)

**Project Title:** Kalispell Training, QI Project

**Details of the project:** I had recently rescued a dog that was incredibly anxious and destructive in my home, which was having negative impact on my personal wellbeing and my relationships with others. My QI project focused on improving her response to commands with training her for 5 minutes a day, 5 days a week for 6 months. I recorded the commands that I taught her and then the number of times I would have to give a command before she responded correctly

**Outcome:** Overall a success. With more focused training our relationship with each other improved and she would need a command repeated less than 3 times before she responded appropriately

**Reflections:** My methods for training were quickly abandoned early into the project and changed to reflect a more organic way of training my dog. Some commands that were “High stake” were picked up more quickly than other commands and some she never really got a hang of. The results were a little skewed as I ended up hiring a professional trainer to work with me on her behavioral outbursts, and there were commands that he worked with her that wasn’t documented in my own calendar. This was eye opening into how I might (or might not) train any future pets that I have

~**Date project completed:** May 2020

**Project Title:** Standardization of OB Documentation, QI project

**Details of the project:** Inconsistent documentation on OB rotation was leading to prolonged documentation time, missing critical information about course of pregnancy, and frustration amongst residents on an already challenging rotation. My project was to improve documentation by implementing “Quick Text” phrases. Ideas on what to incorporate into the quick texts were taken from feedback from OB providers and review of their documentation. The residents were surveyed pre-post intervention to see if overall mood improved with the quick text.

**Outcome:** Was successful, though maybe skewed. Unfortunately there is a low number of residents that were available both pre-post intervention, so while improvement was noted it may be over represented

**Reflections:** This project was challenging, as I implemented the intervention (quicktexts) later than anticipated and distribution of the quick-texts to residents could have been better (many forgot that they had received them). The amount of time spent documenting while on OB wasn’t formally recorded, but resident perception of time was, so there may not have actually be improvement in that aspect. This project made me reflect on how we do OB documentation in clinic and how there is also ample room for improvement there

~**Date project completed:** May 2021
**Project Title:** Emergency Contraception, QI project

**Details of the project:** A quick data dive into our EMR showed that of the ~2000 patients that are female and in reproductive age range (14-50) only 4 instances of EC were prescribed in a given 3 month period. This felt like an underutilized resource in our clinic, so the project focused around educating providers on EC and seeing if the education increased the number of EC prescriptions.

**Outcome:** There was no increase in EC prescribing after education of providers

**Reflections:** This project was really eye opening into how poorly reproductive care/contraception is recorded in our EMR and how readily available EC is in the community. Another barrier seen was the arbitrary designation of ‘reproductive age’ being 14-50yo and only women (excludes trans/non-binary pt). I ran into barriers with trying to change our EMR documentation and eventually abandoned that part of my project all together.

**Date project completed:** May 2022

**Project Title:** Fertility awareness Scholarly activity

**Details of the project:** Information was collected on the various methods for fertility awareness and two separate handouts were created. One, for the provider in clinic in how to counsel patients on various fertility awareness methods and when/how to prescribe Emergency contraception. The second handout was specifically created to give to patients that again listed the various fertility awareness methods as well as a table the outlined a small subset of mobile applications that can be used for fertility awareness.

**Outcome:** As stated, two handouts now live at the residency: self-study for the provider, and a handout that is brief but comprehensive on the various fertility awareness methods and applications that are available for most devices.

**Reflections:** This project came to light when I had numerous patients that did not want hormonal contraception or LARCs and seemingly the lack of knowledge for providers and patients on how to more safely navigate hormone free contraception and Fertility awareness methods. It was quickly apparent that we had adequate information to give to our patients for the various hormonal contraception methods, but were lacking information for patients who chose to not be on prescription birth control. This project was eye opening into how many application are available for period tracking and other fertility methods and how the average consumer could have difficulties navigating the “bad” apps from “good” ones. As above, I really struggled with how poorly contraception methods are documented in our EMR and how to appropriately track how patients are preventing pregnancy.

**Date project completed:** May 2022
CONFERENCE PRESENTATIONS

Project Title: Comparing Healthcare Systems, A Global Perspective

Details of the project: Compared outcomes, costs, and equity of America’s healthcare system against other high income countries. Explored our response to the COVID-19 pandemic and the ethical dilemmas related to vaccine development, public funding, corporate profits, and global vaccine distribution (or lack thereof).

Outcome: Used peer reviewed evidence to demonstrate that our healthcare system is lagging in important patient-centered outcomes, access and equity, and cost compared to other high-income nations. Demonstrated that the COVID vaccine was developed with significant tax payer funding and that US patent law resulted in lower vaccination rates in the developing world as well as massive profits for pharmaceutical companies.

Reflections: This project emphasized the importance of healthcare policy on both the national and international level as it pertains to patient-centered outcomes.

Date project completed: 12/17/2021

TEACHING/PRESENTATIONS

Presentation title: Financial Literacy 101

Brief summary of presentation: Lecture given to residents discussing important financial topics including budgeting, retirement investing, portfolio allocation, and student loan repayment.

Date presented: 4/6/2022

Presentation title: Dermatology Board Review

Brief summary of presentation: Discussed dermatology topics and conditions relevant to the family medicine board examination.

Date presented: 12/20/2021

Presentation title: Pediatric Presentation: POTS

Brief summary of presentation: Discussed signs, symptoms, and treatment options for POTS in the pediatric patient population.

Date presented: 4/30/2021

Presentation title: Pulmonary Infections, Radiology Review

Brief summary of presentation: Created an interactive module reviewing common radiology findings in pulmonary infections.
Date presented: 3/31/2021

Presentation title: Infectious and Inflammatory Disorders, Coccidioidomycosis

Brief summary of presentation: Discussed Valley Fever, a relatively common, but often under recognized cause of pneumonia.

Date presented: 2019

Presentation title: Journal Club: Effect of Screen Time on Recovery From Concussion, A Randomized Clinical Trial

Brief summary of presentation: Discussed a RCT that showed improved concussion recovery rates when screen time was avoided in the pediatric population.

Date presented: 11/18/21

Presentation title: Journal Club: Efficacy of smartphone applications for smoking cessation: a randomized clinical trial

Brief summary of presentation: Discussed a RCT that showed improved rates of smoking cessation when a smartphone app was used in conjunction with pharmacotherapy.

Date presented: 10/7/2020

Presentation title: Journal Club: Meta-analysis of randomized clinical trials of early versus delayed cholecystectomy for mild gallstone pancreatitis

Brief summary of presentation: Discussed a meta-analysis of RCTs which demonstrated benefits for early cholecystectomy in gallstone pancreatitis.

Date presented: 5/7/2020

QUALITY IMPROVEMENT

Project Title: Nutrition Talk to Improve Work Satisfaction

Details of the project: To improve my satisfaction at work, I asked one preselected clinic patient per day to perform a 24 hour dietary recall. Next, I would ask an open ended question following the recall. The goal of this intervention is to increase my satisfaction at work. My satisfaction will be measured by a scaling question after the encounter.

Outcome: I was surprised that I am already talking about nutrition on a majority of the days I work in clinic, 58% to be specific. Oddly, my average satisfaction was lower on days that I did talk about nutrition, 6.3 vs 7 respectively

Reflections: I would attribute most of my lower satisfaction days to having challenging clinical encounters. At times, I would feel powerless to help my patients usually due to socioeconomic factors out of my control. I found some nutrition discussions to be incredibly rewarding and others to be frustrating.

Date project completed: May, 2020

Project Title: Increasing Medicare Wellness Visits
Details of the project: We partnered with the Geriatric task force team to identify Medicare patients who were due for a MAWV. We sent letters to these individuals with educational material regarding a MAWV and encouragement to schedule one. Our goal is to increase our MAWV from less than one a month to two.

Outcome: Of my eligible patients, 3 patients completed a MAWV.

Reflections: Overall, our QI project was unsuccessful. Identifying eligible patients was easy with the help of the Geriatric Task Force. Drafting a letter, loading envelopes with pre-appointment paperwork, and mailing out the letters only took one evening. Unfortunately, the letters did not have the best engagement. Neither of us were close to our goal of doing 2 MAWVs per month. I think some of the patients identified may have only been seen for acute issues or very infrequently. These patients may have a PCP elsewhere which would make the response look less robust. To improve engagement with patients, our clinic could consider having PSRs contact each patient individually along with mailing a letter. However, this process would be much more labor intensive. Once the patient was scheduled, the MAWV was not very challenging even though not all the patients brought the paperwork in. We utilized the established ECW template while performing the visit.

Date project completed: May, 2021

Project Title: Piloting a Tele-PREP Program for Rural Montanans

Details of the project: Worked with PHC leadership and the state government to help pilot a tele-PREP program for rural Montanans. We had frequent meetings with a physician and other staff members in California who have already created a similar program. We worked to: secure state funding for visits and lab testing, get low cost generic PREP from our nonprofit pharmacy, develop easy scheduling and intake, as well as workflows and note templates.

Outcome: This program remains a work in progress. We secured funding from the state, got approval from PHC leadership, created scheduling workflows and blocks for interested residents. At the time of my QI project, we had not yet had a scheduled tele-PREP visit. The program was handed over to a 1st and 2nd year resident.

Reflections: Due to the privacy concerns (and often insurance issues) of the patients, we had to be careful to create workflows that protected patient privacy. It took a lot of coordination with state government officials to make sure we were utilizing the grant funding appropriately. It required coordination with many different people with different clinical/professional backgrounds. I did not realize how complicated creating a program like this could be. I am confident that this program will continue to progress and will ultimately be successful in helping rural patients access PREP.

Date project completed: May, 2022
Class of 2022 QI Work
**QI PROJECT**

**Name:** Genevieve Birang, DO  
**Title:** Promotion of Provider Knowledge and Comfort Surrounding Gender Affirming Hormone Therapy

**Problem**
The field of gender medicine is large and ever changing. The process of transitioning genders is multi-faceted and includes social, medical, and surgical transitioning. Medical transition, the subject of this project, is its own subgenre of medicine for which no guidelines are endorsed by WPATH (World Professional Association for Transgender Health), although multiple guidelines from different medical entities exist. Medical transition, that is, gender affirming hormone therapy, is also not commonly taught in medical schools. For the family physician, this can make providing gender affirming care confusing and leave providers wondering if they are truly practicing to the best of their ability.

**Aim**
The aim of this project was to increase provider confidence in providing gender affirming hormonal therapy to transgender or gender non-conforming patients. This was accomplished by creating a centralized resource with information on gender affirming care for providers. This resource included recommendations from multiple national and local guidelines on counseling patients, prescribing/initiating hormone therapy, and monitoring that therapy throughout the first year and beyond. It also covered some background on common surgical and other common non-surgical methods for transition.

**Key Measure for Improvement**
Provider comfort with providing gender affirming care in general, specifically counseling patients on risks and benefits of masculinizing and feminizing hormone regimens, and comfort with prescribing the common medications used for gender affirming care.

**Process for Gathering Information**
Prior to the release of the Google Doc containing the information detailed above, residents were surveyed on whether they had experience with gender affirming care in general (as well as where that experience was obtained), their comfort with counseling patients on hormone therapy, and the prescription of common medication regimens for gender affirming care. They were also asked about perceived deficiencies in their knowledge. Approximately 3 months following the distribution of the link to the Google Doc, residents were again surveyed on their comfort with counseling and prescription of common medication regimens for gender affirming care as well as where they perceived their knowledge deficiencies to still lie.

**Analysis and Interpretation**

![Graphs showing comfort with counseling and prescribing hormone therapy](image)

The above graphs demonstrate reported provider comfort with counseling and prescribing hormone therapy (measured by percentage) for gender affirming care both pre-Google Doc sharing and post-Google Doc sharing.

**Effects of Change**
Overall, it did appear that the Google Doc did influence provider comfort for both counseling patients on hormonal gender affirming care and the prescription of those medications. About 60% of post-survey responders indicated that they had utilized the Google Doc.

Looking at pre and post comparisons, providers tended to mark that they were more confident after the resource was made available to them. This was especially evident in the fact that under counseling in general and counseling for gender
specific hormone regimens, providers initially marked that they were “Not at all confident” or “A little confident”. In the post survey responses, the lowest confidence level was “Neutral”, and multiple providers indicated that they were “Somewhat confident” or “Very confident”.

This improvement was less evident when it came to prescribing hormone therapy. Here, the lowest confidence level marked was “Not at all confident” for both masculinizing and feminizing therapy pre-Google Doc release. However, providers seemed more confident with feminizing therapy post release (lowest confidence level being “Neutral”) than with masculinizing therapy (“A little confident” being the lowest level).

Finally, participants were also asked what specific questions they had regarding gender affirming care. During the pre-survey, most responders indicated that they were most curious about resources that were available for providers: they did not specify if these were medical or social resources. In the post-survey, most responders stated that they were more interested in specifics of lab monitoring.

**Lessons Learned**

Overall, it does appear that providing residents with a comprehensive resource for gender affirming care does create more confidence in providing gender affirming care. This is indicated by data results as well as by the questions that participants had during the pre- and post-survey. Asking for general resources suggests overall unfamiliarity with gender affirming care. Asking for specifics, such as lab values and lab monitoring schedules, indicates that residents feel comfortable enough with the information volume presented that they are starting to identify holes in their knowledge.

Overall, the net effect from the Google Doc appears to be positive. Unfortunately, interpretation was clouded by the fact that the pre-survey brought significantly more responses than the post-survey (15 vs 5). It is also impossible to tell if the same people responded to both the pre- and post- surveys as they were anonymous. The results were interpreted with the assumption that the same residents responded to both the pre- and post- surveys.

The number of people that responded to the post survey is also much smaller, meaning that the two sets of data cannot be as reliably compared. This is the reason that the y-axis was labeled with percentage, instead of overall number of respondents.

In the future, it would be beneficial to have more survey respondents to ensure greater accuracy in data interpretation. Laboratory monitoring and goals were also included in the Google Doc, but they were not included with the hormone dosing guidelines. Reorganization for ease of use would also be beneficial.
QI PROJECT
Name: Zach Carlson, MD
Title: Process improvement of controlled substance prescribing at a FQHC in Montana

Problem:
Until recently, our clinic did not have a standardized work-flow for prescribing and documenting controlled substances, which resulted in a variety of different methods that varied from one provider to the next. This resulted in extra work and confusion for our providers and staff, while also creating the potential for medical errors. Our clinic recently introduced a standardized workflow for both the method of prescribing as well as the subsequent documentation. The primary goal of this change was to standardize the process across all providers and staff in hopes of reducing the chance of medical errors. Another goal was to reduce the time and effort required for providers to cross-cover one another’s prescriptions during vacations or time away.

The new process has been in place for roughly 9 months, but we have yet to verify it is being used correctly or to investigate if providers and staff have found the changes beneficial. Additionally, there are multiple changes anticipated in the near future regarding Montana’s requirements for controlled substance prescribing which will likely include the elimination of all hard-copy, paper prescriptions and a requirement to check the prescription drug registry prior to every prescription. As our clinic prepares to accommodate these changes, it will be important to first determine if our previous approach to changing our prescribing practices was successful and then learn from any pitfalls that are identified prior to making further changes.

Aim:
I will re-administer the provider satisfaction survey that was used during the original project to determine if our previous changes have led to a reduction in the number of different workflows used and improved provider satisfaction with the overall process. Statistical analysis will be used to compare pre and post provider satisfaction scores to see if the changes implemented have had a statistically significant impact on provider satisfaction. Re-administering the survey will also allow us to determine if we have successfully eliminated the redundant work-flows and identify any new or ongoing concerns via a free-text comment box. Once the survey data has been analyzed, I will work with our clinic’s leadership and QI teams to further refine our process for controlled substance prescribing and address any concerns identified. Additionally, I intend to work closely with clinic leadership as we further modify our current process in anticipation of future changes to the regulations for controlled substance prescribing at both a state and federal level.

Key Measures for Improvement:
1) Reduction in the number of methods used to prescribe/document controlled substances.
2) Increased rates of agreement with the statement, “Controlled substances can be prescribed in a safe and monitored way.”
3) Increased ease and comfort providing cross-coverage for other provider’s patients.
4) Reduction in time spent completing a refill for another provider’s patient.

Process of gathering information:
The post-intervention provider satisfaction survey was administered to all providers at our clinic using “Google Forms” via a link sent to their individual email accounts. Approximately 50% of providers responded to the survey. The data was analyzed as a whole and also by provider type (Resident, Academic Physician, or Clinic Employee) to look for any differences unique to specific provider types. The data was then formatted into bar graphs to make it easier to understand and disseminate the results. Ultimately the goal will be to present it to key stakeholders at the clinic including the clinical informatics team, quality improvement team and multiple individuals from the senior leadership team though this has not taken place yet due to competing priorities.

Analysis and Interpretation:
There were a total of 25 responses to the post-intervention survey, compared to 37 responses to the original pre-intervention survey. These 25 responses included 15 residents, 7 academic physicians, and 3 clinic employees. Despite the focus of our intervention being to reduce the number of different work-flows for prescribing and documentation of controlled substances, our providers still endorsed using five unique workflows to accomplish this task. There was a slight trend towards more providers using electronic prescriptions rather than paper prescriptions but otherwise the responses were very similar to the pre-intervention survey.

There was significant improvement in the level of familiarity providers had with our clinic’s controlled substance policy, with 88% of respondents stating they had read and/or were familiar with the policy, compared to only 64% prior to the intervention. In general, there were no significant changes in responses regarding how well the controlled substance policy was enforced or how easy it was to find the information needed to provide cross-coverage for another provider. Prior to the intervention, 40% of providers reported taking more than 10 minutes to complete a single refill on behalf of another provider but after the intervention, this decreased to only 20% of providers.

Sub-group analysis based on provider type (Resident, Academic Physician, Clinic Employee) showed some interesting differences when comparing the resident physicians to the academic physicians and clinic employees. First, residents were the only group that reported feeling neutral or disagreeing with the idea of prescribing controlled substances on behalf of another provider, with 47% of residents providing one of these responses. Second, the majority of residents (53%) disagreed with the idea that the information for completing a refill on behalf of another provider was easy to locate in the EMR, while none of the academic physicians or clinic employees disagreed with this statement. Last, residents were the only group that reported taking longer than 10 minutes to complete a controlled substance refill on behalf of another provider with 34% of residents reporting it took 10-20 minutes to complete a single refill.

There were also a total of 9 responses to the free-text question at the end of the survey with a variety of comments. A few general themes that emerged included:

- PGY-1 residents lamenting the challenges of completing controlled substance refill without a valid DEA license
- Providers frustrated that our current EMR does not have a straightforward way to prescribe and document 3 subsequent refills within one chart encounter
- Multiple providers noting that the process does seem to be improving but is still far from ideal.

Strategies for change:
Based on the results of the post-intervention survey, we intend to recommend the following changes to the clinic’s key stakeholders when we present the data:

1) Additional education for all providers on the recommended way to prescribe and document controlled substances.

2) As much as possible, limit PGY-1 residents from needing to provide cross-coverage to refill controlled substances on behalf of other providers.

3) Continue discussions with the EMR support team in hopes of finding a way to effectively prescribe 3 months at one time rather than having to provide refills on a monthly basis.

Lessons learned:

- Even when appropriate training is provided, this by itself does not guarantee that practice styles will change.
• We need to put additional effort into training resident physicians in how to prescribe controlled substances within our clinic, as they are significantly less satisfied that more experienced providers.

• When choosing an EMR, more consideration should be given to limitations that may arise in the future related to challenges in changing the work-flows within that specific EMR.

**Next Steps:**

• Meet with key stakeholders of the clinic to discuss the results.

• Work with clinic management to schedule additional training for all providers. Consider developing a system that rewards providers for following the proper workflows.

• Coordinate with residency to suggest additional training regarding best practices for substance prescribing training. Also recommend they limit PGY-1 residents from providing cross-coverage of controlled substance refills for other providers.
Name: Grayson Cobb, MD

Title: Addressing lack of direct sign-out to outpatient provider following hospital discharge

Problems: Lack of adequate sign out to the outpatient setting leading to missed lab results or ongoing diagnostic evaluation.

Aim: Over two six week periods, aim to “sign-out” hospitalized patients to the primary care physician or ensure follow up scheduled for patients without a primary doctor within one week of discharge for >80% of patients. A message via the electronic medical record, text message, or phone call will all qualify as “sign-out”.

Key measures for improvement: Process based measure to increase sign out to outpatient providers from inpatient setting.

Method: Initially, I began with reflection of how often I signed out a patient being discharged from the hospital. The reason for lack of retrospective data is that in most cases, a direct sign-out to the patient’s primary doctor or outpatient specialists is not recorded in the EMR. I do not have baseline data for this reason and collecting baseline data after developing an AIM statement would have been prone to significant bias. My reflection yielded verbal or written sign-out to the next provider in addition to a formal discharge summary likely less than 20% of the time, favoring heavily providers I knew personally, accepting providers at skilled nursing facilities, or providers who worked in my primary care clinic. I performed the improvement effort for two two-week blocks from March 7-20 and again from April 4-17 when I was acting as senior resident on the teaching service at St. Patrick Hospital. My goal was to sign out as many patients being discharged from the hospital to their primary care physician or the accepting physician at their next level of care over the course of the four weeks. Sign out qualified as a text message, personal message through the EMR, phone call, secure email, or personal conversation. Initially established exclusions from the denominator included patients who had no follow up provider established, patients who died in the hospital, and patients who were following up with me.

Analysis and Interpretation: Below table shows results of the intervention of

<table>
<thead>
<tr>
<th></th>
<th>Text message</th>
<th>EPIC (EMR) message</th>
<th>Phone call</th>
<th>Personal conversation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient's successfully signed out</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>6/8 (62.5%)</td>
</tr>
</tbody>
</table>

2 total exclusions from the denominator because they were patients following up with me.

Strategies for change: For any inpatient discharge I typically have a list of three check boxes for each patient. These are discharge instructions, medication reconciliation and prescriptions, and discharge summary. I added an additional checkbox for patient sign-out. This was added to each patient being discharged and I attempted to check it for each patient I discharged before leaving my shift for the day.

Effects of Change: Despite not having baseline data, I can feel almost certain that my effort resulted in greater frequency of direct sign-out than prior to the project. I only had a few discharges over the four weeks but had 6/8 or 62.5% of them signed out to the follow-up physician.

Lessons Learned: I learned from this intervention that signing a patient out to the outpatient provider is more challenging than I originally expected but I still believe it is a vital part of quality transition of care. I felt that the direct communication from the direct sign-out was more efficient and thorough than review of a discharge summary. Even though a phone call, text message, EMR message, or in person conversation was not very time
consuming, it is an easy thing to get missed or neglected with the pressures of high volume, high acuity inpatient medicine. The barriers I faced during the four-week intervention were many. I had to rush to clinic at 1pm to see patients in my primary care clinic four of the days which limited time to coordinate thorough discharge plans. Not every outpatient provider has EPIC access or is available for phone call and I do not have all the primary care doctors cell phone numbers. I only had a handful of discharges because, while our service was busy with multiple discharges daily, I was in a role as the senior resident where I would only see up to 3-4 patients of my own daily. The rest of the service was carried by a second year resident and two interns. For two weeks I lost access to the call schedule online and had to request assistance from colleagues to discover who the accepting provider was.

I noticed several factors which made a sign-out easier. Many of the discharges were signed out easily by face to face encounters with co-workers. Having this decreased barrier of seeing other providers in person made the process more organic and less time consuming. Many of the primary care physicians in Missoula use EPIC as the EMR which is the same one utilized by the hospital which made an EMR message easy and not time consuming. I learned that many outpatient providers greatly appreciated this thorough sign-out and I feel it was worth the additional effort.

To improve adherence to this intervention in the future, I believe hospital systems or insurance should provide incentive for peer to peer sign-out. I believe it should be part of the algorithm for discharge for hospitals and there should be a hard stop if not checked off a discharge checklist in the EMR. I also believe that there should be some reimbursement for a direct sign-out. If this element of patient care were financially incentivized, it would likely greatly increase adherence. A brief literature review elicited no randomized controlled trials evaluating patient oriented outcomes following direct sign-out. I think this would be a worthy trial to evaluate if patient oriented outcomes benefit from this intervention. That data could be helpful to encourage insurers to incentivize this part of patient care.
QI PROJECT
Names: Michelle Metcalf MD, Katie Walicki DO & Mallory Koula MD
Title: Incorporation of Contraception and Preconception Counseling at Partnership Health Center

**Problem:** According to a 2016 study, 45% of the 6.1 million US pregnancies that occurred in 2011 were unintended, 27% were “wanted later” and 18% were “unwanted.” Notably unintended pregnancy rates are highest among low-income women (income less than 200% of the federal poverty level), women ages 18-24 and women of color while rates are lowest in higher-income, white, college-educated and married women. Given that approximately 59% of the patient population who receives care at PHC report living at or below 200% of the federal poverty level, integrating a standardized approach for having conversations about preventative reproductive health is paramount. OKQ (One Key Question) is an initiative first created in Oregon that consists of one simple question designed to support women in their goals for either intended pregnancy or prevention of pregnancy. “Would you like to become pregnant in the next year?” is more than a “yes” or “no” question. It acts as a launching point for opening conversations about preventative reproductive health in primary care. Not only does this approach work to decrease unintended pregnancy rates by ensuring access to appropriate contraception, but also identifies patients who may need further interventions or education for intended high-risk pregnancies. It is important to have the resources to efficiently and consistently discuss, implement and document these reproductive health conversations. Family Medicine is in a perfect position to navigate these discussions because of our familiarity with patients and families as well as our training to care for all ages.

“Whenever I see a woman who has an unintended pregnancy, I make a point of looking through her chart to see if she had a recent office visit. About 75% of the time, I find she did have a visit within the previous three months, but contraception was not addressed.” —Family physician and medical director of a federally qualified health center.

![Clinical Algorithm](https://www.powertodecide.org)

Algorithm taken from powertodecide.org
**Aim:** Improve evidence-based preconception and contraception counseling in the primary care setting by creating and sharing a stream-lined workflow to use for patients of reproductive age (15-45 years old) who can become pregnant. The workflow will include an EMR template, educational browse phrase and physical in-clinic resources that can be dispersed in clinic rooms. We disseminated this information through a brief informational setting at a provider meeting and intended to assess whether this increases provider conversations around reproductive health from January 1st 2022 to April 1st 2022.

**Improvement Measure:** Templates were created to ease the incorporation of these conversations into clinic and EMR documentation. There were three different templates to help work through the OKQ algorithm above.

The first template was the *OKQ mini template* which pulls OKQ into our documentation to initiate reproductive health counseling. Depending on the patient’s answer to OKQ, we then created a contraceptive counseling template as well as a preconception counseling template.

The *contraceptive counseling template* pulled appropriate screening questions for birth control options into the HPI section.

This included questions such as:

- Personal history of migraine with aura, malignancy (breast, endometrial, cervical), uncontrolled hypertension, liver disease, ischemic heart disease, tobacco use, age >35, breastfeeding?
- Contraceptives tried in the past?
- Contraceptive most interested in?

It also automatically inserted resources that would be printed on a patient’s after visit summary to pursue self-education on contraceptive options.

- [https://www.bedsider.org/birthcontrol](https://www.bedsider.org/birthcontrol)
- [https://www.reproductiveaccess.org/contraception](https://www.reproductiveaccess.org/contraception)

Within the order set section of the template you can then choose which form of contraception the patient decides. We also created laminated physical resources with various contraceptive options from bedsider.org to have in the clinic. These were distributed on both the East and West side of the clinic to be available to providers when having these discussions in the clinic.

The *preconception counseling template* pulled in appropriate history components including:

- Meds taken: prenatal vitamin, any teratogenic medications?
- Chronic medical problems
- Reproductive history
- Social and mental health concerns
- Social history: ETOH, tobacco, other recreational drugs?
- Vaccinations: Have you received COVID and flu?
- Nutrition and physical exercise counseling

It also automatically loaded a prescription for a prenatal vitamin into the appropriate diagnosis and assessment for preconception counseling. It brought in a summary of the discussion surrounding recommendations for preconception counseling as discussed in the HPI to be printed on the after visit summary.

A brief presentation of these templates and intended use was given at the Tuesday morning clinic meeting to share our templates with other PHC staff. This was to determine whether our interventions would increase the use of these templates which may correlate with increased reproductive health conversations in our clinic population. To determine whether this project improves the frequency of discussions surrounding preconception and contraception counseling,
the plan was to obtain data both before (on author’s patients) and after (general PHC population) incorporating the templates.

**Process of Gathering Information:**

Data on baseline contraception counseling was gathered by authors’ individually data mining their patient panels though eClinical Works (electronic medical record). We retroactively gathered information on how often contraception was discussed with persons of reproductive age that can get pregnant over a 2 month time period (Aug 2020-Sept 2020) as our baseline data. We did this by reading our notes on the days we were in the clinic and seeing if contraception was discussed in the visit. The contraception and preconception counseling templates were created 03/16/2022. A brief presentation on these templates was performed at the Tuesday morning clinic meeting on 3/22/2022. We leaned on PHC’s informatics team to pull from the EMR database the number of times these templates were used for evaluation after creation and presentation.

**Analysis and Interpretation:**

Chart 1 shows how often contraception was discussed with the targeted patient population before and after incorporating the initial contraception template from 2020-2021 into the electronic medical record.

![Chart 1](image)

There was a baseline variation between each author, in terms of how many reproductive age patients that can get pregnant were seen and how often contraception was discussed. Regardless of this, there was an increase in contraception discussion for each author during the time period we were to incorporate the template. We did not track if the template was actually incorporated ahead of time in every appropriate patient encounter between October - April which may have falsely improved “Template: % Discussed” numbers. The average improvement in contraception discussion was around 10% with the use of the template. Given this improvement in contraception discussion after template incorporation in 2021, we wanted to see how often our three new templates (PHC - Contraception counseling,
PHC - Preconception Counseling, PHC- one key question) were incorporated into Partnership Health Center as an entire organization. Templates were created by Partnership Health Center staff and access given to all providers on 03/22/2022. The plan was to extrapolate how often our templates were integrated into provider’s notes between 03/22/2022 and 04/30/2022. However, at the time of data collection it was found that the templates did not have an unique identifier integrated into them and unfortunately were not able to be tracked by Partnership Health Center Informatics Department.

**Strategies for Change:** Several measures including an educational presentation to other providers, automated templates with pre-loaded order sets, and reusable patient resources were implemented.

**Effect of Change:** Unfortunately, we were unable to produce objective data due to some unforeseen complications with our templates. Anecdotally, each provider (3) states improvement in frequency of discussions about reproductive healthcare with their patients. The OKQ template was used effectively to initiate conversations about pregnancy and reproductive health. The templates also allowed for increased efficiency with both conversation and documentation. Lastly, the laminated resources were a helpful visual aid which improved patient understanding regarding contraception options.

**Lessons Learned:** We were unable to use our templates to collect numerical data due to an unforeseen error; therefore, in the future, we would plan to perform a mid-point evaluation to identify problems in our process at a time where an intervention could allow for adjustments. Anecdotally, we learned that standardized processes can help to increase frequency of discussions about contraception and pregnancy. This is extremely important as contraception and/or preconception counseling should be topics addressed at every office visit, especially considering that in a similar federally qualified health center, 75% of patients with unintended pregnancies had an office visit within the last 3 months³. Our templates helped prompt discussions about pregnancy, contraception, and preconception counseling especially during complicated visits. Lastly, we also learned how important OKQ truly is. The answer to OKQ and education provided as follow-up to that question can change someone’s life, whether they choose pregnancy or not.

Sources:

2. [https://www.partnershiphealthcenter.com/who-we-are.html](https://www.partnershiphealthcenter.com/who-we-are.html)
4. Powertodecide.org
**QI PROJECT**

**Names:** Shannon Rossio, MD & Barb Steward, DO  
**Title:** House Calls and Access to Care  

**PROBLEM:** Many of our patients lack transportation to clinic and are homebound. This project sought to assess whether house calls can improve access to care for this population of patients. Lack of access to care was defined as patients who are unable to see a physician in the clinic due to either a lack of transportation or a medical/physical inability to leave their home.  

**AIM:** To improve access to care through house calls  

**METHODS:** Patients that lacked transportation or were homebound were offered care via house calls. These visits were conducted with a resident and attending physician. After the visit, the patients were given a survey asking the following 4 questions:  

1) Is it difficult for you to see a doctor in the clinic?  Yes or No  
2) Do you think you would see a doctor more frequently if they offered house calls?  Yes or No  
3) Do you feel that house calls have improved your access to a doctor?  Yes or No  
4) Do you feel that house calls have improved your overall health?  Yes or No  

**KEY MEASURES FOR IMPROVEMENT:** Percentage of patients who answered “Yes” to any of the aforementioned questions.  

**PROCESS OF GATHERING INFORMATION:** Patients who lacked transportation to clinic or were homebound were identified by their primary doctors and referred to the home visit program. These patients were then called and offered care via a home visit. The patients that elected to be part of the program were then scheduled for a home visit. After the home visit was completed they were given the post visit survey. The results of each survey were compiled and evaluated.  

**ANALYSIS AND EVALUATION:**  
Ten home visits were conducted over 5 months at Greater Valley Health Center (GVHC). The percentage of “Yes” responses to the survey questions are charted below:  

![GVHC Home Visit Questionnaire](image)  

Based on the above results, most patients (90%) indicated that seeing a doctor in the clinic was difficult for them and that home visits improved their access to care. All of the patients reported that they would see a doctor more frequently if home visits were offered and felt that the home visit improved their overall health.
EFFECTS OF CHANGE: As a result of this project, we were able to increase access to care for a few of our homebound patients.

LESSONS LEARNED: This was a small study, but arguably had a significant impact for our homebound patients. It should be noted that the results of this study were biased towards patients that elected to have a home visit and thus likely had a favorable view of home visits prior to enrolling in the study.

Scheduling arrangements were the largest barrier to program implementation as most of the visits required 40 minutes to 1 hour of visit time combined with 30 minutes to 1 hour of travel time.

Implementing a home visit program could be an effective strategy for improving access to care for a vulnerable patient population that lacks the ability or means to receive care in an office setting.
QI PROJECT
Name: Kayla Whitmore, DO
Title: Low prescribing of emergency contraception (EC) in the clinic

Aim: To increase provider prescribing EC by 25% over 3m after providing formal education about EC.

Key Measures for improvement: measures will be number of “therapeutic injections” for EC as well as prescriptions for EC

Process of gathering Information:

Reached out to team member responsible for UDS measures in our clinic to determine the number of “eligible candidates” for Emergency contraception, and then determined the number of times within a 3 month period that EC had either be prescribed or given as a therapeutic injection in our clinic.

I sent an anonymous survey to all the prescribers in the clinic to gauge their level understanding of what methods of EC were, which methods are available in clinic, and their overall comfort level with discussion EC with their patients.

Next, I met with the Nursing direct/Clinic RN manager to discuss what options for emergency contraception are available in clinic. I did independent research on different type of EC and quickly summarizes mechanism of action, time constraints, Pros, and cons for the various forms of Emergency Contraception. This information was summarized into a brief email that was sent to all the prescribers in clinic.

After sending the email with information on Emergency contraception, the number of EC injections/prescriptions was again evaluated and compared to the original number.

Analysis and interpretation

For CY2021 there are 2,250 females aged 14-50yo at GVHC. During a 3 month period prior to my intervention only 4 instances of EC were prescribed/injected were documented in our EHR. After an email providing education about EC and which ones were available in clinic, there were 2 instances of EC prescribed/Therapeutic injection.

Unfortunately, intervention had no noticeable increase in delivery/prescribing emergency contraception.

However, feedback from providers showed an improvement in their understanding of EC and what resources for EC are available in clinic.

Effects of change: no improvement in volume of Emergency Contraception after intervention

Lessons Learned:

This project was wrought with difficulties. First, I had to arbitrarily decide the age range of female patients to use, so I could have over (or under) estimated the total patient volume (also could have missed transpatients). Then, the way we document contraception in our EMR is clunky and not always easily understood. There is no documentation for offering EC, which might be a more worthwhile project in the future. Providers could have been offering it more to patients, but I would have no way of knowing.

The affordability of EC and the availability of it in the community may also be contributing to why it seems that EC is under-utilized. For instance, in my research for this project I learned of EC available in a vending machine in the lobby of our clinic, people may be going to the “Family Planning Clinic” housed in the same building for their contraceptive concerns (especially if teen or uninsured), and EC is readily available OTC in local pharmacies and online. Thus, pts may actually be using EC but we are not capturing that in our medical record.
**QI PROJECT**

**Name:** Nick Zakovich, DO  
**Title:** Piloting a Tele-Prep Program for Rural Montanans

**Problem:**  
Rural Montanans face many barriers to getting PREP leading to underutilization of this safe and effective medication.

Montana is a rural state. In many of these rural areas “conservative values” prevail. There is also a shortage of primary care providers across the state, but especially in rural areas. This has created many barriers for patients living in rural Montana to access PREP (pre-exposure prophylaxis for HIV). PREP is mainly used by MSM (men who have sex with men) to reduce the risk of HIV infection, but can be used by other groups. It has been shown to be effective and safe. PREP requires routine office visits and laboratory monitoring. Unfortunately, HIV infection cannot be eradicated and can have adverse effects on a patient’s health, finances, and social life. Prevention of HIV also has many benefits from a public health perspective including: decreasing morbidity, mortality, financial costs, and healthcare utilization associated with chronic disease. In summary, we are missing out on a critical opportunity to provide PREP to rural Montanans to prevent HIV infection.

**Aim:**  
To create and pilot a tele-PREP program to help rural Montanans access PREP. The program would connect rural Montanans to providers at Partnership Health Center. They would be able to get required labs through the mail or in their local community. The medications can be prescribed to their local pharmacy or mailed to them. Ideally, the tele-PREP program would reduce barriers and help get more patients on PREP. To accomplish this, I will work with PHC leadership and staff, residency faculty, government officials (who provide funding for PREP visits and relevant lab work), and consultants (other healthcare workers and administrators who have created similar programs in other states), and create a workflows for tele-PREP visits.

**Key measurement for improvement:**  
To create the tele-PREP workflow for rural patients and complete a visit.

**Strategies for change:**

**Brainstorming:**
- I worked with others who have successfully created similar programs in other states. We discussed successful tactics they employed with their own programs and potential pitfalls.
- I discussed this program with PHC leadership, residency faculty, PHC employees involved in patient scheduling and PREP currently, and many others to help shape this program.

**Secure funding:**
- I discussed the program with state government officials who provide funding in the form of grants for office visits and laboratory testing regarding PREP.
- At this time, the state government is not able to use grant money to pay for the PREP medication itself, but that could change in the future.
- I discussed possible costs of generic PREP with our non-profit pharmacy.
- I secured an approval to wave medication costs if needed for select patients from PHC leadership.

**Secure laboratory testing:**
- We are working to create a list of Quest labs in the state that could be utilized by potential patients.
- We will sign resident physicians who are participating in the program for a mail in laboratory service.

Secure access for patients:
- I worked with relevant PHC staff who already schedule PREP visits to create quick and easy access to scheduling appointments for patients.
- We are working to streamline pre-appointment intake workflows to capture necessary information prior to scheduled visits.
- We are creating a time efficient tele-PREP template to allow for tele-PREP appointments to be added on as 15 minute same day appointments without disrupting residents’ existing schedules.
- We are exploring the possibility of online scheduling for potential patients.

Ensure patient privacy:
- Given the possible stigma around PREP, we are working to create appropriate workflows to protect certain, vulnerable patients’ privacy.

Refinement:
- We will continue to refine templates and associated workflows to minimize the time burden on residents in the hope that these visits could be expanded to other PHC providers.
- I have identified a 1st and 2nd year resident who are willing to take over supervision of this project after I graduate.

Effects of change:
Using the above strategies, our work group created a road map to get this program up and running. At the time this project was submitted, we have secured funding, got approval from PHC leadership and appropriate faculty. We have created a rough system for patients to be scheduled quickly and efficiently. We have determined ways to identify patients who will need increased privacy and possible ways to protect against accidental disclosures in billing. We have identified options for local laboratory collection as well as mail-in labs if needed. We explored pricing of generic PREP, the pharmacy’s ability to mail it to patients, and the possibility of waving the cost in select situations. We are in the process of exploring online scheduling, ways to advertise for these services, modification of existing PREP templates, and the possibility of expanding the program to other providers. We have not been successful in having our first tele-PREP visit yet. I have identified a 1st and 2nd year resident who will take over supervision of this project for the foreseeable future. I have the utmost confidence in them, and all the other people who have supported this program, to get this program up and running.

A special thanks:
This project would not have been possible without the countless people who have helped throughout its many stages. There would be too many people to name each of them, nor did I ask their permission. I wanted their contributions to be highlighted. If one of you are reading this, thank you for all your support.
Class of 2023 QI Work
Class of 2023

MISSOULA

Philip Anuta DO

Ben Merbler DO

Jacqueline Ordemann MD

Stephen Reale MD

Jonathan Rhea DO

Rachael Schmidt MD

Melanie Scott DO

KatiLyn Lucas DO

Taylor Simmons MD

Barbara Steward DO
QI PROJECT
Name: Phillip Anuta, DO
Title: Effect of providing and reviewing after-visit summary with medication specific notations to enhance patient comprehension and comfort level with home medications

Problem: Often patients come into clinic not knowing what medications they take, why they take them and the doses. Poor understanding of medications is a barrier to high quality patient care and contributes negatively to health literacy.

Aim: Educating patients and empowering them to understand their medications and why they take them should increase comfort level and base knowledge with medications.

Key measures for improvement: Improvement was measured with comparing patients’ comfort level with home medications during initial clinic visit and 1 week after their clinic visit after receiving the visit summary.

Method: Over the course of approximately 3 months, patients having 3 or more medications on their med rec were randomly screened in the beginning of the clinic visit as to their general comfort level in 1) knowing the names of the medicine they take, 2) which medical condition the medication is supposed to help with and 3) the dosage of the medication. The patient rated their overall comfort level on a scale of 1-3, with 1 being not comfortable, 2 being somewhat comfortable and 3 being very comfortable. This screening was performed verbally by myself and recorded. Patients who reported a comfort level of 3 were excluded from this investigation. Regarding the other patients, before the clinic visit ended, I printed off an after-visit summary with a simple annotation by each medication to indicate which medical condition it was treating i.e., “type 2 diabetes” next to metformin, or “hypertension” next to amlodipine. This visit summary was given to the patient, reviewed with them in person and I instructed them to review it several times at home. After approximately 1 week from the initial visit, patients were contacted via phone and asked to rate their general comfort level regarding their medications on a scale 1-3. After this data was collected, patient comfort level was compared to their initial report and were assigned a value of 1 = worse understanding of home meds, 2 = no difference in understanding home meds or 3 = improvement in understanding home meds.

Analysis and interpretation: A total of 34 visit were used for this project, 13 of which were not used for follow-up questioning given they initially rated their comfort level as a 3. Patients who rated 1 or 2 were called one week later and assessed for their comfort level. The results are graphed below. Overall there was an improvement with medication comfort level after the visit summary was given.
**Strategies for change:** Identifying patients whose comfort level is low or uncertain with their home medications is important, as providing an after-visit summary with medication annotations can improve general comfort levels. This will serve as a reminder to simply ask patients taking multiple medications how comfortable they are with their medications and identifying those who would benefit from a more thorough review.

**Effects of change:** Providing after visit summaries with medication notations had a positive impact on 7 out of 21 patients’ personal comfort level regarding their home medications.

**Lessons learned:** We treat many medically complex patients at PHC and medication literacy is an important consideration especially with those who are on many medications. Overall there was a positive impact with medication comfort level in patients who were provided a visit summary and instructions to review it. However over half of the patients I followed up with did not report any significant improvement. This is likely multifactorial given patients with multiple comorbidities tend to have more complex medication regimens, some of them do not necessarily manage all their own meds, and some patients did not review the visit summary provided to them once they returned home for various reasons. The names of medications also seemed to be a barrier as multiple patients were not able to pronounce the names but knew it was for ‘blood pressure’ or ‘diabetes’. Overall this was an impactful QI project that will encourage me to screen patients more often for medication literacy and intervene through after-visit summaries with medication specific annotations.
**QI PROJECT**

**Name:** Kati Lucas, DO  
**Title:** Sharing Patient Information Between Two Different Healthcare Settings

**Problems:**

Continuity patients seen at Greater Valley Health Center (GVHC) will all eventually deliver at Logan Health Hospital. There needs to be a system in place to share information about the patient between the two different healthcare settings. This is difficult because two different EMR’s are used, the information is private and needs to be protected, and all prior protocols to share information have failed.

**Aim:**

To improve patient care and overall staff satisfaction both by 50% by establishing a HIPPA appropriate and consistent intervention in which we can share continuity OB patient information between GVHC and Logan Health Hospital over 4 months.

**Key measures for improvement:**

Satisfaction among staff members caring for patients, including residents, attendings, nurses, on-call providers, etc. Incidence of adverse patient outcomes/errors in their care as noted by staff.

**Process of gathering information:**

Data about staff member satisfaction and any patient care errors was obtained via two surveys, one initially electronic and a second via personal interviews 2 months after the intervention was implemented.

**Analysis and interpretation:**

The average staff satisfaction was measured using a rating scale of 1-5, where 1 is very dissatisfied and 5 is very satisfied. The average number of reported patient treatment errors were added up over 4 months before the intervention, and the 4 months after intervention. Table 1 below shows these averages as well as the percentage change.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Before</th>
<th>After</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>2.6 out of 5</td>
<td>3.95 out of 5</td>
<td>34% increase</td>
</tr>
<tr>
<td>Errors in Care</td>
<td>1</td>
<td>0</td>
<td>100% decrease</td>
</tr>
</tbody>
</table>

**Strategies for change:**

Since residents are seeing the continuity patients regularly, having them fax notes to Logan Health from GVHC appointments removes multiple “middle-men” and leaves less room for error. Therefore, we have added directions to fax OB information when patients are 28 and 37 weeks. Many patients present to L&D for acute concerns before 37 weeks and there is not a lot to do at the 28 week follow-up. All labs are completed by 37 weeks so sending documentation at this stage will have the most information possible for staff at Logan Health.

**Effects of change:**

There was a significant increase in staff satisfaction once this intervention was initiated. Several of them reported feeling “safer” overall having patient information on hand instead of needing to call for more information or relying on the patient to remember details of their pregnancy. There were no errors noted once this was implemented as well which directly leads to better care overall for patients.
Lessons Learned:

Several times before this, staff have attempted to transmit patient information from GVHC to Logan Health and although it is effective in the beginning, it does not last long. I learned to remove as many unnecessary steps as possible and keeping it simple can lead to longevity.
QI PROJECT
Name: Ben Merbler
Title: Overall frustration and inconsistency in regard to preparation, performance, and documentation of joint injections in clinic

Aim: To improve the provider experience of preparing for, administering, and documenting encounters for joint injections in clinic at PHC. My goal in doing this was to help providers to feel more comfortable performing injections in a timely manner and avoid the stress that comes with documenting a simple and beneficial procedure.

Measures for improvement: Administration of both a pre and post intervention survey to residents in order to assess their comfort level and overall satisfaction with performing joint injections.

Analysis/interpretation: With the help of Dr. Heid, I created and administered a 7 question online survey to residents in order to assess frequency of joint injection administration, use of templates for preparation/documentation, satisfaction with current joint injection practice in clinic, desire for a standardized process, and amount of time spent on documentation. Of the 18 residents who responded to the survey, 11/18 indicated some level of dissatisfaction with their current joint injection practice and 12/18 relayed that they do not currently use a joint injection template. This means that these residents are essentially writing the same note from scratch each time they perform an identical procedure. 18/18 residents indicated that they did desire a more streamlined process for performing/documenting these injections. Most importantly (and as I had expected), 8/18 residents stated that they had referred patients to procedure clinic because they either didn’t feel that they had time to perform an injection or didn’t want to deal with the hassle of documentation. It was clear to me based on these results that we all stood to benefit in some small way from the creation of standardized templates for injections.

Strategies for change: In an attempt to help alleviate some of this frustration, I chose to create ECW templates for large joint injections (shoulder, hip, and knee). As anticipated, this was an exceptionally frustrating process fraught with clicks, cursing, system crashes, and general confusion. Once the templates were finally created, the process of making them available for public access by other providers was, of course, another hoop to jump through. The templates are now live and have received the Dr. Heid stamp of approval. These templates will be loaded onto resident computers during ortho clinic and used during each joint injection from this point forward.

Reflection: Although this project is ongoing and the templates have not been live long enough to truly assess the outcomes of the intervention, I’m hopeful that the creation of these templates will help to improve provider satisfaction with documentation and performance of injections. I’m also hopeful that this will lead to less hesitancy to perform an important primary care procedure simply because of our burdensome EMR.
QI PROJECT
Name: Jackie Ordemann, MD
Title: Using ACE Screeners to Improve Trauma Informed Care

PROBLEM:
Adverse childhood events (ACEs) are common, present in 61% of adults (1). Some studies even show that in clinic settings 80-90% of adults endorse childhood trauma (2). ACEs are associated not only with mental health conditions such as depression, anxiety, PTSD, and substance disorders but also with common conditions such as diabetes and heart disease among many others (1). It is hard to make time to talk about trauma during a busy clinic day and it can be difficult to predict who is experiencing the impacts of trauma. However, it can be impactful to patients’ health if we do talk about trauma as it relates to their health.

AIM STATEMENT:
Improve trauma informed care for my patients by screening for ACEs to increase recognition of and intervention in response to trauma related diagnoses and symptoms. To do this, I will administer ACE screeners to all new and transition of care (TOC) patients between December 2021 and April 2022. I will aim to increase the number of discussions about trauma, related interventions, and referrals from baseline.

KEY MEASUREMENTS FOR IMPROVEMENT:
- Percentage of new patient visits where ACE screeners are provided to the patient (Dec – Apr)
- Percentage of visits where trauma is discussed, interventions are made (screening for PTSD or prescribing a medication, or referrals are made (IBH/SW/IMAT/Psy APRN) compared between baseline period (July – Nov 2021) and the ACE screening period (Dec 2021 – Apr 2022).

PROCESS OF GATHERING INFORMATION:
My ECW new patient and TOC charts were audited for the baseline period (July – Nov 2021) and number of trauma discussions, interventions, and referrals were documented. Starting in December, ACE screeners were provided to all new patients and TOC patients by my MA prior to their visit with me. I attempted to review the ACE screener prior to entering the visit. At the end of the study period, my ECW charts were again audited for comparison to the original baseline data. I documented the barriers to discussing trauma and/or completing an ACE screener when this was the case.

ANALYSIS AND INTERPRETATION:
There were 44 encounters in the baseline period and 24 encounters in the ACE screening period. ACE screeners were given to 87.5% of my new patients between December and April. Some common causes of ACE screeners not being given were working with a different MA, the patient declining to fill it out, or the patient speaking a language other than English.

Interestingly, when the data were initially compared, many more interventions were made in the baseline appointment group although less of these patients had a trauma related disorder (depression, anxiety, PTSD, chronic pain, etc.) (See Table 1.). It is unclear why there would be a difference between these two groups. One possible explanation is that in the second half of the year there were more new patient visits than transition of care patients which makes sense given the usual ebb and flow of the residency clinic with more TOCs after graduation. Anecdotally, new patients seem more likely to be younger, college aged students or new residents of Missoula which might select for a higher socioeconomic status group that might be less likely to have experienced trauma in their lifetime. Further evaluation of this would be needed to suggest whether this is true or not. Another possibility is that if there are more new patients in the group that received ACE screeners, they may not yet have disclosed or been diagnosed with these conditions, however this seems
less likely to be contributing in a major way as I try to ask about prior conditions, specifically including mental health conditions, at every visit. I decided to narrow the group to only those with a trauma related diagnosis for some of the analysis as a proxy for overall trauma burden of the groups.

In any case, before selecting for patients carrying a diagnosis associated with trauma, rates of intervention were similar or even slightly favored the baseline group (Table 1a). After selection for patients with a trauma related diagnosis the interventions favored the group that received ACE screenings (Table 1b and Figure 1). This supports my experience with giving ACE screenings out which is that subjectively, giving ACE screenings made it feel like I had an opening for a discussion about trauma with patients might be higher risk for experiencing the effects of trauma. It did also feel like a lot of my patients had negative ACE screeners and also seemed really low risk for any history of trauma compared to in the first half of the year.

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>ACE Screening</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Visits</strong></td>
<td>44</td>
<td>24</td>
</tr>
<tr>
<td><strong>a. ACE Screener Given</strong></td>
<td></td>
<td>21 (87.5%)</td>
</tr>
<tr>
<td>Discussion of Trauma</td>
<td>11 (25.6%)</td>
<td>9 (37.5%)</td>
</tr>
<tr>
<td>Screened for PTSD</td>
<td>4 (9.3%)</td>
<td>2 (8.3%)</td>
</tr>
<tr>
<td>IBH WHO</td>
<td>14 (32.6%)</td>
<td>6 (25%)</td>
</tr>
<tr>
<td>PSY APRN</td>
<td>2 (4.65%)</td>
<td>0</td>
</tr>
<tr>
<td>IMAT</td>
<td>1 (2.33%)</td>
<td>0</td>
</tr>
<tr>
<td>Medication</td>
<td>3 (7.0%)</td>
<td>2 (8.3%)</td>
</tr>
<tr>
<td>Any Intervention</td>
<td>17 (39.5%)</td>
<td>6 (25.0%)</td>
</tr>
<tr>
<td><strong>b. Patient with a Trauma Related Diagnosis</strong></td>
<td>38 (88.4%)</td>
<td>11 (45.8%)</td>
</tr>
<tr>
<td>Discussion of Trauma</td>
<td>11 (28.2%)</td>
<td>6 (54.5%)</td>
</tr>
<tr>
<td>Screened for PTSD</td>
<td>4 (10.3%)</td>
<td>2 (18.2%)</td>
</tr>
<tr>
<td>IBH WHO</td>
<td>14 (35.9%)</td>
<td>5 (45.5%)</td>
</tr>
<tr>
<td>Medication</td>
<td>3 (7.7%)</td>
<td>2 (18.2%)</td>
</tr>
<tr>
<td>Any Intervention</td>
<td>17 (43.6%)</td>
<td>5 (45.5%)</td>
</tr>
</tbody>
</table>

Table 1. Outcome data comparing discussion, interventions, and referrals related to trauma in the baseline period compared to during ACE screening. a) For all new and TOC patients seen and b) For patients with a trauma related diagnosis only.
**Figure 1.** Comparison of discussion of trauma, PTSD screenings, IBH referrals, medication prescription for mental health conditions, and any intervention made during the visit between the baseline group and the ACE Screening group.

**EFFECTS OF CHANGE:**

Giving ACE screeners in clinic to new and transition of care patients made it feel easier for me to open a discussion about trauma and mental health with my patients. Based on the data it also seems like it did improve the number of times I discussed trauma (25 versus 37%) even before I narrowed the groups to include only those with trauma related diagnoses. For some reason, my patients had less mental health and trauma associated diagnoses in the second half of the year and this factors in to the overall results. It does seem like I improved my rates of screening, referrals, and interventions for these patients only.

**LESSONS LEARNED:**

- Giving ACE screeners was helpful to me for my mindset as I entered new patient encounters and helped me get to know my patients' histories more deeply from the start of our doctor-patient relationship.
- In the future, an ACE screener might be helpful to use for some of my already established patients as well.
- It was easier to carry out this workflow when I worked with my MA rather than other MAs because the workflow was smoother.
- It didn’t seem like patients were triggered by filling out an ACE form which was one of my concerns going into this project.

QI PROJECT
Name: Stephen Reale, MD
Title: Removing penicillin allergies from the charts of patients at low- and very low-risk of true allergy by direct oral amoxicillin challenge

Problems:
- 32 million Americans report allergies to penicillin or other beta-lactam antibiotics
- Studies show that having a penicillin allergy on a patient’s chart can lead to:
  - Suboptimal treatment for many common illnesses because first-line antibiotics are not used
  - Increased adverse drug events because of higher rates of side effects with alternative regimens
  - Increased number of hospital/clinic visits for these adverse reactions to alternatives
  - Increased rate of surgical site infections
  - Increased incidence of C. diff, MRSA, and VRE infections
  - Increased cost to patient and system
    - 1 year after delabeling 100 children, $1400 saved per patient and projected savings to one pediatric ED of more than $192,000 per year
  - Longer hospital stays
  - Increased rate of death for patients with MSSA bacteremia
- More than 95% of patients who report these allergies can ultimately tolerate this medication without issue but this reported allergy is rarely formally addressed, despite a Choosing Wisely recommendation (American Academy of Allergy, Asthma & Immunology, March 3 2014).

Current Problem:
- There is lack of awareness of this issue and no system currently in place at PHC to conduct the appropriate evaluation.

Aim:
- Delabel 10% of all PHC patients with a self-reported penicillin allergy who are low- or very low-risk based on the PEN-FAST rule by May 2022.

Key measures for improvement:
- Risk of true penicillin allergy
  - Kind of reaction
  - Date of most recent reaction
  - Treatment needed for reaction
  - Percentage of patients with reported penicillin allergy

Process of gathering information:
A list of patients with reported allergies to penicillin was obtained by working with PHC’s quality improvement department. This list included reported reaction, when available. Further information needed to risk stratify patients would have been obtained through phone conversation or web portal.

Analysis and interpretation:
Table 1. Percentage of patients seen in the last 12 months with a reported penicillin allergy at the time of data collection (12/2/21) compared with US population statistics

<table>
<thead>
<tr>
<th>Patient population</th>
<th>Percent with a chart allergy to penicillin</th>
</tr>
</thead>
<tbody>
<tr>
<td>All PHC patients</td>
<td>10.95% (1445/13199)</td>
</tr>
<tr>
<td>FMRWM-provider patients</td>
<td>8.93% (615/6886)</td>
</tr>
<tr>
<td>My patients</td>
<td>8.85% (27/305)</td>
</tr>
<tr>
<td>US population, reported</td>
<td>10%</td>
</tr>
<tr>
<td>US population, true</td>
<td>0.5-2%</td>
</tr>
</tbody>
</table>

Strategies for change:
Extensive preparations went into this project, including meeting with a local allergist multiple times over the course of the year, reviewing and discussing current literature on the topic, and devising a protocol for advertisement of service, patient risk stratification and selection, and preparation, performance, follow-up, and billing of in-clinic allergy testing. Proposal was elevated up the clinic chain of leadership before ultimately being halted just prior to implementation out of concern for risk.

Effects of change:
Significant gains were made in personal understanding of the prevalence, natural history, and consequences of penicillin allergy, as well as the risks and logistics of organizing and conducting oral allergy testing in a large clinic. Unfortunately, no patient-level data were able to be changed as a result of the denial of the project's execution.

Lessons learned:
- Penicillin allergy is substantially over-reported in both the general population and the PHC population.
- More than 95% of patients who do not have a history of serious penicillin allergy reactions are penicillin tolerant because
  - the most commonly reported penicillin hypersensitivity reaction is a delayed benign rash, likely a type IV hypersensitivity reaction and these reactions may or may not recur when patients are re-exposed to penicillin;
  - IgE-mediated penicillin allergy wanes over time, with 80% of patients becoming tolerant after a decade
  - many patients were never allergic, but may have had an intolerance or another cause for the symptoms they thought represented a penicillin reaction, such as a concomitant viral infection
- Smaller steps in pursuit of the larger goal of penicillin allergy delabeling may have been more likely to succeed in a large, busy FQHC. Some possibilities for intermediate steps include:
  - Structuring allergy history taking at the MA level to include the information needed to risk stratify allergies (penicillin and/or otherwise)
- Generate alerts to providers for follow up on patients with reported penicillin allergies, either in person with the MA or via EMR
- Provider education around this topic
- Patient education around this topic
- A system to refer patients to local allergists for testing if necessary

- My initial aim statement, crafted before I saw the raw data, would have had me trying to delabel 144 patients. My later revised goal of 10% of my own patients seemed much more reasonable for a small study such as this one.

- There is great inconsistency and inadequacy in documentation of drug allergies with the current system at PHC that should be addressed with providers and/or nursing/MAs. Thorough conversations about drug allergies should be happening any time allergies are reported and inaccurate allergies should be removed from patients’ charts, with questionable allergies being referred for testing. These conversations are not commonly occurring, potentially because they are seen as low-yield in a busy FQHC, but infectious diseases are some of the most common illnesses treated in the hospital, not to mention most common causes of death, and the vast majority of these use a beta-lactam as first-line treatment.

- There are 19 different formulations of penicillin that patients are listed as allergic to in eCW. One patient is listed as allergic to 14 of these.
- 40% of patients have no documented reaction.
- Some documented reactions include: “anxiety,” “taken and was okay” x3, “immune to it,” “Mother said don’t do it,” “won’t work,” and “possible UTI.” None of these patients are likely to have a true allergy (three of them have challenged themselves and passed) and having the allergy on a patient’s chart is very likely to lead to, at best, potentially substandard care or, at worst, active harm (see “Problems” above).

- The above numbers for PHC penicillin-allergy are ONLY to penicillin formulations but theoretically this strategy should extend to anyone with an allergy to a beta-lactam or cephalosporin as well (data not shown). This is most commonly seen nowadays with children being labeled allergic to amoxicillin, and these patients were not included in this analysis.
QI PROJECT
Name: Jonathan Rhea, DO
Title: Providing Information about Medications to Patients

Problem: Providing patients with pertinent printed information about medications that are prescribed to them.

Background: At a clinic visit, we are providing verbal instructions to patients on how to take medications, educating about side effects, adverse reactions, and other information about new medications. I often find that I don’t have time to type all this information out requiring patient to rely on verbal instructions. Studies suggests that patients forget 50-80% of what they are told during a doctor’s appointment. Medications often have to be taken at different times, some take weeks to start working, others have side effects that improve with time. I would like to develop browse phrases for 20-30 of the most commonly prescribed medications or classes of medications that give instructions for the medication including how to take, side effects, and expectations. I will include these on the patient’s after visit summary so they don’t have to rely on verbal recall.

AIM: I will come up with a list of browse phrases for common medications and use them in my visit summaries that I provide to patients. At a minimum the phrases will discuss what the medication is for, how to take the medication, and common side effects. I will do this 80% of the time a new medication is prescribed that I have a browse phrase over a 3-month period.

Methods for gathering information: Starting January 1st I started including the instructions I created. I reviewed a 12-week period prior to this and randomly chose one clinic half day each week to audit. I reviewed the number of new prescriptions and then if written information was provided about the medications. I then chose a 12-week period to after I started using the browse phrases and reviewed them with the same methods.

Analysis and interpretation: During the initial 12-week period, I reviewed 12 half-days consisting of 65 visits where 34 new medications were prescribed. In the post intervention period I reviewed 12 half-days consisting of 71 visits where new medications were prescribed 36 times. Of these 36 times medications were prescribed, I had created instructions for 28 of them.

Table 1.

<table>
<thead>
<tr>
<th></th>
<th>Pre-intervention</th>
<th>Post-intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medication Prescribed</td>
<td>34</td>
<td>36</td>
</tr>
<tr>
<td>Medication with Browse Phrase</td>
<td>N/A</td>
<td>28</td>
</tr>
<tr>
<td>Information Provided</td>
<td>13</td>
<td>25</td>
</tr>
<tr>
<td>Percentage provided with information</td>
<td>38%</td>
<td>89%</td>
</tr>
</tbody>
</table>

Effects of Change: Creating information for commonly medications led to a significant increase in the frequency that this information was provided, going from 38% to 89%. In the post intervention period, if we look at the percentage of times information was provided for all medications, not just the ones that I had made phrases for, the percentage drops to 70% of the time. Unfortunately, I was not able to come up with a practical measure to determine the actual impact on patients being given this information in a printed format compared to the previous verbal information.

Lessons Learned: There were several challenges to this project that I did not expect. I ultimately identified 25 medications from a list of most commonly prescribed medications in US primary care. I found it challenging to decide which medications to include but mainly used personal experience. I picked medications with common side effects, with special instructions about administration, and with medications that could take weeks to work. Expanding the list of medications would increase the number of visits where printed information is provided.
Another challenge was what to include in the instructions. I wanted to provide some focused information; I did not want to create a 4-page handout similar to what a patient gets at the pharmacy. It was difficult to decide which side effects to include and which precautions to discuss. To provide adequate information without overwhelming the patient is challenging and may create some liability on the provider’s part. Ultimately I decided that some focused information was better than no information and patients would still receive the long handouts from the pharmacy when the medication is picked up.

Measuring the impact on patient experience was beyond the scope of the project, but it would have been interesting to survey the patient about the extent to which they reviewed their after visit summaries or if they found the information helpful.

The goal of the project was two-fold, to provide patients with important information and to streamline the process. Unfortunately, I found it cumbersome to do this with our EHR so I resorted to creating the phrases in word and copying and pasting them into my after visit summaries which was an inelegant solution.

**Medication Information Example**

**Sertraline** - Sertraline (Zoloft), like most antidepressants, can take 4-6 weeks to reach its maximum effect, and we may need to increase your dose several times to get control of your symptoms. Ideally we use the lowest dose possible to minimize side effects. If you decide to stop this medication in the future, please contact me so we can discuss tapering this medication to minimize withdrawal symptoms. Antidepressants can make you feel tired, dizzy, or nervous. Some people have dry mouth, constipation, headaches, sexual problems, an upset stomach, or diarrhea. Many of these side effects are mild and go away on their own after you take the medicine for a few weeks. There is a small but not insignificant risk of suicide when starting an antidepressant medication. If you are having increasing thoughts of harming yourself, please stop this medication and call the clinic. The national suicide hotline number is 1-800-273-TALK (8255).

This medication, particularly when combined with other serotonergic medications, can cause serotonin syndrome. Symptoms usually occur within several hours of taking a new drug or increasing the dose of a drug you’re already taking. Signs and symptoms include: Agitation or restlessness, Confusion, Rapid heart rate and high blood pressure, dilated pupils, Loss of muscle coordination or twitching muscles, Muscle rigidity, Heavy sweating, Diarrhea, Headache, Shivering, Goose bumps. If you suspect you might have serotonin syndrome after starting a new drug or increasing the dose of a drug you’re already taking, call your doctor right away or go to the emergency room. If you have severe or rapidly worsening symptoms, seek emergency treatment immediately.
QI PROJECT
Name: Rachael Schmidt, MD
Title: Reduction of Documentation Time Through the Use of the Templates Created Within PhraseExpress

PROBLEM
For medical providers, a good portion of time after a patient visit is spent on documentation. This has the unwanted effect of reducing the time providers spend with patients, accidentally omitting information for the sake of brevity, or sacrificing quality in their documentation. There are ways clinics mitigate this burden, but many of the ways (hiring scribes, changing the EMR in use) are costly and impractical in a training environment with multiple residents.

AIM STATEMENT
The primary aim is to reduce time spent documenting after clinic, decreasing the documentation burden and minimizing provider strain that can ultimately lead to burnout. Secondary aims include improved, clear documentation and simplifying the after visit summary process. The goal is to reduce the time spent documenting to an average of <10min per encounter over a period of 6 months through the use of templates and auto-complete phrases available through Phrase Express.

KEY MEASURES FOR IMPROVEMENT
Objective measures include time spent on documentation before and after the intervention as well as average number of templates used with each encounter.

METHODS
For the pre and post intervention data, I used a simple stopwatch on my phone to keep track of time spent actively documenting. The time spent was then averaged across the number of encounters for the day. This was used to calculate the efficacy of the intervention. While this method seems a bit clunky and requires manual tracking of the time, it was felt this would be the best way of minimizing confounding factors (interruptions, technical problems, etc).

The software used to generate templates was Phrase Express, which is software independent of the EMR used in our clinic, eClinicalWorks. This application allows the user to independently select specific templates and pull them in to parts of the note as needed.

Templates were generally produced in one of two ways: either prior to clinic day when pre-charting or after a visit where it was realized a template could be created from that encounter.

RESULTS

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<thead>
<tr>
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<th>Pre-intervention</th>
<th>Post-intervention</th>
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<tbody>
<tr>
<td>Average post-visit documentation time spent per patient encounter</td>
<td>8.5 minutes</td>
<td>8.3 minutes</td>
</tr>
<tr>
<td>Average number of templates used per encounter</td>
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<td>4</td>
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DISCUSSION/BARRIERS
As demonstrated in the table above, the average post-visit documentation time spent per encounter was relatively unchanged despite the intervention. However, the average number of templates used with each encounter increased, from once an encounter — frequently in the physical exam section — to an average of four times in an encounter. Following
the intervention, the use of templates expanded to all portions of the note including the History, physical exam, assessment, plan, and patient instructions.

LESSONS LEARNED
While the overall time spent documenting did not change with the implementation of templates, I found it was easier preparing for clinic and my notes were much more consistent across encounters. In addition, though not objectively measured, I observed multiple benefits of QuickPhrase usage as I grew to use it more and more.

Improved ease navigating annual wellness visits including cancer screening recommendations, social history, reproductive health, and vaccination status.

Increased use of screening tools such as those used to screen/evaluate for various conditions including obstructive sleep apnea, insomnia, cardiac risk index, bipolar disorder, COPD scoring, and alcohol use disorder screening.

Improved monitoring of chronic health conditions such as diabetes or COPD to ensure each component of routine care was reviewed and addressed.

Higher quality after visit summaries: including providing information about general wellness recommendations, sleep hygiene, weight loss, anxiety, depression, nausea in pregnancy, management of irritable bowel syndrome and more.

Despite these improvements, it was admittedly disappointing to discover I had not diminished the amount of time I spent documenting after clinic. When reflecting on this, I found interruptions such as prescription refills, paperwork, chart review, warm-handoffs, messages, emails and many other environmental factors account for a significant amount of time that is not charting or seeing patients.

Most frustrating, however, was the number of technological interruptions. With inefficient EMRs — requiring multiple clicks, search difficulties, long load times, freezing, crashing, etc. — much of the time spent navigating the chart was spent simply attempting to access it. The time spent on simple tasks such as ordering labs, entering referrals, or prescribing medications adds up rapidly across a clinic day.

My most significant take away from this experience is that implementing templates is not enough to reduce the burden of charting on providers. If the primary objective is to improve physician wellness, then the whole system that that provider practices in must be considered.
QI PROJECT
Name: Melanie Scott, DO
Title: Healthcare Maintenance Template

Problem:
We have very little time during clinic with each patient. This is especially true with brand new patients that are coming to our clinic to establish care with significant past medical history and problems they want to discuss. I found that I was frequently running out of time or forgetting to discuss the important preventative measures. I thought that if I created a template as a reminder that I would be able to increase this discussion and potentially increase the amount of my patients that complete this. I also thought that this could improve my documentation by streamlining this process so that I could quickly find the needed information for when patients come in for their next visit. This way I could update this when things were completed and address gaps at each visit.

AIM:
I plan to develop a template for documentation of healthcare maintenance for my patients. My goal is to increase the documentation and therefore discussion of the various preventative measures in my personal clinic. I will measure this change based on percentage of appropriate preventative measures discussed at each visit over 3 months. My goal is to see an increase of at least 10% during this time.

Template:

#HCM:
- Colon Cancer Screening: Colonoscopy or FIT card [Age 45-75]
- Breast Cancer Screening: Mammogram [Biennial/annual Age 50-74, earlier if risk factors]
- AAA Screening: [1-time screen in M age 65-75 who have ever smoked]
- Cervical Cancer Screening [Age 21-30 q3y with cytology alone, 30-65 q5y cytology + HPV contesting; ACS – start age 25-65, can start HPV test alone in 25-29 group or Pap/HPV cotest q5y or same as above]
- Lung Cancer Screening: [Age 50-80 with 20 pack year smoking history, quit < 15 years]
- DEXA [Age 65+, or earlier based on risk assessment]
- Vaccinations: Tdap [q10y], flu [annual], HPV [2-3 doses age < 26, consider >26], Shingrix [2 dose > 50], Pneumonia [>65 unless risk factors]
- Labs: Hep C [Age 18-79], HIV [Age 15-65], DM [Age 35-70 if overweight/obese], GC/CT [Sexually active women < 24, or if risk factors > 25], Lipids [Universal screening age 40-75]

Key measures for improvement:
Percentage of age appropriate healthcare maintenance topics discussed during new patient visits.

Process of gathering information:
I created a template in a word document based on USPSTF guidelines for preventative measures recommended. Over three months, I started using this template with new patients in my clinic. Measured outcomes were the percent of items documented/discussed as compared to the three months prior based on age appropriate guidelines.

Analysis/Interpretation:
During months Oct, Nov, Dec I retrospectively analyzed my new patient visits (including transfer of care appointments from other providers) and determined what percentage of vaccines, labs, and cancer screenings I discussed with each patient. I then analyzed this during Jan, Feb, March after I started using the template.

| Before intervention: | 67% |
| After intervention:  | 75% |
| P-value:             | 0.35 |
Lessons Learned:

I found that with this template it was easier for me to remember everything that needed to be discussed based on age/guidelines and then quickly document. I found that it was still challenging to get through everything during a new patient visit and this was frequently pushed to follow up visits. The template did make it easier to pick up from where I left off on the last visit to fill in blanks. This did make the data I collected a little more challenging to interpret given that at my new patient visits we did not necessary discuss more items. This was not statistically significant based on my design. I also did not meet my goal of an increase of 10%. However, looking at new patient visits and follow up visits it did improve subjectively. I also had a few outliers where I did not discuss much on their new patient visit, but the subsequent visit we covered all of it with the template. I will be using this template going forward for my healthcare maintenance.
QI PROJECT
Name: Taylor Simmons, MD
Title: Well Child Check Templates for GVHC

PROBLEM:
Currently available well child check (WCC) templates at Greater Valley Health Center (GVHC) are cumbersome and time consuming to make adjustments necessary to include succinct and pertinent information. The alternative to using the template is building the WCC note from scratch but this method can lead to accidentally forgetting to counsel parents and patients on important anticipatory guidance. Both options are less efficient and may even potentially compromise patient care during the course of a busy clinic day.

AIM:
Improve efficiency and standardize anticipatory guidance for well child examinations by creating well child check templates (newborn to 17 years old) for Greater Valley Health Center. Use surveys given to providers before and after implementation to measure time on documentation and perceived confidence in hitting important markers of anticipatory guidance.

Timeline:
- Pre-surveys sent out: 11/1/21
- Pre-surveys collected 11/10/21
- Templates created by 12/31/21
- Templates distributed by 1/1/22
- Templates used 1/1- 4/20/22
- Post-surveys sent out: 4/20/22
- Post-surveys collected: 4/27/22
- QI write up due 5/13/22

KEY MEASURES FOR IMPROVEMENT:
Success of the project will be determined by improvement in anticipatory guidance confidence scores, decreased time on documentation, as well as provider perceived improvement comparing the old versus new templates.

PROCESS OF DATA GATHERING:
The pre-surveys were obtained from all who see pediatric patients at GVHC. Google Forms was utilized for the surveys. Then the templates were created in a test patient encounter, and the providers were notified when they were available via email. The timeline was followed appropriately, and providers had over four months of template use prior to taking the post-survey.
DATA ANALYSIS:

PRE-SURVEY

Do you currently use any of the available WCC templates at GVHC?
12 responses

If yes, how satisfied are you with the currently available WCC templates?
11 responses

If you are using the templates, how much time on average do you estimate you spend documenting a WCC encounter?
9 responses

Do you rely on templates to help guide your anticipatory guidance counseling?
12 responses

How confident are you that you consistently and completely counsel caregivers and patients on age appropriate anticipatory guidance?
12 responses

Do you believe having a well constructed and age appropriate template will increase your age appropriate counseling skills?
12 responses

What are the most important parts of a template for you? 12 responses

Age appropriate vax, preventative coding, PE completed for normal, education for age milestones, counseling,

Exam, anticipatory guidance, coding

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Relative ease of use. Age appropriate milestones, in history and exam and basic anticipatory guidance

Ease of use (quickness to complete and templated AVS), accuracy of milestones

Concise and accurate.

HPI and treatment templated and age appropriate

HPI template and anticipatory guidance in the treatment section

up to date information and guidelines/can use with all genders and easy to use

What topics to discuss in HPI. Physical exam findings. Assessment and Plan of what we discussed.

Ease of use

Anticipatory guidance

Any additional comments or feedback regarding the currently available templates? 8 responses

I hate all the clicky boxes that auto populate. A lot of redundancy IMO and tedious to remove/edit every time for areas I'm not concerned about (or include new areas I am)

Templates currently are too clunky

so many to choose from. Quality not consistent for sure. Some are ok some are bad

Dislike current templates, use them because I have not had time to create my own. Too lengthy and cumbersome to use

They take too long to edit.

I use my own-copy and paste from Word

i have some of my own and this is why i have not used

Dislike that some information is already filled in: runs risk that it will not be applicable to my patient and I will fail to update all of it

Any suggestions for the work-in-progress new templates? 7 responses

How to incorporate ASQ, area in the new template ?

take out all of HPI stuff

It would be great if they could thread that needle of being complete but not too much information

Paragraph form for HPI and treatment

glad you are doing it

We know you'll do an amazing job.

Not right now, but thanks!
EXAMPLE TEMPLATE:

**Subjective:**

**Chief Complaint(s):**
- WOC 9 MO

**MPI:**

**Provider history:**
- **is** a 9 month old ****male presenting to clinic today with mom/dad*** for a well child check:
  - Questions/concerns:
  - Diet: breast/bottle feeding ****oz **times/day, solid foods**
  - Development:
  - Dental:
  - Sleep:
  - Bowel/bladder:
  - Family situation (changes, caregivers, child care):
  - Social/environmental (food, housing, safety):

**Examination:**

**Pediatric Exam:**
- General: alert, active, well nourished
- Skin: normal, no abnormal skin lesions or rashes
- Head: normocephalic with anterior fontanelle open, atraumatic
- Eyes: red reflex present bilaterally, extracocular movements intact, no eye discharge
- Ears: bilateral TM's normal, canals normal
- Nose: nares patent and clear, mucosa normal
- Mouth: moist mucus membranes, no obvious lesions, no natal teeth, palate intact
- Neck: supple, no torticollis
- Chest: normal contour, good expansion, symmetric, normal peripheral pulses
- Heart: regular rate and rhythm, normal S1/S2, no murmurs
- Lungs: normal effort, clear to auscultation bilaterally, equal breath sounds bilaterally
- Abdomen: soft, nontender; no masses, umbilical stump healing appropriately
- Genitalia: normal external genitalia, ****testes descended bilaterally
- Extremities/Back: normal exam of spine, moving all extremities equally, negative Ortolani and Barlow maneuvers
- Neurologic: normal tone and motor development, no abnormal reflexes.

**Treatment:**
- Encyclopedia for routine child health examination without abnormal findings

**Clinical Notes:**

9 MONTH OLD WELL CHILD CHECK

Normal growth and development. ASQ reviewed. No provider concerns today.

Completed anticipatory guidance as outlined under preventative medicine. Bright Futures handout provided.

Counseled on immunizations with the following plan: up to date***. Patient tolerated vaccines well without complication***. Parent/guardian was given weight based dosage for acetaminophen and counseled on post vaccine side effects.

Follow up: 12 months of life.

**Preventive Medicine:**

**Care Plan:**
- Actions
  - Pediatric counseling for nutrition provided Yes
  - Pediatric counseling for physical activity provided Yes

Nutrition Counseling:
- Introduction of solid foods.
- Supervise eating.
- Drink from cup.
- Self-feeding.
- Healthy food choices.
- Limit Juice < 8 ounce per day.

**Infant:**
- Car Restraints.
- Dental/Tooth Brushing.
- Discussed development.
- Discussed growth.
- Limit television time.
- Poison Control.
- Safety-Proof Home.
- Vitamins/Nutrition.

**Injury Prevention/Safety:**
- Rear facing infant Car seat.
- No baby walker.
- Water Safety.
- Supervision.
POST-SURVEY:

Are you currently using the new WCC templates at GVHC?
9 responses
- Yes: 88.9%
- No: 11.1%

If you are using the new templates, how much time on average do you estimate you spend documenting a WCC encounter?
8 responses
- 0-5 min: 25%
- 5-10 min: 25%
- 10-15 min: 25%
- 15-20 min: 12.5%
- 20-30 min: 12.5%
- 30+ min: 12.5%

Do you feel the new templates have improved your ability to provide anticipatory guidance counseling?
8 responses
- Yes, definitely: 62.5%
- Yes, most likely: 25%
- Maybe, it depends: 25%
- Probably not: 25%
- Definitely not: 25%

How confident in your anticipatory guidance skills are you after implementation and utilization of the new templates?
8 responses
- 0 (0%)
- 1 (12.5%)
- 2 (25%)
- 3 (37.5%)
- 4 (50%)

If yes, how satisfied are you with the newly available WCC templates?
8 responses
- 1 (0%)
- 2 (25%)
- 3 (0%)
- 4 (50%)
- 5 (0%)
- 6 (0%)
- 7 (0%)
- 8 (0%)
- 9 (25%)
- 10 (25%)

Suggestions, comments, feedback on the new templates: 5 responses

I appreciate the decreased amount of anticipatory guidance in the new templates, although I do often find myself adding things that are part of my script that aren’t always in there. This isn’t a problem with the templates, just a style thing that can easily be solved by me and not the template author.

Next Appointment: 3 Months (Reason: 12 mo WCC)

Billing Information:
- Visit Code: 99391 Preventive Care Est. Pt. Age less than 1 Year.

Great improvement over prior.

So much more convenient & concise

It might be helpful to change the billing codes to default to est patient rather than new pt
DATA INTERPRETATION:

Only 58% of the providers were using the available templates prior to creation of the new templates; this increased to 88% after implementation of the new templates. The satisfaction scores for the old templates ranged from 1-7 with the majority saying 3/10; this increased to scores ranging from 8-10 with majority voting 9/10 after implementation. With the old templates, most people were spending 10-20 minutes and some were spending 30+ minutes on documentation; with the new templates, this improved with 50% of people spending <10 minutes and 87.5% of people spending <15 minutes. The majority of providers were using the templates to guide anticipatory guidance. With the old templates, confidence in age-appropriate anticipatory guidance was varied across the map with five people voting <4/10; with the new templates, there was perceived improvement in anticipatory guidance skills from 75% of people and confidence on anticipatory guidance increased with the majority voting 8-10/10.

EFFECTS OF CHANGE:

Overall, satisfaction with the WCC templates increased, time on documentation decreased, and confidence in age-appropriate anticipatory guidance skills increased.

STRATEGIES FOR CHANGE:

It was important to remind providers on how to find the templates and to add them to their favorites in order to get them to use them regularly. I sent out multiple emails to encourage participation in the survey process. It was also helpful to work with IT to figure out the options and limitations for creating templates in the EMR.

LIMITATIONS:

I had 12 of 15 providers answer my pre-survey and 9 of 15 providers answer my post-survey. The results above represent the majority of providers who do pediatric care but not all of them.

Unfortunately, due to the limitations of EMR, once a template is created, it cannot be edited. This issue was discovered early on in template creation, and it made it challenging to make adjustments as I went along. I wanted all the names to match, so if I messed up and saved one before I had included all the information necessary, I had to start over completely. IT is also the only ones that can delete templates, so they had to be involved to get rid of the erroneous templates. This limitation made it challenging to act on any post-survey feedback as there is no easy way to go back to edit.

LESSONS LEARNED AND NEXT STEPS:

Through this process, I learned about the process of template creation, the value of provider input and feedback, and the utility of well-constructed templates to decrease documentation time and improve provider education skills and satisfaction. Overall, I am satisfied with the improvement from prior and feel they are more concise and user friendly.

Moving forward, providers could customize their own templates using the ones created to add details they feel appropriate. There are also a couple errors where new patient billing codes were selected instead of established patient codes. The vaccine schedule may vary too depending on the child or the provider preference. I also did not put in Bright Futures anticipatory guidance due to time limitations; that could be added to the after-visit summary area. A future resident/attending could revise and add to these templates as their QI project.
QI PROJECT

**Name:** Shannon Rossio, MD and Barb Steward, DO

**Title:** House Calls and Access to Care

PROBLEM: Many of our patients lack transportation to clinic and are homebound. This project sought to assess whether house calls can improve access to care for this population of patients. Lack of access to care was defined as patients who are unable to see a physician in the clinic due to either a lack of transportation or a medical/physical inability to leave their home.

AIM: To improve access to care through house calls

METHODS: Patients that lacked transportation or were homebound were offered care via house calls. These visits were conducted with a resident and attending physician. After the visit, the patients were given a survey asking the following 4 questions:

1. Is it difficult for you to see a doctor in the clinic? Yes or No
2. Do you think you would see a doctor more frequently if they offered house calls? Yes or No
3. Do you feel that house calls have improved your access to a doctor? Yes or No
4. Do you feel that house calls have improved your overall health? Yes or No

KEY MEASURES FOR IMPROVEMENT: Percentage of patients who answered “Yes” to any of the aforementioned questions.

PROCESS OF GATHERING INFORMATION: Patients who lacked transportation to clinic or were homebound were identified by their primary doctors and referred to the home visit program. These patients were then called and offered care via a home visit. The patients that elected to be part of the program were then scheduled for a home visit. After the home visit was completed they were given the post visit survey. The results of each survey were compiled and evaluated.

ANALYSIS AND EVALUATION:

Ten home visits were conducted over 5 months at Greater Valley Health Center (GVHC). The percentage of “Yes” responses to the survey questions are charted below:

Based on the above results, most patients (90%) indicated that seeing a doctor in the clinic was difficult for them and that home visits improved their access to care. All of the patients reported that they would see a doctor more frequently if home visits were offered and felt that the home visit improved their overall health.
EFFECTS OF CHANGE: As a result of this project, we were able to increase access to care for a few of our homebound patients.

LESSONS LEARNED: This was a small study, but arguably had a significant impact for our homebound patients. It should be noted that the results of this study were biased towards patients that elected to have a home visit and thus likely had a favorable view of home visits prior to enrolling in the study.

Scheduling arrangements were the largest barrier to program implementation as most of the visits required 40 minutes to 1 hour of visit time combined with 30 minutes to 1 hour of travel time.

Implementing a home visit program could be an effective strategy for improving access to care for a vulnerable patient population that lacks the ability or means to receive care in an office setting.
Class of 2024 QI Work
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<tr>
<th>MISSOULA</th>
<th>KALISPELL</th>
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<tr>
<td>Sienna Foxton DO</td>
<td>Rebecca Sharar MD</td>
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<td>Kara Francis MD</td>
<td>Cecilia Weeks MD</td>
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<td>Alec Kerins MD</td>
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<td>Travis Kinane DO</td>
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<td>Jennifer Selland MD</td>
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<td></td>
<td>Sarah Davis DO</td>
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<td>Emilie McIntyre MD</td>
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<td>Bryce Roberts DO</td>
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QI PROJECT
Name: Sarah Davis, DO
Title: Self-Care in the Midst of Chaos

Problem: The cognitive, emotional and physical demands of residency are incredibly high. This, to some degree, was to be expected as we progress on the journey of our medical careers. In the past, I have been successful at adapting and learning how best to care for myself given the current circumstances. However, residency poses the ultimate challenge when it comes to self-care, between long work weeks, constantly being evaluated etc. I began to find it nearly impossible to use the strategies that have worked so well to care for myself in the past.

Background: As family medicine residents we quite frequently work 60+ hour work weeks. Each day may bring a new work environment, filled with different faces and expectations, it may bring a new preceptor to work with and be evaluated by, it may bring a different field or branch of medicine. We spend the majority of our time away from loved ones, often come home from long days too exhausted to engage with others, or to even think of going to exercise or partake in other activities that may fill us up, because sleep and rest is a necessity. We often charge through our day without stopping to make healthful choices or food or beverages, just trying to fuel to keep us going with whatever is most readily available. Cognitively, we push our brains daily to limits they have never reached before. Emotionally we take on the burdens of our patients, and try to compartmentalize to keep going and help the next patient, without taking time to process. While being one of the most rewarding professions one can choose, it can also be incredibly taxing on our health, and in order to keep going we must prioritize our own well-being.

AIM: To lower perceived levels of stress by intentionally engaging in self-care activity for 20 minutes daily.

Key measures for improvement: Anticipated lower weekly Perceived Stress Scale ratings on the weeks I completed more days of self-care. Overall, improved happiness and wellbeing during stressful times.

Process of data gathering: I kept 2 excel spreadsheets, the first with a list of self-care activities that I could choose to spend 20 minutes daily doing that included, meditation, stretching, running, weight lifting, journaling, counseling- and I would keep track of how many days each week I would spend 20 minutes a day doing one of these things. On the second excel spreadsheet, I had each of the ten questions from the Perceived Stress Scale, and a column for the week. At the end of each week I would complete this scale, I completed this for 10 non-consecutive weeks when I was able to remember to do so. I then compared my perceived stress scale score for that week to how many days I completed 20 minutes of self-care to combat the stressors of the week.

Analysis and interpretation
**Strategies for change:** I did find that it was quite difficult in our busy schedules to set aside time, even if only 20 minutes for self-care. However, I had more success on the days that I prepared for the activity the night before, the days where I planned it out well. I also had most success, about half way through data collection, once I downloaded an app called Calm that made it very simple to find, and record meditations, reflections, yoga etc. It also was helpful to have a partner to encourage me and hold me accountable.

**Effects of change:** In addition to the clear trend in objective data of lower perceived stress scale scores on the weeks that I had more days of completing self-care activities, I also had profound perceived changes on a day to day basis. On the days I did allow for 20 min of a self-care activity, I found that I was happier, healthier, more grounded, more confident, I was better able to accomplish work tasks, my relationships felt stronger.

**Lessons learned**

- I found that stressors that were outside of my control, such as death of a family member, trying to purchase a new home and move to Kalispell, more rigorous rotations I was on, likely had the most impact on my perceived stress at the time- whether I was partaking in self-care time or not. However, I did still see a trend that implies the weeks I allowed for more self-care times, my perceived stress levels were in fact lower. I believe overall prioritizing time for this absolutely does have a positive effect on my well-being.

- I also found that I was more likely to have success if I had the self-care activity well planned out ahead of time. For example, picking out the meditation to do in the morning the night before, or setting out a bag with gym clothes and deciding on a work-out the night before. Otherwise I often would waste time, or feel anxious I was wasting time that would be better off used another way.
QI PROJECT

Name: Sienna Foxton, DO
Title: Practicing savoring for overall wellbeing

Problem: Intern year is a difficult time for overall wellbeing as workload and stress level is high.

Background: Savoring is a concept in positive psychology that employs different techniques to enhance positive experiences that occur in one’s life. There are three major types of savoring including savoring the past (reminiscense), savoring the present moment, and savoring the future (anticipation). Within these three major types of savoring there are many different techniques including taking photos, sharing with friends and family, and enjoying the present moment.

AIM STATEMENT: In order to enhance overall wellbeing during intern year, I will go on at least one outdoor activity per week and practice at least 1 savoring activity between November 2021 and February 2022.

Key Measures for Improvement: 1) Overall wellbeing score on a scale from 1 to 10, with 1 being not well and 10 being maximally well; 2) Type of savoring activity performed.

Process of Gathering Information: From November 2021 to February 2022 outdoor acitivities were logged and overall wellbeing scores were recorded before and after each activity. A variety of different savoring techniques were also used and recorded.

Analysis and Interpretation:

From 11/14/21 to 2/13/22 a total of 32 outdoor activities were recorded. The average wellbeing score increased by 2 points before and after the activity.

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<thead>
<tr>
<th>Average Overall Wellbeing Score</th>
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<tr>
<td>Before</td>
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Types of savoring activities performed included anticipation, enjoying present moment, remembering with photos, and sharing with friends.

Below are some of the photos taken during the outdoor activities.
**Strategies for Change:** With the goal of getting outside at least once per week I made it a priority to spend time outside during my free time during the study period. I also consciously performed a few different savoring activities for each activity.

**Effects of Change:** Getting outside during time off increased overall wellbeing scores. Employing savoring techniques also helped increase overall wellbeing scores by requiring me to be more aware of the activities I was doing.

**Lessons Learned:** Based on the design of this project it was difficult to parse out the effect of the outdoor activities versus the savoring techniques that led to the increase in overall wellbeing scores. If performed again I would have separate periods of data collection in which I engaged in outdoor activities with and without employing specific savoring techniques. This would allow me to identify more directly the effect of the outdoor activities and savoring techniques on overall wellbeing.

Confounding variables considered included the subjective nature of overall wellbeing ratings, other life factors contributing to overall wellbeing, types of savoring techniques used, and to what extent they were employed, among others.

Overall, this project allowed me to be more conscious about the time I spent outside during my time off and incentivized me to spend time savoring through pictures, anticipation, enjoying the present moment, and sharing with friends.

Sources:

https://positivepsychology.com/savoring/
QI PROJECT
Name: Kara Francis, MD
Title: Reducing Stress with Meal Planning

Problem:
I never enjoyed cooking and have historically preferred to throw meals together at the last minute. While this was more sustainable when I had more time to grocery shop, I found that, in residency, when time is very scarce, I tend to eat whatever is available. I noticed that this was increasing stress toward the end of a long day and resulting in unhealthy, not particularly enjoyable dinners.

AIM Statement:
Decrease self-rated stress at dinnertime by preparing a meal on my day off with sufficient leftovers for the rest of the week, “meal prepping,” at least 2 weeks out of the month. During these weeks I will compare my mealtime level of stress with the weeks where I do not meal prep.

Information Gathering:
To quantify my level of stress, I used a simple, subjective 0-10 rating scale of stress level in the moment. I recorded my stress immediately prior to eating dinner and in the period following. I collected my data on a month where I was on medicine, a more time consuming rotation. During this month, I had Sundays off. On two of the Sundays, I intended to prepare a meal and store leftovers. However, in reality I found that my motivation to cook was low and on one of my experimental Sundays, my partner, who does significantly more cooking in our household, prepared my meal for the week.

The other two weeks served as my control and I continued to eat as I typically do.

Analysis and Interpretation:
Table 1, below, contains my raw data of subjective stress prior to and following dinner. As shown, on days with pre-prepared meals, average stress before dinner to after dinner decreased by 0.5 points and on control days, average stress decreased by 0.4 points.

<table>
<thead>
<tr>
<th>Meal Prepping Days</th>
<th>Control Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before Dinner</td>
<td>After Dinner</td>
</tr>
<tr>
<td>6 6 4 3 5 2 5 3 3 4 2 2</td>
<td>3 5 6 7 5 3 4 5 3 4 2 2</td>
</tr>
<tr>
<td>5 5 5 4 3 3 4 4 4 5 2 2</td>
<td></td>
</tr>
<tr>
<td>Average 4.1</td>
<td>Average 3.4</td>
</tr>
</tbody>
</table>

Table 1: Pre- and post-dinnertime stress levels on days with and without prior meal prep

Strategies for Change:
Successful implementation of my intervention required me to set aside several hours on my day off to allow for time to select a recipe to prepare, purchase ingredients, prepare a large volume meal, and clean up following.

Effects of Change:
As demonstrated above, my average level of stress before and after dinner did not vary significantly between days where I had pre-prepared meals and those where I had not. Thus, based on this limited sample period, it appears that meal prepping does not significantly impact my dinnertime level of stress.

Lessons Learned:

I found my intervention surprisingly hard to execute. It was difficult for me to set aside sufficient time to prepare a dish, store it, and clean up. I only succeeded in successfully meal prepping once and my partner kindly cooked on the next week. And, in the end, meal prepping did not significantly impact my subjective level of stress. Instead, I found that my overall stress was less influenced by the contents of dinner and more strongly by what had transpired in the hours preceding or thoughts of the future.

However, I did discover that having a ready-to-eat, home cooked meal resulted in significantly more enjoyment of my food, greater satiety, and healthier content. Thus, although difficult to execute, I do feel that meal prepping has the potential to increase my overall sense of wellbeing. In the future, I would like to strive to plan more meals and use this as a time to prepare food with my partner and find more joy in cooking and eating.
QI PROJECT
Name: Alec Kerins, MD
Title: The Pursuit of Happiness: Using Exercise to Improve Mood

PROBLEM
There is an established link between physical activity and mood. Unfortunately, time constraints during residency prevent regular access to exercise, often resulting in feelings of fatigue, stress, and tension, ultimately leading to dissatisfaction with work.

AIM
Maximize number of days per week in the “pleasant” quadrants of the Circumplex Model of Affect by exercising at least 30 minutes, 3 days per week.

KEY MEASURES FOR IMPROVEMENT
Exercise defined as heartrate >130 bpm for greater than or equal to 30 minutes as measured by an Apple Watch. Mood was measured using the Circumplex Model of Affect (Figure 1). Quadrants 1 and 2 signifying a “pleasant” mood whereas quadrants 3 and four signify an unpleasant mood.

PROCESS OF GATHERING INFORMATION
Data collection was confined to a 2-month period that included rotations known for being both time intensive (medicine) and more time-flexible rotations (Rural, FMC, Admits). Mood was measured using the Circumplex Model of Affect (Figure 1). A reminder was sent by phone at 8:00 am daily and mood was evaluated based upon pleasance and activation. The quadrant corresponding to current mood was recorded into a spreadsheet. Day and timing of exercise was recorded using the “Activity” tracker within the Apple Watch.

ANALYSIS AND INTERPRETATION
 Reached exercise goal of at least 3 days a week for 5 of the 8 weeks. Average days exercised per week throughout the study period was 2.88 days (Table 1). There are a significantly higher number of days spent in quadrant 1 with exercise as compared non-exercise. This signifies exercise produces feelings of alertness, excitement, happiness. Conversely, an unpleasant mood (quadrant 3 and 4) is associated more strongly with less exercise, producing feelings of fatigue, sad, anger, and stress. Feelings of calm, content, relaxation tend to be associated with both exercise and no exercise.
Interestingly, more days were spent in the unpleasant quadrants during time on Medicine as compared to days on Rural, Family Medicine Clinic, or Admits (Figure 3).

<table>
<thead>
<tr>
<th>Date Range</th>
<th>Number of Days Exercised</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/1 - 3/6</td>
<td>1</td>
</tr>
<tr>
<td>3/7 - 3/13</td>
<td>0</td>
</tr>
<tr>
<td>3/14-3/20</td>
<td>3</td>
</tr>
<tr>
<td>3/28-4/3</td>
<td>2</td>
</tr>
<tr>
<td>4/4-4/10</td>
<td>5</td>
</tr>
<tr>
<td>4/11-4/17</td>
<td>5</td>
</tr>
<tr>
<td>4/18-4/24</td>
<td>3</td>
</tr>
<tr>
<td>4/25-4/30</td>
<td>4</td>
</tr>
</tbody>
</table>

**Average:**
2.875 days/week

Table 1: Number of days exercised per week during the study period

Figure 2: Number of days in each quadrant with exercise and no exercise

Figure 3: Percentage of days spent in each quadrant while on medicine vs others (rural, family medicine clinic, admits)
Effects of Change
Exercise produced twice as many days in the pleasant quadrants as compared to days without exercise (18 vs 9). Lack of exercise was associated with feelings of depression, sadness, tiredness.

Lessons Learned
I had a strong suspicion going into this project that exercise would be associated with improved mood. This project served as a bit of an accountability tool, though one of the reasons it was held to such a short time frame is due to the time needed to exercise at least 3 days/week. I would love to be exercising every day, but with the demands of residency and personal/family life, it just isn’t feasible. Though exercise was correlated to improved mood, I wonder what other (less time consuming) interventions might be useful given the setting.
Name: Travis Kinane, DO

Title: The need for improving quality of life during extended hours and time-intensive rotations like OB and medicine

Aim Statement: Increase overall quality of life (QOL), especially during time-intensive rotations like OB/MED, I will be tracking solo exercise, social exercise, and exercise with my dog to see if there are any that are more valuable in QOL than the others.

Process of Gathering Information: I created an Excel document and recorded the exercise performed. For exercise to fulfill the requirement, the duration had to last at least 30 minutes. The exercise chosen were the following: alone at the gym, with my dog, or in a social setting (hiking, basketball, volleyball, trail running, exercise class). I performed a quality of life measure every two weeks using the WHO Well Being Index Score questionnaire. The questionnaire asked five questions. It asked me to rate my answer from 0 to 5. One being at no time or 5 all of the time. The 5 questions were 1. I have felt cheerful and in good spirits. 2. I have felt calm and relaxed. 3. I have felt active and vigorous. 4. I woke up feeling fresh and rested. 5. My daily life has been filled with things that interest me. The raw score was then calculated by totaling the figures of the five answers. The raw score ranges from 0 to 25, 0 representing the worst possible and 25 representing the best possible quality of life. The raw score was then multiplied by four to obtain a percentage score ranging from 0 to 100. A percentage score of 0 represents the worst possible, whereas a score of 100 represents the best possible quality of life.

Results:

<table>
<thead>
<tr>
<th>Dates 2 Week Blocks</th>
<th>QOL Score</th>
<th>Exercise Alone</th>
<th>Exercise with Dog</th>
<th>Exercise with Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/9-1/22 (OB)</td>
<td>64</td>
<td>3</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>1/23-2/5 (OB)</td>
<td>60</td>
<td>5</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>2/6-2/19 (Addiction)</td>
<td>72</td>
<td>1</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>2/20-3/5 (Addiction)</td>
<td>76</td>
<td>1</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>3/6-3/19 (Medicine)</td>
<td>52</td>
<td>1</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>3/20-4/2 (Medicine)</td>
<td>44</td>
<td>1</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>4/3-4/16 (Peds)</td>
<td>84</td>
<td>1</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>4/17-5/2 (Peds)</td>
<td>80</td>
<td>0</td>
<td>8</td>
<td>11</td>
</tr>
</tbody>
</table>

Discussion: As can be seen from the above data, my QOL was higher during Addiction Medicine, Ambulatory Pediatrics, and with more social exercise activities. My QOL score was the lowest during my Inpatient Medicine rotation, and the more I exercised with my dog. I found it interesting that my QOL score was lower the more time I spent exercising with my dog. While on medicine, I remember looking forward to evening runs after a long day at the hospital and I think if I did not go for those runs my QOL score would have been significantly lower. Exercising alone was infrequent and became even less frequent as the four months progressed.
It is unlikely that the type of exercise (solo, with my dog, or social) is the only factor contributing to my QOL during that month. My higher QOL scores were during two rotations with significantly fewer hours worked and often had free weekends. This excess of time allowed me more time to sleep, more time to spend with family and friends, and more time to relax and to exercise. If I were to take the results as causation, the more social exercise performed would result in a better QOL. I think this was more of a correlation and not causation. It would be interesting to design a QI project that would have fewer variables. This could be done by comparing three months of medicine, with one month focusing more on social exercise, one with exercise with my dog and the other not doing any exercise. Even with the mixed explanation of my data the overall lesson I learned, is that medicine and OB can be more time-intensive. This would make it more critical for me to seek out opportunities for social exercise.
Problem: I have long looked forward to experiencing the joys of pregnancy and having a child. However, childbirth is widely regarded as one of the most difficult and painful human experiences. Many forms of psychological and physical preparation for birth are thought to improve the experience by reducing anxiety and fear, and to help with coping and pain management.

Aim: In order to maximize a sense of preparedness for birth, I will engage in daily birth-related self-care activities (such as exercise, reading about birth, yoga, meditation, etc.) for 20 minutes throughout my third trimester. I will measure my subjective sense of preparedness for birth, on a scale of 1 to 10, weekly.

Key measures for improvement: subjective sense of preparedness for childbirth, as measured by a scale of 1 to 10, with 10 being the maximum value.

Gathering information: I kept a daily log on my phone of my activities (or lack thereof) throughout my third trimester of pregnancy (mid-January through birth in April). Before starting, and at the end of each week on Sundays, I recorded a rating for my sense of preparedness for birth.

Analysis and interpretation:

![Graph](image)

*Figure 1. Subjective readiness for birth and birth preparation activities during the third trimester of pregnancy.*

Strategies for change: Birth preparation activities included:
- reading various books and listening to audiobooks about preparing for childbirth
- exercise (primarily walking and hiking)
- prenatal yoga (using the Down Dog yoga app)
- meditation
- attending prenatal visits with physicians, midwives, and a doula
- body positioning and stretching (using Spinning Babies techniques recommended by my doula) to optimize fetal position before labor
**Effects of change:** Consciously spending time to prepare, both psychologically and physically, on a fairly regular basis helped to increase my sense of readiness for labor and birth. I improved from a rating of 3 to a rating of 8 out of 10 over a period of 11 weeks. It is difficult to assess how much of this increase is due to these preparatory activities versus the passage of time – I imagine that if I had not undertaken any preparation, simply nearing the end of pregnancy would make one feel somewhat more ready for what is to come. However, I did notice my birth-related anxieties lessen as I developed more confidence in my mind and body through exercise and in working with my doula.

**Lessons learned:** My sense of preparedness for birth increased significantly throughout the intervention period. My goal was to spend at least 20 minutes per day on these activities, and I was concerned that this would not be possible on top of my work schedule. While I had many days in which I did not do any activities, I had many others in which I did multiple activities. Overall, almost every week I was able to do more than one activity per day, on average. I feel that the cumulative effect of the time spent mattered more than doing something every single day.

Walking became the most common activity. I think this is because I was able to do it with my partner, which increased my motivation and helped me with accountability. I noticed the most significant subjective increases in my sense of readiness after meetings with my doula, though this was not reflected overtly in my weekly rating trend.

One of my intentions with this project was, for various reasons, to hopefully be able to avoid using epidural analgesia during labor. While it is impossible to assess to what extent my preparatory activities affected this outcome, I was able to get through labor without an epidural.

One of my biggest concerns going into this project was that I would not be able to accomplish an almost-daily time commitment on top of work. I learned that making it a stated goal, committing to seeing it through, and having a clear goal in mind to guide me all made staying on task more achievable than I had imagined.
Mood is thought to be a result of 3 factors: biological factors (ie hormones and chemicals), psychological factors (ie personality and learned responses), and environmental factors (ie illness and stress). “Moods are different from emotions in three main respects. First, moods tend to be much more long-lasting, going for hours or days, whereas an emotion may only last minutes. Second, emotions are about something specific, such as a person or situation, but moods are much more diffuse with no identifiable object. A mood is a general feeling, not a reaction to a particular situation. Third, moods are not as intense as emotions, which can be strong feelings such as exhilaration, terror, or despair. In contrast, you might not be consciously aware that you are in a good or bad mood until you reflect on your response to situations. Moods and emotions are linked. When you are in a bad mood, you are inclined to have negative emotions such as being sad, angry, or afraid about something. But when you are in a good mood, you are inclined to have positive emotions such as being happy or hopeful about something. So the nature of emotions should inform us about the nature of moods.”[1] As I grow older, I continue to learn that my mood and intertwined emotional responses are better when my life feels balanced. To me, part of having a balanced life means making room for spirituality. The purpose of my QI project is to study the effects mindful spirituality on my mood. A similar study was published in 2019 titled Brief Mindfulness Meditation Improves Emotion Processing in which they developed a 15-minute brief mindfulness meditation (BMM) which they called “JW2016 BMM” that was used to investigate the effects on mood and emotion processing. They found that the BMM group (composed of 23 participants) “showed a significant decrease in emotional intensity in response to positive as well as negative emotional stimuli, response time for emotional memory, and duration of attention bias toward negative emotional stimuli”[2] after only 7 days of consistent performance. They concluded that “JW2016 BMM may be an effective, convenient, safe and standardized way to help practitioners remain focused and peaceful without any negative effect on emotion.”[2] In my study, I attempted to engage in daily mindful meditation/spiritual study (consisting of scripture study, listening to hymns, and/or extended prayer) to see how this impacted my overall mood.

Problems:
Life is often very overwhelming, especially during residency. I need to be my best self not only for my patients, but for my wife and kids when I get home as well. I needed something to improve my daily mood in the setting of long work hours.

Aim:
To engage in a dedicated 10-15 minutes of mindful meditation/spiritual study (consisting of scripture study, listening to hymns, and/or extended prayer) daily over 1-2 months and record on a scale of 1-10 how this affects my overall mood with the goal of improving my average sense of well-being.

Key Measurements for improvement:
Mood affected by mindful meditation/spirituality

Process of Data Gathering:
I used a subjective scale from 1-10 to rate my overall mood (at the end of each day) and compared the days that I engaged in mindful meditation/spirituality vs the days I did not. In addition, I completed the Hero Wellness Scale prior to the study and again after the study to compare my overall sense of well-being.
Analysis and Interpretation:

I decided to make a “good” mood 9 or higher on the “my mind scale” and a HERO score greater than 30 to be a positive sense of well-being. I learned that on the days I engaged in mindful meditation/spirituality, my sense of mood was typically higher than on days I did not though this was not always the case. I attempted to regularly vary which activity I engaged in; however, I did not document which specific activity I performed on specific days. As you can see from the information below, there are gaps in recording (days that I did not record activity or mood), but I attempted to be as accurate as possible on the days that I did record my data. Obviously many factors contribute to my overall mood day to day. In January I was working in surgery and the schedule was not as intensive while in February I was working in the hospital and there was not much time for recreation. Despite the more intense schedule and the overall difficult nature of the hospital rotation, I was able to be more consistent during February and you can see how that affect my mood in the data. This study does not account for other confounders as already stated or others including work and family stressors, diet/exercise, sleep, my natural optimistic sense of well-being, etc. Interestingly, my average mood was 9.5 on days that I engaged in the mindful meditation/spirituality and 8.0 on the days that I did not. Even more interestingly, my pre-study HERO score was calculated to be 23 and my post-study score was 37. It’s impossible to say that this is a result of the mindful meditation/spirituality alone; however, I do believe that the consistent practice of such activities overtime did create more balance in my life and positively affected my overall mood and sense of well-being (even despite coming off a very difficult rotation at the end of this study).

Strategies for change:

If I were to complete this study again, I would try to document my mood without active intervention during a rotation which would repeat (ie medicine or OB) first, and then introduce the intervention during the second month of that same
rotation to eliminate a very important confounding variable (i.e., rotation type). I would also likely record which of the various mindful meditation/spirituality practices I engaged in on each day to see if there is one activity which influences my mood more than another.

**Lessons Learned:**

Taking time to engage in personal and mindful meditation/spirituality brought increased balance into my life and increased my subjective mood. I learned that it doesn’t necessarily matter what mindful activity I focus on (whether quiet meditation vs. singing/listening to hymns vs. thoughtful prayer), on average my mood seemed to be improved on the days that I performed them. When I engage in these sorts of activities intentionally and I make time for them every day, I am happier and nicer to be around for others (like my patients, colleagues and family). My goal moving forward is to intentionally take time for myself at least momentarily every day to be mindful and spiritual because I know that this is beneficial to my overall mood and I enjoy feeling happy (and I think other people do too).

**Resources:**

**QI PROJECT**
**Name:** Jennifer Selland, MD  
**Title:** Optimizing Strategies for Efficient Practice While in Residency

**Problem:** The primary care shortage our country is currently facing, especially in rural areas, has put additional pressures on primary care physicians (PCPs) to see a greater volume of patient in shorter amounts of time. This creates numerous challenges for PCPs including but not limited to; increased rates of burn-out, high-stress working environments, limited time for patient care, and subsequently even less time for administrative duties. Therefore, there is a need to optimize strategies for efficient practice while in residency, as the demands placed on PCPs will only increase as I am practicing after residency.

**Aim:** As time allotted for patient visits continues to decrease during R1 year, I will aim to finish my notes from the clinic day before leaving clinic or that same day. By doing so, I expect I will feel less stressed going into my next day of work. I will track my note completion in three categories (finished prior to leaving clinic, finished at home after clinic, or did not finish until subsequent days) and my mood the next morning on a scale from 1-5 (1 being very low energy/stressed/overwhelmed and 5 being energized/motivated/grounded).

**Key Measures for Improvement:**
1. Number of clinic days where notes were finished prior to leaving clinic or later that evening.  
2. Mood on days after clinic, grouped by note completion status

**Process of Gathering Information:** A daily log was kept on days I had clinic and whether or not my notes were completed, and how I felt the next morning. My note completion status was given a mark of A, B, or C. A = finished prior to leaving clinic, B = finished at home after clinic, or C = did not finish until subsequent days. My mood on the next day was measured on a scale from 1-5, with 1 being a stress/upset mood and 5 being a clear-headed, positive mood.

**Analysis and Interpretation:**

I looked at the average of my mood the following day based on two independent data points – my note completion status (graph A) and the rotation I was on the following day (graph B). My average mood was greater when I had completed my notes prior to leaving clinic compared to when I finished them at home or on subsequent days. Interestingly, my mood was the worst on average when I finished my notes at home the same day. I think this speaks to the importance of work-life balance in any career, but especially a high-demanding one such as medicine. Some of my longest work days are likely ones where I am doing administrative tasks after regular work hours.

My average mood was also greater when I had an outpatient rotation or day off the following day, compared to when I was on an inpatient rotation. Again, I think this just speaks to how demanding inpatient rotations can be, they require your full attention, have earlier start times, and have less breaks built into the day. I would guess my mood was slightly worse when I had days off compared to outpatient rotations because there was that additional pressure to feel like I needed to complete my notes entirely to be able to fully embrace the time I did have off.
Strategies for Change:
In an effort to adhere to my aim statement, I tried to set aside time on days before clinic to thoroughly pre-chart on patients I was scheduled to see the next day. I also tried to create dot phrases along the way that I could use when writing notes to save time.

Effects of Change:
My strategies for change were overall effective, but I’m not sure how much of an effect they ultimately had on whether or not my notes were completed the day of clinic. Pre-charting is always useful, but does not account for the patient that show up on your schedule the day of or as same day visits, which can sometimes be the most complex. The dot phrases are helpful in certain situation, but it is hard to give the same exact set of instructions to each patient as everyone is unique.

Lessons Learned:
Working on my efficiency in clinic overall with real-time strategies such as agenda setting and delegating tasks will help improve my charting ability in real time and decrease the amount of charting I have to do after clinic ends, at any point. I also can consider trying to set better boundaries between work and home life. After work hours, even if it is only a few hours, are clearly an important time for me to spend with friends or family, and doing activities that bring me joy. I may not immediately start doing notes I don’t finish in clinic the same night of, as I think this data supports that breaks from work are important and necessary for me to build a sustainable career.
QI PROJECT
Name: Rebecca Sharar, MD
Title: Running after from the afternoon energy slump

Problem:
I have always been a very active person and regular exercise is a critical component of my mental health and wellbeing. But as life gets busy it’s easy to forego physical activity. As intern year progressed I found myself giving up on workouts in the name of patient care. I also found myself more fatigued. I couldn’t help but wonder if regular exercise would actually help increase my energy during the day.

Aim statement:
To improve my physical energy through exercise I will complete at least four activities recorded on Strava per week and at the end of every day I will rate how “full” my battery was that day on a scale from 0-100%. I will compare average energy levels for weeks that I achieve my goal compared to weeks that I do not (>4 workouts per week).

Measures to improvement:
Personal perception of energy level measured daily during the afternoon, on a scale of 0-100%, with 0% being a dead (low energy) battery and 100% being a fully charged (high energy) battery. Process measures include the percent of weeks that I achieve my goal (>4 workouts per week) and what percent of days I record my energy level.

Process of gathering information:
I already tracked nearly all of my workouts on Strava prior to the intervention. These workouts automatically upload from my GPS watch after the activity is complete. The goal was to measure my energy level every day at some point during the afternoon (my typical time of slumping energy) but in reality I often forgot to do this. Information gathering was way-layed by a busy afternoon at work, the chaos of moving between Missoula and a rural rotation, and then took another hit when I came down with COVID during my data collection period. I ultimately ended up with sporadic data points over two months (late January to early March 2022).

Analysis and interpretation:
I ended up collecting fewer data than anticipated, resulting in a small sample size and increasing the chance of error. Over the 8 weeks I collected data, I only collected 31 daily energy assessments (55% of days). There was an entire week when I did not collect a single energy assessment. 5 out of 8 (63%) of the weeks I completed my goal of ≥4 workouts per week.

I averaged my energy level each week and compared my average energy level on weeks I achieved my workout goal (<4 workouts per week) versus weeks I did not achieve my workout goal (≥4 workouts per week).

Strategies for change:
Regular exercise (>4 workouts per week) was attempted but inconsistently implemented as it was not always realistic when I was busy.
Effects of change:

Working out consistently (>4 workouts per week) did correlate with higher energy levels, although this was not statistically significant (59% charged, standard deviation 5.4% vs 68% charged, 9.0% standard deviation).

I identified a few confounding variables that complicate my analysis. These include COVID infection and the intensity of the clinical rotation I was on. My energy levels plummeted after contracting COVID, even as I got back to my regular workouts. This is a well-known symptom and complication of COVID and confounds the relationship I was studying. Additionally, certain rotations such as inpatient medicine and OB result in longer work hours and left me more exhausted, even when I hit my goal number of weekly workouts.

Lessons learned:

I learned that daily data collection is challenging, unless there is a hard stop in your day that forces you to collect it. A more realistic process would have been less frequent measures and setting up a reminder system such as a calendar event with an alarm to ensure that I didn’t forget.

Between sporadic data collection and confounding variables my data analysis had its flaws but overall I took away that regular exercise did seem to correlate with feeling charged and energetic, although this was not statistically significant and the relationship was potentially confounded by numerous factors. In the end, life gets busy, and even the best of habits can’t always overcome physically and emotionally long days. My takeaway? Just keep running, it probably doesn’t hurt.
QI PROJECT

Name: Cecilia M. Weeks, MD
Title: Routine Journaling on Resiliency and Sleep

Aim: The goal of this quality improvement project was to further explore the benefits of journaling on resiliency and sleep quality. When deciding on topics for a wellness quality improvement activity, I was hoping to increase additional tools in my toolbox for wellness activities to strengthen resiliency and also promote restful sleep, which also can in return strengthen resiliency.

Goal: Journal for ten minutes three of seven nights per week for one month.

Key Measures for Improvement:

Resiliency: To measure resiliency in a weekly measure, I decided to use a questionnaire. I chose the Brief Resilient Coping Scale (BRCS), which is a simple four question five-point Likert scale that specifically asks about ability to look for creative ways to alter difficult situations, evaluate locus of control, positivity, etc.¹

Sleep Quality/Quantity: To measure sleep quality and quantity, I decided to log time slept during the week for each night and then complete a rating of sleep quality that night on a scale of 1-10.

Outcomes

I did not meet my QI project goal to journal three to seven nights per week for one month. Although I thought this goal was manageable, I was only able to journal for a few nights but had difficulty in maintaining the routine.

Challenges/Lessons Learned:

Timing of Journaling/Activation Energy: As part of promoting restful sleep, my goal was to journal at night immediately prior to sleeping. Due to exhaustion from the day, I found it difficult to find the energy/motivation to complete journaling every day. In terms of forming a new habit, it’s often helpful to pair the new activity with another habit/daily activity. I think it may be more beneficial to journal at another time of the day (drinking coffee in the morning, at the dog park, etc).

Types of Journaling: I think my knowledge of types of journaling was limited when initially starting this QI project. I tried to complete gratitude journaling and reflections from the day. I think it may be more beneficial to reflect on the different types of journaling to explore different styles of journaling for inspiration.

Wellness toolbox: As discussed previously, I had hoped to increase tools in my toolbox for wellness activities to strengthen resiliency and also promote restful sleep. I thought journaling may be a helpful addition. I think I already use regular exercise, nutrition, social activity to maintain my wellness goals, and I may have to consider that I usually prioritize these activities over other wellness activities, such as journaling.

References:

Faculty Scholarly Activity
FMRWM SCHOLARLY WORK  FACULTY

Name:  Darin Bell, MD

CONFERENCE PRESENTATIONS

**Project Title**: MAFP Presentation: Findings from a Montana Scope of Practice Survey

**Details of the project**: Elizabeth Paddock and I, Working with RHEDI, conducted a scope of practice survey of Rural Montana physicians, focusing on services that may be difficult to obtain. This was an effort to determine how accessible these services were, and if there were curricular changes or offerings our program should consider to help make them more accessible.

**Outcome**: Surveys completed. Preliminary review of results completed. Working on dissemination – one presentation through MAFP in Jan 2022.

**Reflections**: Our survey was not as robust/specific as it probably should have been. Difficult to determine true accessibility in many instances due to a lack of clarity as to what was meant by availability, and what was considered the size and area of the community from responses. Could build on these early findings with more specific information. Will also be looking to identify other avenues for dissemination of the information we collected.

**Project Title**: RTT Collaborative Presentation: Rural Program Directors Development

**Details of the project**: The RTT Collaborative offers development programs for rural residency program directors and leadership, including scholarships for NIPDD and through Rural Program Directors University, a year-long facilitated learning community. This presentation was on the results of those two programs and plans moving forward.

**Outcome**: Both programs have been a success and will continue for the next year.

**Reflections**: Evaluations and feedback from the program participants are still bending. New processes will be adjusted based on the feedback received.

OTHER PRESENTATIONS

**Project Title**: Journal Club: Does Depression Screening in Primary Care Improve Outcomes?

**Details of the project**: Journal Club Presentation.

**Outcome**: Completed

**Reflections**: Good primary care topic.

CHAPTER/TEXTBOOK

**Project Title**: Where You Live Matters: Bringing Interprofessional Education to the Rural Healthcare Workforce; Chapter 23; Rural Nursing: Concepts, Theory, and Practice, 6th Ed

**Details of the project**: Interprofessional Collaborative Practice is a key part of maximizing rural patient care. This was collaborative effort with nursing faculty from MSU, to provide information on developing IPE educational opportunities in rural training environments.

**Outcome**: Published by Springer Publishing, September 16, 2021
Reflections: Coordination co-writing a book chapter talks a significant amount of time and effort and should be started earlier and with more time blocked than anticipated.

GRANT LEADERSHIP (PI/ Co-PI or site director)

Project Title: PI on a HRSA Primary Care Training and Enhancement – Residency Training in Primary Care grant: Expanding Rural Access and Training

Details of the project: HRSA Grant to improve training to better prepare residents to practice in rural areas after graduation. Began July 2020. 5-year grant implementing multiple rural training projects for FMRWM and its rural training partners: Rural Intensive Track; Rural Continuity Clinic; partnerships with IHS/Tribal Health organizations and development of cultural humility curriculum; rural faculty development; data collection and analysis to determine what (if anything) we do in residency training that improves preparation and likelihood of successful rural practice after graduation.

Outcome: Project ongoing. Completing year two of the 5-year grant currently.

Reflections: Many of the programs and processes have now been developed. We continue to develop new programs and refine those in place. Data collection has begun this year with ongoing plans to collect and analyze to determine program success.

Project Title: PI on a MT Healthcare Foundation Grant: Improving Access, Training, and Recruitment for American Indian Healthcare

Details of the project: Montana Healthcare Foundation Grant to improve training for residents to better serve Tribal populations after graduation; Began July 2019. 2 year grant with a one year extension targeting partnerships with Tribal Health of the Confederated Salish and Kootenai Tribes; and development of a cultural humility curriculum for residents and rural faculty.

Outcome: Project ongoing. Completing year three, and working with the foundation to modify ongoing projects.

Reflections: The pandemic and working with multiple healthcare institutions has proven challenging to move some projects forward. Working on ways to utilize remaining grant funds on valuable projects.

LEADERSHIP OR PEER REVIEW ROLE

Project Title: RTT Collaborative: Associate Director

Details of the project: The RTT Collaborative is a national organization focused on developing, assisting, and encouraging rural health care training.

Outcome:

Reflections:

Project Title: Simulation in Motion Montana: Executive Board Vice Chair

Details of the project: Simulation in Motion Montana is a non-profit organization that provides simulation training for healthcare throughout the state through the use of high-fidelity simulators and trucks that are set up as mock ambulances and ER bays.

Outcome:
Reflections:

FORMAL COURSES

Project Title: FMRWM/UMHM Rural Retreat

Details of the project: The Rural Retreat is a 2-day conference designed to bring together regional rural medical and healthcare educators. It provides an annual opportunity for educators to learn from each other and from experts on rural health care and education.

Outcome: Planning the 10th annual event this year.

Reflections: The pandemic reduced participation with virtual format, but we are hoping to bring it back live this fall.
Name: Ellen Bluett, PhD

PEER REVIEWED PUBLICATIONS


**Details of the project**: This study examines the impact our initial pilot of integrated behavioral health had on our patient’s engagement/utilization of behavioral health services.

**Outcome**: In submission

**Reflections**: Integrated Behavioral Health (IBH) has had an enormous impact on our clinic. Our patients our now able to receive a real-time assessment and intervention when they meet with their PCP. Measuring the impact of this program was/is challenging as clinical work flows do not always translate into quantitative outcomes.

CONFERENCE PRESENTATIONS


**Details of the project**: Presented for the state wide Integrated Behavioral Health Summit in September 2022. The goal of this talk was to provide a broad overview of the evidenced-based treatment FACT to behavioral health clinicians across the state.

**Outcome**: Great attendance and growing interest in this treatment modality.

**Reflections**: I enjoy providing clinical trainings to clinicians across the state.

CONFERENCE PRESENTATIONS

**Project Title**: Bluett, E.J., Paddock, E., Greenberg, S. (2021, May). Two Birds One Stone: The development of a longitudinal QI curriculum that fosters resident engagement and well-being. Round table presentation at the Society of Teachers of Family Medicine, Virtually

**Details of the project**: We presented our QI curriculum at STFM this past year. We highlighted that this curriculum can be implemented in a busy residency program if appropriate time is allocated for the residents to work on their projects.

**Outcome**: There was significant interest in our curriculum and many attendees requested copies of our slides and curricular documents.

**Reflections**: Creating R1 wellness oriented QI projects is unique to our program. Our QI curriculum is now in its’ 3rd year and continues to go well.

CHAPTER/TEXTBOOK

Details of the project: ACT and anxiety and trauma related disorders continue to be my clinical area of expertise. I was approached by some of my colleagues to collaborate on this book chapter and gladly accepted the invitation.

Outcome: In press

Reflections: Writing is an important part of my identity as a clinical psychologist. It can be challenging to carve out time to get things into publication. I find that working on a team makes this process far more achievable.

GRANT LEADERSHIP (Site Director)

Project Title: Sequenced Treatment Effectiveness for Posttraumatic Stress

University of Washington Department of Psychiatry & Behavioral Sciences
Division of Population Health

Details of the project: I am in charge of the coordination and implementation of PCORI funded “Comparative Effectiveness PTSD Trial of Sequenced Pharmacotherapy and Psychotherapy in Primary Care” at our community health center. The primary aim of this study is to learn whether providers in primary care clinics should recommend medications or written exposure therapy to treat posttraumatic stress. In addition, for patients who do not respond to the first treatment, we want to determine what treatment providers should recommend next.

Outcome: Actively recruiting

Reflections: Running a treatment trial in a very busy FQHC is challenging. Recruitment is not top of mind for most providers. However, a large majority of our patients have experienced a trauma in their lifetime. We should continue to work hard to screen our patients for posttraumatic stress in efforts to provide the appropriate treatment and ultimately the best outcomes.

LEADERSHIP OR PEER REVIEW ROLE

Project Title: University of Washington ALACRITY Center- Community Board Member

Details of the project: UW ALACRITY center is an (NIMH-funded interdisciplinary team working to improve access to and use of evidence-based psychosocial interventions in non-traditional care settings. They host annual meetings for their board members to learn about works in progress and projects being designed. Board members offer insight into the feasibility of these projects in real-world settings.

Outcome: Continue to serve as a board member.

Reflections: This center is unique in the breadth of topics they fund and projects they support. There are some very creative and motivated researchers trying to improve evidenced based psychosocial interventions in health care.

LEADERSHIP OR PEER REVIEW ROLE

Project Title: University of Washington Practice Research Network (WPRN)

Details of the project: WPRN is an incredible resource/learning environment for WWAMI programs. I participate in monthly meetings reviewing submitted research proposals and providing reflections/feedback to the PIs.

Outcome: Will continue to sit on the committee.
Reflections: I find this to be a very valuable role in my continued pursuits to engage in research/scholarly work.

FORMAL COURSES (responsible for seminars, conference series or course coordination (program didactics are not considered formal courses))

Project Title: Integrated Medicine Elective

Details of the project: I am assisting Jeff Walden, MD on creating an integrative medicine elective at FMRWM. We plan to integrate the University of Arizona online curriculum as an elective over the course of 3 years for interested residents.

Outcome: Will begin July 2022

Reflections: There is a growing interest in integrative medicine (as seen in our recent wellness survey) and we will that creating opportunities to learn about whole health care is important for training well-rounded family physicians.

OTHER

Project Title: Psychedelic Assisted Therapy Certificate Program

Details of the project: I am currently completing a year-long training in psychedelic assisted therapies through the California Institute for Integral Studies- the first formal training center in the country. The goal of the certificate program is to acquire knowledge about the research being conducted on psychedelic medicines and train to be a therapist working in this domain

Outcome: In progress

Reflections: There is huge potential for psychedelic medicines in treating mental health conditions that have often failed other traditional forms of therapy. The research is particularly impressive for palliative medicine.

Project Title: Suicide Safe Care- BSQ

Details of the project: I completed a Suicide Safe Care Train the Trainer event in March 2022. Part of this training requires the trainees to complete 2 trainings in the first 6 months of their training. I completed a Faculty Development in April 2022. As part of this training, I am working with Dr. India King at the Boise Family Medicine Residency to create a BSQ for risk assessment and safety planning for our residents.

Outcome: In progress

Reflections: Suicide risk assessment and safety planning is a core skill that all family physicians should feel competent at completing.
Project Title: guest lecture, “Precocious Puberty,” University of Wisconsin-Madison Family Medicine Residency Program.

Details of the project: Invited to present to residents and faculty at my former training program, particularly as presentations can now be virtual.

Outcome: could have had more audience participation which is always a challenge during an early AM didactic conference. Overall good feedback and seemed well-received.

Reflections: virtual conferencing can allow for greater flexibility in medical education and build bridges across programs, although the format presents its own challenges with learner engagement. Always fun to reconnect with former teachers and colleagues.

Project Title: FMR/PHC OB Committee

Details of the project: Multidisciplinary committee formed to focus on improving both prenatal care processes at PHC and resident education in prenatal care.

Outcome: Have worked on a variety of initiatives including transitioning and refining new RN care coordinator roles for prenatal care and pediatrics, schedule and patient assignment changes to increase both patient continuity with their assigned resident and improve patient access, developing new patient information materials, and transitioning to web-based patient application that integrates with the EMR. Further initiatives to include a QI/chart review process and greater integration of OB-IMAT and IMAT programs.

Reflections: has been a great collaborative to clarify and “move the needle” on program goals and increase integration and communication between FMRWM and PHC.

Project Title: FMOB High-risk rounds

Details of the project: Reinstated a venue post-Covid for FMOB attendings, residents, and MFM physicians to discuss clinical cases, both to increase awareness of plans and concerns for cross-coverage and collaborate on care, and for continuing resident and physician education. Developed case tracking tool to ease collaboration/follow-up.

Outcome: Helpful forum for both learning and to share relevant information across the group and across disciples, generally appreciated by those in attendance.

Reflections: Will continue to evaluate whether the time/format is ideal, particularly to increase resident participation.
Name: Tim Caramore, MD, MS

Project Title: Presentation, Montana Academy of Family Physicians Winter Conference

Details of the project: “Evidence Update – 10 Articles to Know from 2020-2021.” Involved review of titles from a variety of sources like Daily POEMs, DynaMed/McMaster Evidence Alerts and compilation of a list of articles I thought would be high impact and could immediately change practice.

Outcome: Completed presentation, enjoyed the experience.

Reflections: this continues to be a great opportunity to share significant developments from the medical literature with colleagues and learners. It was fun to catch up on things outside the world of COVID.

Project Title: FMRWM Journal Club

Details of the project: I oversee the every-other-week journal club experience with St. Pat’s. This year’s developments included Dr. Matheny leading efforts to secure grant funding from ABFM to integrate the new National Journal Club.

Outcome: I’m so impressed with how far the culture of journal club has come. Papers are consistently high quality and relevant, presenters are well prepared. Continued improvement as a learning experience.

Reflections: Next academic year we will move to adopt more National Journal Club titles as that library has expanded substantially this year.
**FMRWM SCHOLARLY WORK**

**Name:** Rob Cruikshank, MD

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**Project Title:** Well Child Care Theme Day

**Details of the project:** Planned and coordinated an afternoon of didactic learning activities for the FMRWM residents.

**Outcome:** We had three interactive presentations - Team trivia Jenga competition; Show and Tell - residents teaching each other about various topics; and group discussions of several Yale Cases.

**Reflections:** The interactive and fun format was well received and educational.

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**Project Title:** Ophthalmology Procedure Day

**Details of the project:** I teamed up with Jeff Walden to lead an afternoon didactic on Ophthalmology Procedures.

**Outcome:** I presented on taking a history for eye complaints and lead a workshop of the evaluation and management of corneal abrasions.

**Reflections:** I should have planned to make the history taking didactic more interactive. The corneal abrasion workshop was well received, but the exam room got overheated quickly with about 8-10 people in it. If we could find a larger space or have smaller groups it would have been more comfortable.

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**Project Title:** Wilderness Medicine education at the Fall and Winter Wilderness weekends

**Details of the project:** I coordinated Wilderness Medicine didactic presentations and workshops/activities.

**Outcome:** Residents prepared presentations of topics of their choosing. I presented on winter survival tips. Zach Carlson did a very nice Med Wars that involved finding an injured hiker, splinting a leg fracture, and carrying the patient. Todd Glue taught on reading a snow pack and beacon search and rescue skills.

**Reflections:** A mix of didactic teaching and active workshops/scenarios are best.

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**Project Title:** IMAT team member

**Details of the project:** These committees meet regularly to discuss the care of our patients with substance use disorder.

**Outcome:** IMAT team meets monthly for inter-professional discussions and patient care planning.

**Reflections:** Patients get better care when multiple providers and different disciplines take part in care planning discussions.
FMRWM SCHOLARLY WORK

Name: Samantha Greenberg, MD

OTHER PRESENTATIONS (ground rounds, materials developed)

Project Title: Office Based Early Pregnancy Loss Management, Montana Obstetrics and Maternal Support (MOMS) Echo, Virtual, Billings Clinic 1/26/22

Details of the project: The MOMS Echo is a grant-funded virtual learning collaborative through the Billings Clinic focusing on connecting and educating perinatal care workers throughout the state. The goal of the collaborative is to improve perinatal care and outcomes for birthing patients in our state, a mission I strongly align with. I have been involved with MOMs since it started in 2020. Patient centered, evidence based, and accessible miscarriage management has been a long-time professional project of mine, as it is at the intersection of two of my medical passions, abortion care and obstetrical care. In the past I had presented this topic at Logan Health Grand Rounds, and with the MOMS project had the opportunity to reach a broader audience. The presentation focused on research supporting integration of full spectrum miscarriage management into the outpatient setting as a patient centered, high quality and financially viable care model.

Outcome: The presentation was well received by the group.

Reflections: Miscarriage management often gets lumped in with or siloed with abortion work. By presenting on this topic to obstetrics providers I hope to contribute to the normalization of comprehensive miscarriage management in obstetrics and family medicine I hope to find other opportunities to continue to present on this topic. However, talking about a topic does not always translate into action. I hope that by continued work with the MOMS project I can become a resource to other providers and clinics in our state for integrating comprehensive miscarriage management.

Project Title: Non-pharmacologic Labor Pain Management and Physiologic Birth, Montana Obstetrics and Maternal Support (MOMS) Echo, Virtual, Billings Clinic 8/10/22

Details of the project: My obstetrics training in residency and fellowship was deeply rooted in a midwifery model of care with a strong focus on patient centered birth and birth support, even for birthing patient with medical complexity. In birth we often sort patient experiences into two buckets- “natural birth” without intervention or pain management or “medicalized” birth. However, in reality birth experience is a continuum where patients and providers may opt in to some or all interventions as desired by a patient or medically necessary. The goal of this talk was to discuss what non-pharmacologic pain management options exist, the physiologic underpinnings behind their efficacy and how we can offer interventions while still centering a physiologic birth process.

Outcome: Presentation was well received.

Reflections: While this presentation shared evidence/physiologic basis for labor management, it also largely reflects my personal perspective on birth. I am lucky to work at a hospital and with other obstetrics providers and nurses with similar approaches to birth. I strive to continue to learn how to best teach these techniques to residents when we work on labor and delivery together.

LEADERSHIP OR PEER REVIEW ROLE
**Project Title:** Co-Chair, Perinatal Safety and Quality Committee, Logan Health

**Details of the project:** Similar to my work with the MOMS project, work with the PNSQC is an avenue to work locally on improved quality and safety of obstetrical care in our hospital environment. I have been involved with this committee since 2019, first as a general member and then as the chair and co-chair for the past 2 years. We have had some big successes, implementing hypertension protocols, improving EMR documentation. With provider turnover we have gone through several transitions, and now have reorganized to be a small, multidisciplinary group focused on data gathering, reviewing unit safety data, protocol review, and a space for vetting and implementing quality projects, especially projects from the state Perinatal Quality Collaborative.

**Reflections:** Prior to me taking on this role, the group was undergoing transition of key stakeholders. This plus a hiatus of my participation while on maternity leave and competing time commitments has slowed us down over the last 9 months or so. I have had previous experience in working with coalitions through transition and have had the opportunity to do formal learning on coalition leadership. This group has given me an opportunity to use this skill set in an area I feel passionate about. We have had decreasing participation from other providers which has made it more difficult to organize, we are continuing to reassess how we can best fulfill this role.
CONFERENCE PRESENTATIONS (abstracts/posters/presentations at international, national, state or regional meeting).

Project Title: Deprescribing: When less is more

Details of the project: Presentation at FMC Jan 2022

Project Title: WWAMI Pharmacist Collaborative Meeting

Details of the project: Small group facilitator – Roundtable discussion on working with learners from multiple health care programs

FORMAL COURSES (responsible for seminars, conference series or course coordination (program didactics are not considered formal courses))

Project Title: FMMC elective

Details of the project: Offered each semester for health care professional students

Project Title: UM IPE Faculty Development Workshop Jan 2022

Details of the project: co-developed and co-lead an IPE training workshop for UM and MSU faculty. We received sponsorship through MTGEC and COH to support speakers from UW.

Project Title: WWAMI FMRN Pharmacist Collaborative Meeting May 2022

Details of the project: Assisted in developing a regional 1 day training for regional FMR pharmacist.
FMRWM SCHOLARLY WORK

Name: Amy Matheny, MD

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PUBLICATIONS

Project Title: Editor, Montana Family Physician

Details of the project: I have served as the editor of this quarterly publication of the Montana Academy of Family Physicians since 2019. The magazine provides quarterly updates on MAFP chapter and Board of Director activities, advocacy work, clinical updates, medical education community updates, and other topics relevant to the practice of Family Medicine in Montana.

Outcome: This has been a very successful new endeavor for the MAFP to connect with members, share important information, and show the value of the state chapter in the lives of family physicians and trainees.

Reflections: I have absolutely loved this project and helping to contribute to it. I have received some very positive feedback from members of the MAFP about how it is valued and connecting with members.

CONFERENCE PRESENTATIONS

1) Project Title: Co-Presenter (with Dr. Nerissa Koehn), “Update on Cervical Cancer Screening Guidelines”, 2022 MAFP Big Mountain Medical Conference

2) Project Title: Presenter, “Guideline Update Potpourri”, 2022 MAFP Big Mountain Medical Conference

Details of the projects: Both presentations were contributions to the CME program for this annual event. We used some creative interactive formats to engage attendees throughout the presentations.

Outcomes: Both sessions were successful with very positive feedback from attendees per the evaluations that were forwarded to us. Attendees particularly enjoyed the interactive format.

Reflections: I enjoy this annual CME meeting, and this is the fourth year I have participated as a presenter at the conference. It has been fun to consider creative ways to engage folks at a CME meeting based on successful methods we have used in residency didactics.

GRANT LEADERSHIP

1) Project Title: Co-Primary Investigator for the HRSA PCTE-RTPC Grant (Primary Care Training Enhancement – Resident Training in Primary Care) (7/2020 to present)

Details of the project: This is a five-year, 2.5 million dollar federal grant funding a variety of initiatives to enhance and expand training that supports rural as well as American Indian and Alaska Native (AI/AN) populations, including research into curricular impacts on future practice patterns.

Outcome: This project remains an exciting work in progress to continue to grow our rural curriculum across many domains. One new addition this year was the ability to incorporate expansion of our POCUS equipment and curriculum as part of this initiative. We have also been engaging with various groups, including the AAMC, regarding AI/AN healthcare workforce development activities across our region.
**Reflections:** This has been an exciting project, both for the growth we are seeing in our program offerings and curriculum for residents, as well as the ability to partner with colleagues at the University of Montana regarding research around this project.

2) **Project Title:** Primary Investigator for various grants related to the work of the Western Montana Area Health Education Center, MT-AHEC (7/2021 to present).

**Details of the project:** In my role as WMT-AHEC director, I serve as the PI on our core AHEC grant as well as various other projects within our office, including a simulation grant for health professional education programs at UM and within the region, as well as a CDC grants subaward through DPHHS working on a regional health equity taskforce and capacity-building.

**Outcome:** These are ongoing works in progress that encompass various aspects of our regional AHEC office workplan. As a part-time director with the center, I provide support and guidance for staff working within these various projects and represent our office in various venues across the state that interface with this work.

**Reflections:** This has been an exciting addition to my work that supports health professional recruitment and education in our region beyond just the Graduate Medical Education Realm.

**LEADERSHIP OR PEER REVIEW ROLE**

1) **Project Title:** Peer Reviewer, *FP Essentials™*

**Details of the project:** Served as a content expert peer reviewer for a manuscript on liver disease through the AAFP’s *FP Essentials™* publication. Edition #511, “Liver Disease” was published in December 2021. This is a monthly, peer-reviewed subscription publication of the American Academy of Family Physicians.

**Outcome:** complete

**Reflections:** This was an exciting opportunity to peer-review a publication around an area of clinical expertise regarding Hepatitis C care. It was gratifying to have an opportunity to put that clinical skill set to use in a scholarly way.

2) **Project Title:** Board Member, Montana Academy of Family Physicians Board of Directors

**Details of the project:** I have served as a member of the MAFP board of directors since 2013. I have previously served in the capacity of President in 2019 and continue to serve on the board.

**Outcome:** This work continues to evolve and grow over time.

**Reflections:** I have always enjoyed engagement with organized family medicine, particularly the AAFP and local state chapters. The MAFP and its members include an incredibly dedicated collection of family physicians. I enjoy continuing to support the state chapter in meeting the needs of members, patients, and trainees.

3) **Project Title:** Member, Montana Viral Hepatitis Advisory Council, January 2022 to present

**Details of the project:** I was invited to participate in this stakeholder advisory council through the Montana Department of Health and Human Services as the state develops plans to improve Hepatitis C screening, engagement in care, and treatment.
**Outcome:** This is just getting started and remains a work in progress.

**Reflections:** I have only attended one meeting thus far, but I look forward to being a voice for Family Medicine and primary care in this venue. Hepatitis C care is best delivered in a primary care model for most patients, and I hope to bring this perspective with my practice and teaching experience to the council.

**FORMAL COURSES/OTHER**

**Project Title:** Faculty Lead, ABFM National Journal Club Pilot, 2021/2022 Academic Year

**Details of the project:** Wrote a successful proposal to be one of the resident programs to be included in the inaugural pilot of the American Board of Family Medicine National Journal Club. Managed a small grant related to this project, received IRB approval for evaluation program, and received AAFP CME designation for our FMRWM Journal Club series. This series is now available for CME for community members and is available to claim on the AAFP CME website. Developed a curriculum plan to integrate the ABFM NJC content in didactics, journal club, and other teaching venues, including MAFP.

**Outcome:** This remains a work in progress, although we have had some good success starting to integrate use of these articles in the FMRWM journal club and didactics.

**Reflections:** The ABFM National Journal Club project has been a fun and exciting way to engage FMRWM with a national initiative to further improve evidence-based education and care. We are helping to establish ourselves among leading programs in the nation using this resource in resident training.
PEER REVIEWED PUBLICATIONS


Details of the project: Reviewed the literature for recent studies on this topic. Then edited and updated the above article.

Reflections: I enjoyed this editing project and hope/plan to edit more EE+ topics. Hydatidiform mole is a somewhat more obscure topic; I would like to review/edit a more common topic in the future. Work like this is always a good way to grow medical knowledge and ensure I am practicing based on the best evidence.

CONFERENCE PRESENTATIONS


-Monthly Morning CME; Sauk Prairie Hospital, Sauk Prairie Wi (virtual). November 2021.

Details of the project: Two presentations at the Montana Academy of Family Physicians. The first was an overview of recent antibiotic prescribing changes addressing duration of treatment, antibiotic choice etc. The second was a presentation reviewing data from a survey Dr Darin Bell and I collected around scope of practice in Montana including gyn procedures, hep C/HIV, OB and iMat.

The third was a remote presentation over zoom for primary care clinicians working for a small hospital system in Sauk Prairie Wisconsin. This was an updated presentation on osteoporosis that I have given previously.

Reflections: Like scholarly written work giving presentations is a nice way to update and solidify my knowledge on a topic.

The MAFP presentation reviewing the scope of practice survey was helpful to get Dr Bell and I thinking about and working on our project. The Scope of practice survey remains a work in progress.

LEADERSHIP OR PEER REVIEW ROLE

-“Does acupuncture effectively treat tension headache?”. Reviewed for Evidenced Based Practice (April 2022).

-“Does prenatal exercise decrease the incidence of gestational hypertension?”. Evidenced Based Practice. Accepted for publication (December 2021).
- "Does an outpatient follow-up appointment within 14 days of discharge from the hospital reduce readmission rates?"
Evidenced Based Practice. Accepted for publication (October 2021).

**Details of the project:** Roughly 2-3 x per year I will do a peer review of a FPIN "Helpdesk Answer". Not all go on to publication. I like reviewing these because it makes me think harder about scientific writing and how to translate and present data into a helpful format.

**Reflections:** Editing for FPIN is something I plan to continue doing. I would like to write an HDA or other FPIN EBM review in the near future.

**OTHER**

-WPRN Survey Research Panel

**Details of the project:** As a member of the panel I receive surveys from researchers who are interested in feedback from clinicians in community-based primary care settings in the WWAMI region.

**Reflections:** This is a really nice and very easy means to participate in academic research from a community based clinic.
FMRWM SCHOLARLY WORK

Name: Jennifer Robohm, PhD

PUBLICATIONS

**Project Title:** Climate Change and Health in the Family Medicine Residency Curriculum

**Details of the project:** Write-up of research study involving WWAMI FMRN conducted for my MPH Capstone project and thesis.

**Outcome:** Will defend Capstone project on May 9th!

**Reflections:** Excited to convene working group of interested WWAMI folks to develop climate change-related curriculum and recommendations for FMRN Program Directors. Plan to publish findings, with Rob Stenger from FMRWM and Grace Shih from WWAMI.

CONFERENCE PRESENTATIONS

**Project Title:** The Why and How of Training Public and Environmental Health Professionals to Prepare Montana’s Communities for Climate Change.

**Details of the project:** Presentation for MPHA/MEHA Annual Conference in Helena on April 13, 2022.

**Outcome:** Participants expressed the desire for a central clearinghouse of climate-related information and tools, and a way to touch base regularly (monthly?) with other public health professionals hoping to plan for climate change in their communities.

**Reflections:** Important first step. Brought feedback back to Montana Health Professionals for a Healthy Climate, will try to post materials on the website and institute monthly Zoom calls.

OTHER PRESENTATIONS

**Project Title:**


Robohm, J. (2021, October 7). *Using an IPE “Simulation Day” to Teach about the Physical and Mental Health Impacts of Climate Change*. Virtual presentation for WWAMI Behavioral Scientists’ Annual Meeting.

Robohm, J. (2021, October 4). *Mental Health and Climate Change: A Tale of 3 Crises*. Presentation for “Introduction to Climate Change” course at the University of Montana in Missoula, MT.

Robohm, J. (2021, September 2). *Preparing Physicians to Tackle Climate Change*. Grand Rounds presentation (virtual) for internal medicine and family medicine residents from the Trios Health residency programs in Kennewick, WA.
Blackburn, H. & Robohm, J. (2021, June 17). *Climate Change and Health Careers*. Presentation to high schoolers at MedStart summer camp for students interested in health careers at the University of Montana in Missoula, MT.

**Details of the project:** opportunities to speak about climate change and its physical/mental health impacts with a wide variety of audiences.

**Outcome:** We continue to get the word out!

**Reflections:** Virtual presentations have made it easier to reach more audiences. More and more individuals are recognizing (experiencing?) the mental health impacts of climate change, in particular.

**GRANT LEADERSHIP (PI)**

**Details of the project:** Awarded small grant ($3,500) as a JHU student to convene a Community Advisory Board (CAB) and develop a climate and health-related educational opportunity with the Confederated Kootenai and Salish Tribes

**Outcome:** Held an Earth Day event on the Salish Kootenai College (SKC) campus with CAB members.

**Reflections:** Tremendous learning opportunity, particularly with regards to intercultural collaborations and indigenous traditions, knowledge, and perspectives. I learned more during the CAB planning process than the event itself.

**GRANT LEADERSHIP (Co-PI)**

**Project Title:** Planning Grant ($25,000) to Develop an Online Certificate Program & CME Opportunities in “Climate and Health"

**Details of the project:**

**Outcome:** Conducted needs assessment, offered course for undergraduates and health professions students on Climate Change and Human Health in Montana, and developed a free, on-line webinar series by the same name for practicing health professionals.

**Reflections:** A lot of work, hard to sustain without grant funding and dedicated time.

**LEADERSHIP OR PEER REVIEW ROLE**

**Project Title:** *Montana Health Professionals for a Healthy Climate*

**Details of the project:** Board Member for MtHPHC, a non-profit dedicated to advocacy and education related to climate change and health

**Outcome:** Proud to be affiliated with other health professionals hoping to make a difference

**Reflections:** One outcome of our UM course was a student affiliate group. I would love to engage more residents in organization-related activities.
FORMAL COURSES

Project Title: Climate Change and Human Health in Montana

Details of the project: developed a free, on-line webinar series for practicing Montana health professionals last summer: http://health.umt.edu/mphtc/trainings/climate-change.php.

Outcome: We’ve had over 200 health professionals enroll to date from a variety of fields.

Reflections: Good way (asynchronous) to provide climate-related education for busy health professionals.

OTHER

Project Title: Climate Resources for Health Education (CRHE)

Details of the project: Collaboration with Global Consortium of Climate and Health Education and others to develop climate-related curricular materials for health professions training.

Outcome: I’ve worked as a faculty advisor for both medical students and residents developing materials.

Reflections: Clever way to build a repository of curricular materials without over-taxing busy people; the collaboration involves hundreds of volunteers from around the country.

OTHER

Project Title: Climate Change Efforts in Missoula County

Details of the project: Involvement in three local Missoula County working groups: “Wildfire Smoke, Heat, and Health,” “Climate Change and Mental Health,” and “Disaster Mental Health”

Outcome: Works in progress.

Reflections: Excited to contribute to local community efforts to mitigate the physical/mental health impacts of climate change. Also hope to work with PHC/FMRWM to (a) reduce our carbon footprint, (b) identify at-risk patients who would benefit from education, anticipatory guidance, and resources, and (c) possibly engage residents in disaster and emergency planning efforts.
CONFERENCE PRESENTATIONS

The Faculty Lift: Reflections on Balancing Faculty Workload. Presentation to the WWAMI Family Medicine Residency Network Faculty Development Fellows. January 2022.


LEADERSHIP OR PEER REVIEW ROLE

Project Title: Physician Member, Missoula City-County Board of Health

Details of the project: Ongoing leadership position on our county board of health. I am the only physician member of the board. This is a position appointed by the board.

Outcome: The last year has been challenging as we navigated peak COVID in Missoula during the fall and winter of 2021. The board and in particular the COVID subcommittee was highly involved in reviewing local data, deciding on mitigation measures and advising the department on policy.

Reflections: Public health has much more community support in Missoula county than elsewhere in the state.

Project Title: Vice Chair, Montana Graduate Medical Education Council

Details of the project: This is a board of all the residencies, teaching hospitals and other parties in the state interested in supporting and promoting GME. One major activity of the council this past year was planning a GME summit which took place in Helena in the spring of 2022. We will also be hosting the WWAMI regional GME summit in the fall of 2022.

Outcome: The GME council has set an ambitious goal of doubling the number of GME slots in the state in the next 5 years. It will be interesting to see if the state can meet this goal.

Reflections: Beyond a few engaged parties and the residency programs themselves, interest in and knowledge of the value of GME programs to the state’s future workforce remains pretty low in MT. Montana remains in the bottom handful of states (currently 48/50) in residents per capita.
FMRWM SCHOLARLY WORK

Name: Jeff Walden, MD

PUBLICATIONS:

Project Title: Environmental Medicine: Saving People and Wildlife

Details of the project: Follow-up from prior grant-led study on environmental, human, and wildlife health in Uganda

Outcome: Publication in Wilderness Medicine Magazine

Reflections: Plan is to create another article (Part 2) to place in further context

OTHER PRESENTATIONS

Project Title: All-Staff Presentation on Wellness 101

Details of the project: Organized entire afternoon, led clinic staff through foundations of wellness. Successful project with plans to incorporate further wellness activities within the clinic

FORMAL COURSES

Project Title:

1. Sports Medicine rotation
2. Integrative Medicine curriculum
3. POCUS 2 week elective

Details of the project:

1. Sports Medicine – complete revamping of the curriculum, setting up specific rotation here in Missoula
2. Integrative Med curriculum – still in planning stages of introducing the Integrative Medicine in Residency (IMR) Program from University of Arizona here in Missoula
3. POCUS 2 week elective – developing 2 week elective for point of care ultrasound in conjunction with Butterfly POCUS app

OTHER

Project Title: Refugee Health curriculum – coordinating regular, monthly meetings with newly formed refugee Team to more fully incorporate learners, regular review of CDC updates, and ongoing process improvement for refugees in our clinic.
CONFERENCE PRESENTATIONS

**Project Title:** Getting Beyond “Are you sexually active?”: Tools for effective discussions about Adolescent Sexuality

**Details of the project:** Presented at the MAFP Big Mountain Medical Conference in January 2022. Purpose of the project was to provide providers with effective tools for collecting an adolescent sexual history and performing counseling on some key topics. The idea for this topic came from my own desire to have a more developed skillset in this area.

**Outcome:** Successful presentation with very positive feedback from attendants of the conference.

**Reflections:** Will also utilize this presentation for a didactic session for the residents. A corollary topic could delve more into counseling.

OTHER

**Project Title:** Improving Immunization Rates in Missoula/Montana

**Details of the project:** Collaborating with a vaccine specialist and epidemiologist at the University of Montana who is working to explore barriers to pediatric immunization acceptance/delivery in Missoula and Montana.

**Outcome:** Work in progress. Collaborated on survey sent to all providers who take care of children in Montana in 2022 which included questions about COVID vaccine hesitancy. Preliminary results are available. Data has been submitted to American Public Health Association 2022 meeting. Will be named as co-author on resulting publications/presentations.

**Reflections:** Interesting preliminary data about provider perceptions of barriers to immunization. Will continue to collaborate with the team at UM as we analyze this data and move forward with further study.

**Project Title:** Clinic Curriculum Development

**Details of the project:** Working to develop a more cohesive/explicit clinic curriculum to help residents to feel more confident, comfortable, successful, and happy in clinic. Will continue to do surveys to gauge progress in this project.

**Outcome:** Ongoing. Initial surveys from residents helpful in understanding barriers to providing care in the clinic. Have continued to work on IFM curricular pieces and am starting to incorporate other didactic sessions on clinic-related topics. Also, completed MA survey of residents/providers recently.

**Reflections:** Appreciate any resident input. We are already covering a lot of the content that makes up a “clinic curriculum” but I am hopeful that this work will make it feel more useful. Will be focusing my faculty development project on this curriculum as well.