ANNUAL REPORT
2019

The Department of Family Medicine
“Improving Health Through Partnership, Scholarship and Advocacy”
# 2019 Annual Report Table of Contents:

- Faculty overview: pages 4-6
- Faculty changes: pages 7-8
- Faculty retreat highlights: page 9
- Faculty awards: page 10
- Faculty Leadership: page 11
- Faculty Spotlight: page 12
- Residency Graduation 2019: pages 13-15
- Current Residents: pages 16-18
- Combined FM/Preventive Medicine program: pages 20-22
- Curriculum Highlights: pages 23-25
- Team Building, Fun, Wellness: pages 26-30
- Community Outreach: pages 31-33
- Global Health: pages 34-35
- Scholars Corner and STFM: pages 36-38
- Advocacy: page 39
- Resident Scholars’ Forum: pages 40-45
- Medical Student Education: pages 46-47
- Contact information: page 48
I'm proud to share the Department of Family Medicine 2019 Annual Report with you. With this report, we are now transitioning to a calendar year annual report instead of an academic year summary. Consequently, this report includes 18 months of events, dating back to July 2018, though with an emphasis on 2019.

Our department’s core mission and values span excellence in clinical care, education, and scholarship. In the past 18 months, we celebrated key accomplishments in many different areas despite weathering expected and unexpected changes. We said goodbye to cherished colleagues but also welcomed strong new additions to our team. Overall, the department, clinic, and residency are thriving.

We continue to attract high quality residents in both our categorical Family Medicine Residency and the 4-year combined Family Medicine-Preventive Medicine program in collaboration with Johns Hopkins Bloomberg School of Public Health. Our faculty and residents hold regional and national leadership positions and present their academic work at regional, national, and international conferences.

In addition to our residents, we are a core teaching site for dozens of other learners throughout the year: medical students, pharmacy students, social work students, community health education students, and more. This interdisciplinary environment enhances our department.

We conducted over 30,000 visits in the Family Health Center this year, and provided care to over 10,000 patients in the clinic, the hospital, nursing homes, and in their homes. We have maintained Level III Patient Centered Medical Home Status since 2011. Our care coordination team has helped address the most complex needs of our patients and reduced hospitalizations as well as ED visits in the process.

I am honored to lead this talented team and thank them for the hard work and dedication they demonstrate every day in support of our goals and those of MedStar Health.
FACULTY HIGHLIGHTS
FAMILY MEDICINE CORE FACULTY

The Heart of Our Department

Nancy Barr, MD
Medical Director, FHC/Med Student Ed

Jill Cotter, DO

Lauren Drake, MD
Faculty

Michael Dwyer, MD
Program Director, FM Residency

Uchenna Emeche, MD
Faculty, Associate Medical Director

Lee Fireman, MD
Core Pediatrics Faculty

Andrea Gauld, PharmD, BCACP, BCPS

Melly Goodell, MD
Chair, FM

Claudia Harding, LCSW-C, BCD, Dir of Behavior Science/Comm Med

Martha Johnson, MD
Faculty

Joyce King, MD
Director of Inpatient Training

Michael Niehoff, MD
Director of Musculoskeletal Programs

David Pierre, DO
Faculty

Kelly Ryan, DO
Faculty & Sports Medicine

Katherine Stolarz, DO
Faculty

Elise Worley, DO
Faculty

Sasha Mercer, MD
Core Pediatrics Faculty

David Pierre, DO
Faculty

Katherine Stolarz, DO
Faculty

Elise Worley, DO
Faculty
In the last year, family and career changes led to the departure of several faculty. Eli Moreno and her family moved to Utah, where she is now faculty with the University of Utah Department of Family Medicine.

Lauren Gordon is providing women’s and adolescent health care in the Baltimore County Department of Health and The Baltimore County school system.

Britt Gayle took a more research intensive position with the University of Maryland Institute of Human Virology.

Both Dr. Gordon and Dr. Gayle remain as part time/ per diem faculty with us. They each contribute unique talents to our team, but we are excited for them to continue to achieve professional and personal goals while they will remain a part of Family Medicine family!
Family Medicine Welcomes:

Jill Cotter, DO, completed her medical education at the University of New England College of Osteopathic Medicine and is a graduate of the Medstar Franklin Square Family Medicine Residency. She completed a fellowship in obstetrics at The University of Texas Austin. Following her fellowship training, she practiced full scope family medicine in rural areas of Texas while serving as faculty at Texas A&M University. Eager to get back to her east coast roots, Dr. Cotter joined the faculty at Medstar Franklin Square Family Medicine Residency in October 2019. Areas of interest include resident education, women’s health and obstetrics.

Sasha Mercer, MD is a General Pediatrician who trained at Children’s Hospital Kings Daughter in Norfolk, VA, for her pediatric residency. Currently, she is clinical faculty with Medstar Franklin Square Family Health Center with interests in pediatric development and adolescent health. She is ecstatic about teaching family medicine residents outpatient pediatric ambulatory clinical care.

David Pierre, DO is a board certified family physician who attended Philadelphia College of Osteopathic Medicine. He completed his residency at Christiana Care Health Services where his areas of clinical interest ranged from pediatrics to adult medicine, acute and chronic disease management, osteopathic manipulative medicine, public health, health and nutrition, and socioeconomic determinants of health.

Mozella Williams, MD MBA is a family physician who resides in Baltimore. She attended Morehouse School of Medicine where primary care was an early interest, and she completed her residency at the University of Maryland. She has enjoyed her career in both academics and an innovative, integrated non-profit primary care model, most recently as a part-time faculty member of MedStar Franklin Square Family Health Center in Baltimore, MD. She currently serves as the President of the Maryland Academy of Family Physicians.
The Department of Family Medicine faculty held their annual retreat on April 11, 2019. Our guest speaker, Dr. Susan Cheng, Ed.L.D., MPP presented on “Everyday Bias in the Workplace”. Her presentation was eye-opening and engaging.

Curriculum updates and goals were also presented by faculty for the FHC on themes and trends in women’s health, inpatient services, residency and LIC programs, research, journal club, geriatrics, home visits, didactics, behavioral health, dermatology, obstetrics, patient safety, and pediatrics.

Retreats provide an opportunity for extended time to focus on deeper curriculum and development issues, along with attention to well being and faculty cohesion.

The curriculum work was followed by a spirited team building event at McFadden Glass Studio.
At the 2019 Resident Graduation, the residents voted to honor Britt Gayle with the Faculty Teaching Award. His steady dedication and supportive teaching style were highly valued by residents.

Faculty peers voted to select Eli Moreno as the recipient of the 2019 Faculty Excellence Award, in acknowledgment of the passion and enthusiasm and high level of quality she brought to all aspects of her faculty role.

Uchenna Emeche represented the Family Health Center and accepted an award as the winner of the 2019 Family Practice Management Award for Practice Improvement. The award for the work of our Care Coordination team has provided around decreasing admissions, readmission, and total cost of care was presented at the STFM Conference on Practice & Quality Improvement on December 6, 2019, in Phoenix, AZ.

Congratulations to Nancy Barr, who was promoted to Associate Professor of Family Medicine on the Clinician Educator path in the Department of Family Medicine at Georgetown University School of Medicine.

Lauren Drake was selected for the Society of Teachers of Family Medicine 2019 Emerging Leaders Fellowship Program. This is a year-long program focused on developing leadership skills and mentoring as participants take on new challenges and responsibilities in their careers. The curriculum includes a longitudinal practicum project to apply fellowship skills. Dr. Drake’s practicum project is implementation of an opiate dependence treatment program at the Family Health Center.
FACULTY LEADERSHIP

We continue to support the involvement of our faculty in leadership roles outside of MedStar Health. This provides professional and faculty development opportunities for our faculty and role models leadership and service for our residents.

• **Michael Dwyer** continues to serve on the ABFM in-training Exam Committee and is an item writer for the certification exam for the ABFM.

• **Michael Niehoff** is a Specialty Society representative on the Board of Trustees for MedChi (Maryland State Medical Society). This is the statewide professional association for licensed physicians, whose mission is to serve as Maryland's foremost advocate and resource for physicians, their patients, and the public health. Dr. Niehoff is also a delegate for the Baltimore County Medical Association and on the Board of the Center for a Healthy Maryland, which is the philanthropic foundation associated with the state medical society.

• **Kelly Ryan** currently Co-Chairs the Education Committee of the Maryland Academy of Family Physicians.

• **Mozella Williams** is currently the President of the Maryland Academy of Family Physicians and will transition to Board Chair in June 2020.

• **Katherine Stolarz** serves as President of the Board of Companion Community Development Alternatives, a non-profit that focuses on public health projects in Central America.

• **Nancy Barr** serves on the Education Committee of the Maryland Academy of Family Physicians.
Dr. Kelly Ryan is the Co-medical director for Horsemen Health system and has been traveling around the country and internationally speaking at conferences advocating for jockey safety. Last year she spoke in Santa Anita, California; Lexington, Kentucky; and even in Dubai at the International Conference for the Health, Safety and Welfare of Jockeys. She also is the assistant team physician for Towson University providing care to all of their teams in the training room and medical coverage for women's basketball, men and women's lacrosse, and women's gymnastics. Dr. Ryan is a member of the Orioles medical staff providing game coverage and medical care at spring training in Sarasota, Florida. She's given talks for the community on concussions as well as the American Academy of Family Physicians to teach family medicine physicians how to manage concussions in the office.

Dr. Kelly Ryan spoke at an event for the Racing Officials Accreditation Program in April urging everyone to review medical protocols, practice possible situations, and educate all members/staff to know what to do in different situations.


https://youtu.be/vLBh29cAL24
RESIDENCY HIGHLIGHTS
RESIDENT GRADUATION & FUTURE PLANS
CONGRATULATIONS TO THE CLASS OF 2019

Candice Bainey, MD
Outpatient Primary Care
at Marna Main Health, Arizona

Janelle Hinze, MD
Outpatient Primary Care
at MedStar MMG, Virginia

Michelle Dutkin, MD
Hospice and Palliative Care Fellowship at Henry Ford Hospital, Michigan

Kai Chen, MD
Mid-Atlantic Kaiser Permanente Urgent Care, Maryland

Max Romano, MD, MPH, FM-Prev Med
Healthcare for the Homeless, Maryland

Melanie Connah, MD
Core Faculty at the Family Medicine Residency-Oconee, South Carolina

Farrah Siddiqui, MD
Outpatient Primary Care

Resident Awards:
Outstanding Resident Teacher Award: Melanie Connah, MD
Reichel Award for Geriatrics, Resident: Melanie Connah, MD
Scholarship Award: Max Romano, MD, MPH
Global Health Scholar: Kai Chen, MD
Lee Rome Memorial Award: Joseph Brodine, M.D.

Specialty Faculty Awards:
Pediatric Teaching Award: Jeanne Markowski, N.P.
Reichel Award for Outstanding Teaching, Attending: Mary Katherine Buchanan, MD
CONGRATULATIONS TO THE CLASS OF 2019

A great time had by all!
CURRENT PGY3 RESIDENTS: CLASS OF 2020

Mariam Antonios, DO
Chelsea Backer, DO
Annie Bailey, MD
Sadhika Jamisetti, MD
Allen Jian, MD
Samantha Kurzrok, MD
Priya Raghavan, MD
Nithin Paul, MD
FM-PREV MED
CURRENT PGY2 RESIDENTS: CLASS OF 2021

Adwoa Adu, MD
Ankita Ambasht, MD
Linda Ataifo, MD
Sarah Gray, MD
Jeremy Parsons, MD
Matthew Shapiro, MD
Angele Wafo, MD
Joseph Brodine, MD
FM/Prev Med
Welcome Family Medicine Residency Class of 2022

Sydney Allison Kraemer, MD
Fam Med/Prev Med class of 2022

Anna Conley, MD
University of Maryland

Christopher Favero, MD
Medical University of the Americas

Laura Kurata, MD
University of Hawaii

Allyson Lynch, MD, MPH
Drexel University

Ilyssa Moore, MD
Saba University

Julie O’Donnell, DO
Lake ERIE College of Osteopathic Medicine

Kelsey Schwartz, DO, MS
Philadelphia College of Osteopathic Medicine

Andrew Shaw, DO
Edward Via College of Osteopathic Medicine

Jarett Beaudoin, MD
Fam Med/Prev Med
Thomas Jefferson University
(Class of 2023)
I enjoyed my time at Franklin Square as a fourth year medical student. After that rotation it became clear that Franklin Square Family Health Center was the perfect place for me to spend the next three years of my training. The environment is incredibly welcoming, and the quality of education is second to none.

- Kelsey Schwartz, 1st year Resident

2018–2019 FAMILY MEDICINE INTERVIEW STATS

<table>
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<tr>
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<th>Invited To Interview</th>
<th>Interviewed</th>
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<td>FM Program:</td>
<td>197</td>
<td>121</td>
</tr>
<tr>
<td>Dual Program:</td>
<td>11</td>
<td>7</td>
</tr>
</tbody>
</table>

Total number of applications received: 1747 (FM Program), 198 (FM/Prev Med)
COMBINED
FM/PREVENTIVE
MEDICINE RESIDENCY
The Combined Family Medicine-Preventive Medicine Residency is a four-year residency program leading to board certification in both Family Medicine and General Preventive Medicine. The program is a collaboration between MedStar Franklin Square Family Medicine Residency and Johns Hopkins Bloomberg School of Public Health (JHSPH) General Preventive Medicine Residency. The goal of the program is to train leaders in family medicine and public health to improve health through partnership, discovery and advocacy.

- Max Romano, MD, MPH, our 2019 Combined Program graduate, joined the primary care team at Healthcare for the Homeless in Baltimore City. Dr. Romano continues to provide excellent patient care to marginalized and underserved patients in the Baltimore area with a special concentration in HIV care and population health. Dr. Romano is a medical student preceptor at HCH and is involved with the Family Medicine Education Consortium as an advisory member. Dr. Romano also continues to serve as a board member for Baltimore Ethical Society.

- Starting in spring of 2020 our Family Medicine Residency will be serving as a 6 month clinical rotation site for categorical preventive medicine residents. Rotation concentrations will include addiction medicine, PCMH, and developmental pediatrics. This is a new and innovative reciprocity which will strengthen the clinical skills of the prev med residents while bringing a specific set of skills to our clinical setting.
Joseph Brodine, MD, MPH (PGY 3) completed his 2nd year in the combined program. He helped develop the Baltimore City Health Department guidelines for the Levels of Care initiative that would guide hospitals in optimizing their response to the opioid epidemic. During his time at Johns Hopkins Community physicians, he supported a QI project to improve that healthcare systems’ diagnostic coding educational curriculum for staff providers. He helped conduct literature reviews and analyses for the Johns Hopkins Evidence-Based Practice Center seeking to address the question of whether community health worker licensure affects population health outcomes. This year, he will work with Johns Hopkins Health Systems’ health insurance administration and with the Maryland State Department of Health in the Environmental Health Bureau. Dr. Brodine also served as the course coordinator and an instructor for the class, “Problem Solving in Public Health” for graduate students at Johns Hopkins Bloomberg School of Public Health.

S. Alison Kraemer, MD (PGY-2) entered her second year in the combined program as a full-time MPH student. She embarked on taking courses in a variety of disciplines from biostatistics and epidemiology to food systems and mental health disaster relief. At the same time, she has continued to perform required clinical duties at Franklin Square Hospital. She eagerly pursues her passion for integrative medicine, and she has selected to focus her MPH capstone on designing a resiliency program for Family Medicine residents. She met with the senior advisor for her congressional representative on Capitol Hill regarding strategies to prevent nuclear war as part of the Union of Concerned Scientists Advocacy Day. She was then selected for the Board and Steering Committee for the Chesapeake Physicians for Social Responsibility and is working to connect medical students with advocacy and policy opportunities within the organization.

Jarett Beaudoin, MD (PGY 1) joins us from Philadelphia, Pa where he served as a National Health Corps member at the Nationalities Service Center, the city’s largest refugee resettlement agency. This work fostered Dr. Beaudoin’s interest in both primary care and health policy, especially the impact they have on marginalized and low-income populations. Dr. Beaudoin is interested in how research impacts health policy and advocacy efforts.
CURRICULUM HIGHLIGHTS
Updates to the Pediatrics Curriculum

As reported in last year’s annual report, the closing of the hospital inpatient pediatrics unit in April 2018 necessitated changes to our pediatrics curriculum to maintain and achieve high quality clinical care and educational experiences.

- Beginning in Oct 2018, the inpatient experience moved to Sinai Hospital in partnership with LifeBridge Health. The residents and students report high satisfaction with this rotation.
- The Peds ED experience continues in the MedStar Franklin Square ED and is augmented by a rotation in the Harriet Lane Childrens’ Hospital ED at Johns Hopkins which began in May, 2019.
- Nursery and NICU rotations are unchanged.
- Our ambulatory peds volume has remained robust. We were excited to recruit a second full time pediatrician, Sasha Mercer, who joined our faculty in Fall 2018.
- With the addition of precepting support from the pediatricians at the Perry Hall Pediatrics practice, we have pediatrics faculty supporting the teaching of residents and students during most clinic sessions.
New Elements in the Residency Curriculum

As healthcare and medical education evolve, so must our curriculum! As of September 2019, PGY 2 and PGY 3 residents began a regular 3 week rotation on Johns Hopkins Inpatient Chronic Pain Unit. Through this rotation, residents will learn how to manage patients suffering from chronic pain conditions within a multi and interdisciplinary rehabilitative setting. Goals of this rotation include mastery of non-opiate pharmacology, development of psychiatric formulations using psychiatry perspectives, and attendance and facilitation of psychosocial, psycho educational, mindfulness, and biofeedback groups and sessions.
TEAM BUILDING, FUN, AND WELLNESS
One of the ways our team keeps focused and energetic is by having fun. Throughout the year, our monthly interdisciplinary Process Improvement (PI) meetings, semi annual retreats, holiday celebrations, and community outreach events give us many opportunities to improve our work, but also to laugh and connect with faculty, residents, and staff.

A favorite past time is dressing like our fearless residency leader, Dr. Mike Dwyer. Who does it better, Dr. Barr (left) or PGY 2 Jeremy Parsons (below and right)?
The Department of Family Medicine started practicing yoga weekly on lunch breaks to help with the stress of the day, stretching, and keeping a healthy mind and body.

For one of our most entertaining Halloween costume contests, staff, faculty and residents were encouraged to dress up as an ICD-10 code. Can you spot the following: Stung by a jellyfish, struck by a chicken, injury due to arts and crafts, cat scratch fever, ovarian torsion, problems related to upbringing, or attacked by a turtle?
The Family Health Center Annual Retreat was full of surprises including a flash mob to celebrate Dr. Nancy Barr’s dedication to the Family Health Center and her birthday.

Faculty Andrea Gauld, Eli Moreno, Martha Johnson, and Kelly Ryan share smiles after conquering the climbing wall at Earth Treks during the June New Intern Welcome Retreat.
The Fall 2019 Retreat included patient safety, team building, exercise, and tie-dye activity, which many of our group proudly displayed a few days later.
COMMUNITY OUTREACH
SPORTS MEDICINE IN THE COMMUNITY

MedStar Franklin Square Family Medicine attendings, residents and medical students have the opportunity to cover running road races such as the Charles Street 12 miler and the Baltimore Marathon. They also help with pre-participation physicals for our communities including Baltimore County and Baltimore city, helping make sure 300-400 student athletes are healthy enough for their sports seasons.

Faculty, residents, and medical students prepare to conduct pre-participation exams
Former faculty Tobie Smith and 2019 Graduate Kai Chen provide finish line medical coverage at the Baltimore Marathon.

Faculty Kelly Ryan, D.O. and Andrea Gauld, PharmD share laughs while preparing to provide flu shots to track workers, trainers, and jockeys.
Dr. Kathy Stolarz was invited to speak on a panel for the Maryland Immigrants Rights Coalition’s 3rd annual Connect for Immigrants event in March at the University of Maryland. While on the panel, Dr. Stolarz spoke around her Asylum Evaluations and Female Genital Mutilation/Cutting (FGM/C).

Dr. Kai Chen, our Curriculum Chief, attended and presented at the 10th Annual Consortium of Universities of Global Health (CUGH) Conference in Chicago.
Our Global Health providers also traveled to a Greek Refugee Camp, completed Asylum evaluations, and presented at the Maryland Immigrant Rights Coalition's Connect for Immigrants event.

Dr. Stolarz and the Medical team provided primary and urgent care at Moria Refugee Camp in Lesvos, Greece.

Dr. Stolarz assists in fig distribution to break Ramadan fasting in Moria Refugee Camp.
The MedStar Health Teaching and Research Scholars Capstone event was held on Wednesday, February 6th at the Columbia Sheraton Hotel. This event culminates the two-year Research Scholars and Teaching Scholars programs at MedStar. It was also a chance to recognize those who have recently been inducted into the GUMC Teaching Academy. Certificates were presented to the teaching scholars, research scholars, CENTILE (Center for Innovation and Leadership in Education) LEAD Program graduates and was followed by a presentation on the Georgetown University Teaching Academy. The evening concluded with closing remarks by Stephen R.T. Evans, MD, Executive Vice President & Chief Medical Officer of MedStar Health.

Dr. L. Elizabeth Moreno was among the graduating class who completed the 2 years Teaching Scholars program, receiving the LEAD and MERC (Medical Education Research) certificates. She joins several others members of our Family Medicine Department who had also completed the Teaching Scholars program in past years. Her poster presentation was on The Use of the Learner Prompted Clinical Question in Outpatient Precepting.

Dr. L. Elizabeth Moreno and Dr. Katherine Stolarz attended the Program Director Workshop in Kansas City.

Dr. Nancy Barr presented on Cervical Cancer screening and prevention at the Maryland Academy of Family Physician Winter CME meeting.
Faculty and residents attended STFM’s Annual Spring Conference in Toronto, Ontario, Canada - April 27-May 1, 2019. The conference placed special emphasis on health equity, curricular and faculty development innovations, family medicine advocacy/policy, scope of practice, and emerging technologies. There were also sessions on curricular and faculty development innovation, meeting accreditation requirements, and promoting student interest.

Dr. David Pierre co-presented a pre-conference workshop: *Achieving Equity in the Workforce: Exploring the Very Low and Declining Rates of Black Males in Medicine*. This session facilitated frank discussions regarding diversity and race in medicine and explored the impact of implicit biases, micro-aggressions, institutional racism, and other barriers to achieving success, with a focus on Black males.

PGY3 Melanie Connah explains her poster during the session: Health Disparities in Cesarean Delivery Rates at a Suburban Community Hospital. Faculty Martha Johnson mentored her on this project.

Dr. Johnson also presented a poster building on the scholarly project of recent grads Jordan Gottschalk and Grace Wessling on Improving Pneumococcal Vaccination Rates.

Congratulations to Dr. Melanie Connah for being selected as one of 25 STFM “Faculty for Tomorrow” scholarship recipients! Melanie attended the preconference day around skills for residents interested in including teaching in their careers.
An STFM Presidential Quintet gathers at the 2019 Annual meeting in Toronto: L to R, Freddie Chen ('19-20), Stephen Wilson ('17-18), Beat Steiner ('18-19), Tricia Elliot (Pres-Elect), Melly Goodell ('16-17)

Faculty and residents attending the STFM Annual Meeting in Toronto take a break for dinner: L to R, Britt Gayle, PGY3 Melanie Connah, Martha Johnson, Lauren Drake, David Pierre, PGY2 Sadhika Jamisetti, Melly Goodell

Melly Goodell and Martha Johnson were excited to spend time with faculty alumna Netra Thakur. Dr. Thakur is now the Chair of the STFM Program Committee, leading the planning for upcoming annual meetings

MORE STFM HIGHLIGHTS
Legislative Hearing with MDAFP Advocacy Group for Direct Primary Care

Dr. Niehoff is on the Medchi Legislative Council and on the Insurance subcommittee, which meet every Monday evening and Sunday morning respectively through the legislative session. He was Doctor of the Day in Annapolis several times through the 2019 legislative session and also went to Annapolis for the Baltimore County/ Baltimore City/Harford County Advocacy Day, and again for the Maryland Academy of Family Physicians Advocacy Day. Dr. Niehoff went to a fund raiser for Senator Kathy Klausmeier in December 2019 representing the BCMA. He also participated in the BCMA legislative breakfast for our Baltimore County elected officials at Sheppard Pratt in December 2019.

Representative Kathy Szeliga- District 7 with Dr. Michael Niehoff
Department of Family Medicine 14th Annual Scholar's Forum
Thursday, May 30, 2019
Congratulations to our presenters and faculty advisers. Also included in the Scholar’s Forum, Dr. Joseph Brodine was presented the Lee Rome Award from Mrs. Margaret Rome.

Candice Bainey, M.D., M.P.H & Michelle Dutkin, M.D.
“Pneumococcal Vaccination Rates in a Community-Based Family Medicine Resident Clinic”

Kai Chen, M.D.
“Long-Term Effectiveness of Diabetes Bootcamp”

Melanie Connah, M.D.
“Health Disparities in Cesarean Deliver Rates”

Janelle Hinze, M.D. & Farrah Siddiqui, M.D.
“Screening for Social Determinants of Health in Prenatal Care: an experiential curriculum in Trauma Informed Care”

Max Romano, M.M., M.P.H.
“What is the individual survival benefit of population-based clinical preventive services?”
# Improving Pneumococcal Vaccination Rates at a Community-Based Family Medicine Resident Clinic

Candice Bainey, MD

Michelle Dutkin, MD

## Abstract

Pneumococcal disease causes pneumonia, meningitis, and sepsis, which are significant causes of morbidity and mortality. Despite the ready availability of pneumococcal vaccines, vaccine utilization rates remain suboptimal at Family Health Center. The aim of this project is to improve the pneumococcal vaccination initiation rates at Family Health Center by 10% over a 4-month period from February to May of 2019. This initiative was a multi-pronged approach. It involved resident, MA, and patient education. Residents and MAs were educated on the need for pneumococcal vaccination. Patient education included handouts given at the time of check-in. A standing order was designed for MAs to obtain consent and administer the pneumococcal vaccine (without needing physician approval). The percentage of patients who received the pneumococcal vaccine was compared pre and post intervention.

## Methods

### Participants:
FHC patients, physicians, and MAs

### Multi-pronged approach implemented over a 4 month period

- Physician and MA education on indications for pneumococcal vaccination
- Patient education: handouts promoting pneumococcal vaccination in patients 65 years given at time of check-in
- Medical assistant-driven vaccination ordering protocol: one page questionnaire prompting the MAs to obtain consent and administer the pneumococcal vaccine to eligible patients through standing orders without requiring physician’s approval.

### Design:
Electronic health record chart review

## Results

### Results of PDSA Cycle 1

<table>
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<th>Resident and Faculty Survey</th>
<th>Results of Resident and Faculty Survey</th>
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<tr>
<td>How comfortable do you feel with Vaccine Indications?</td>
<td>% of patients age ≥65 who received PCV13 on Team C</td>
</tr>
<tr>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>80</td>
<td>35</td>
</tr>
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</table>

### Results of PDSA Cycle 2 (March 2019)

<table>
<thead>
<tr>
<th>% of patients age ≥65 who received PCV13 on Team B</th>
</tr>
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<tbody>
<tr>
<td>35</td>
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</tbody>
</table>

## Discussion

In educating the physicians, CMAs, and patients, we hoped to ensure that FHC staff remembered to assess patients’ pneumonia vaccination status. Our interventions did not demonstrate a significant increase in vaccination rate for our study populations but showed promising potential interventions that could be beneficial long term. The surveys demonstrated that there is still confusion in the provider population as to what are the indications for pneumococcal vaccination. The survey showed increased competency in vaccination indications for the CMA population after standing order implementation. Next steps include determining the reason for patients not receiving vaccination, implementation of CMA standing order clinic-wide, scheduling a vaccination specific clinic visit or drop in hours and follow up discussions/reminders for faculty, resident and CMAs regarding intervention effectiveness.

## References

# Long-Term Effectiveness of Diabetes Bootcamp

**Kai Chen, MD**

**Uchenna Emeche, MD, Martha Johnson, MD**

**MedStar Franklin Square Medical Center, Baltimore, Maryland**

**Department of Family Medicine**

## Background
- Diabetes mellitus type 2 (DM2) is one of the most common chronic diseases and poses a heavy burden to the healthcare system.
- Multiple studies have demonstrated that multidisciplinary intensive education program improve diabetes control and decrease cardiovascular complications.
- MedStar Pathway to Diabetes Control started a pilot program named Diabetes Boot Camp in 2015 targeting high-risk patients with uncontrolled DM.
- The program has been very successful as a whole with median A1C decrease of 3.1 after immediately post program but lack data for longer term impact.

## Objectives
- This study examined the long-term effectiveness of Diabetes Boot Camp in a subgroup of patients at the Family Health Center.
- The hypothesis is that patients who participated in Diabetes Bootcamp would have significantly lowered HbA1c compared to patients who did not at two years.

## Method
- This is a single-center, outpatient-based, retrospective chart review analysis.
- Data collected from MedStar Family Health Center.
- Study time period: January 2017 to January 2019.
- HbA1c at goal at end of study was defined as <9.
- Inclusion criteria:
  - Patients with diagnosis of DM2 listed in EMR.
  - Continuity patients of a third-year resident (8 residents) → 178 patients selected.
- HbA1c ≥9 in the start of the study → 52 patients selected.
- In 2019, 22 patients (42%) out of the 52 patients achieve HbA1c below 9.
- Whereas 30 patients (58%) did not.
- Average baseline age: 64.95-year-old, average baseline HbA1c 11.30, average HbA1c at the end of study 9.34.
- Chi-square tests was used to examine the distributions of categorical data included age, sex with 95% confidence interval.
- Fisher’s exact test, t-tests and logistic-regression test to compare DM2 control and participation of diabetes boot camp and also pharmacy clinic.

## Results

### Table: Results

<table>
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<tr>
<th>Pre-Med</th>
<th>Post-Med</th>
<th>P-value</th>
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<tbody>
<tr>
<td>HbA1c</td>
<td>HbA1c</td>
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</tr>
<tr>
<td>11.30</td>
<td>9.50</td>
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<td>0.0001</td>
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</table>

## Conclusion
- There is significantly higher percentage of patients who participated in the Diabetic Bootcamp in the group who reached HbA1c goal at end of the study period.
- The average HbA1c is significantly lower at end of the study period for all patients regardless of their participation of the Bootcamp.

## Discussion
- Diabetes Bootcamp has been successful in helping patient to lower their HbA1c within in the three months period. The long-term impact of Diabetes Bootcamp for patients at the Family Health Center was investigated for this study.
- It is not surprising that among patients who reached HbA1c goal, there is significantly higher percentage of patients who participated in the Bootcamp. However, interestingly, the average HbA1c is significantly lower in 2 years for all patients regardless of their participation of the Bootcamp. Other factors such as frequency of primary care office follow up, patient’s motivation, co-morbidities may also be main factors of long-term DM2 control. Readers should be cautious against overinterpretation of the findings due to study limitations. First, there was no information on co-morbidities, lifestyle, frequency of follow up or other lab findings except for HbA1c. Second, primary physician’s information and diagnosis codes may be inaccurate in the EMR system. Third, patients who only have one HbA1c value checked during the two years study period were included in the data analysis.
- In conclusion, this retrospective study showed that patients who participate in the DM boot camp have higher percentage of reaching HbA1c goal. All patients achieve significantly lower HbA1c at two years compared to baseline regardless of their participation of the DM boot camp program.

## References
Health Disparities in Cesarean Delivery Rates
Melanie Connah, MD
MedStar Franklin Square Medical Center, Baltimore, Maryland

Objectives
- To evaluate whether race and ethnicity are associated with increased cesarean delivery rates among low-risk deliveries at a community hospital in Baltimore, MD.
- To evaluate whether race and ethnicity are associated with increased rates of other peripartum morbidities including preterm delivery, low birth weight, postpartum hemorrhage (PPH), and shoulder dystocia at the same community hospital.

Background
Cesarean deliveries (CD) are the most common surgical procedure performed in the US and carry inherent risks to mother and child, including increased maternal morbidity and mortality and neonatal respiratory complications. CD rates vary up to 10-fold between hospitals. The CDC’s Healthy People 2010 and 2020 provided goals for CD rates for low-risk patients. Prior research has illuminated significant disparities in CD rates based on age, race, and insurance status, though these disparities vary by location. Other studies have identified racial disparities with respect to low-birth weight preterm deliveries, and other peripartum morbidities. Addressing disparities could help decrease inappropriate CDs and improve peripartum health outcomes. Evaluation of individual hospital’s potential disparities with respect to CD rates and peripartum morbidity is critical to identify areas of intervention.

Methods
Type of Study: Retrospective chart review
Population: AI deliveries between 1/1/2013 - 12/31/2016 at Medstar Franklin Square Medical Center Labor and Delivery (MFSMC L&D).
Primary outcome: Mode of delivery
Secondary outcomes: Preterm delivery, low birth weight, PPH, shoulder dystocia
Inclusion Criteria: Initial analysis on all deliveries. Secondary analysis on low-risk deliveries defined as Nulliparous, Term, Vertex, Singleton (NTSV)
Exclusion Criteria: Placenta previa, active herpes infection, breech presentation
Covariates: Maternal age, BMI, medical insurance status, zip code of residence, and medical history (hypertensive disorders, diabetes, prenatal care, myectomy).
Analysis: Descriptive statistics were calculated in regards to the data set. Data analyses involve bivariate and multivariate logistic regression.

Results

Table 1: NTDS Demographics

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>Hispanic</th>
<th>Other</th>
</tr>
</thead>
</table>
| Maternal Age
| ≤ 29   | 733   | 54       | 61    |
| 29 - 34  | 1678  | 122      | 119   |
| 35 - 39  | 1372  | 106      | 110   |
| 40 - 44  | 332   | 26       | 28    |
| P-value  | <0.001| 0.65     | 0.47  |

Table 2: Mode of Delivery in NTDS

<table>
<thead>
<tr>
<th>Delivery Type</th>
<th>White</th>
<th>Hispanic</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cesarean</td>
<td>1581</td>
<td>128</td>
<td>120</td>
</tr>
<tr>
<td>Vaginal</td>
<td>583</td>
<td>56</td>
<td>62</td>
</tr>
<tr>
<td>P-value</td>
<td>&lt;0.001</td>
<td>0.01</td>
<td>0.02</td>
</tr>
</tbody>
</table>

Discussion
Racial and ethnic disparities in healthcare are prevalent but vary significantly based on location. Here we conduct a retrospective chart review assessing CD rates and other peripartum morbidities at one community hospital. Data show that there are some significant differences between races.
- Overall, White women make up 42.9% of the low-risk population. Black women make up 20%, and Asian and Hispanic women make up 1.6% and 3.4%, respectively. There is a significant amount of missing data on race in this population.
- Black women are more likely to deliver at a younger age, be obese, and have medical assistance as compared to White women.
- In the low-risk population, Black women and Asian women have statistically significant increased odds of CD when compared to White women.
- In all deliveries, Black women are at increased odds of preterm delivery, low birth weight delivery, PPH, and shoulder dystocia when compared to White women.
- In the low-risk population, Black women have increased odds of low birth weight delivery. Asian women have increased odds of PPH. and Hispanic women have increased odds of shoulder dystocia.
- Limitations: In this data set there is a high rate of missing data on race. This is a retrospective study which relies on EMR data that may be missing, imprecisely entered, or incomplete. Findings are not generalizable beyond the local population.
- Areas of Future Study: This analysis of a large number of deliveries in one location has identified some high risk populations for CD and peripartum morbidities. Further study on interventions aimed at decreasing CD rates and peripartum morbidity should be pursued.

References
Screening for Social Determinants of Health in Prenatal Care: an experiential curriculum in Trauma Informed Care

Janelle Hinze, MD, Farrah Siddiqui, MD
MedStar Franklin Square Medical Center, Baltimore, Maryland
Department of Family Medicine

Abstract

Purpose: This project aimed to identify trauma affecting our prenatal patients through screening with the modified SEEK questionnaire at the first prenatal visit, to provide earlier intervention in preventing childhood adversity, and to educate residents and staff around trauma informed care.

Methods: The SEEK questionnaire was modified by adding new questions to address other aspects of trauma. When a patient scored positively, they were asked to complete the modified SEEK questionnaire at the next visit. If a patient scored positively two times in a row, they were referred to the Trauma Informed Care (TIC) Program.

Results: Of the 10 patients who scored positively on the SEEK questionnaire, 4 were referred to the TIC Program. Of the 3 patients who scored positively on the modified SEEK questionnaire, 1 was referred to the TIC Program.

Discussion: The modified SEEK questionnaire was effective in identifying patients with trauma. The TIC Program was able to provide further support to these patients.

References

Introduction

- Primary care clinicians prioritize clinical preventive services every day, balancing delayed evidence, quality metrics, patient preference, and other factors to choose certain preventive services over others in busy clinical practice.
- The United States Preventive Services Task Force (USPSTF) uses “strength of evidence” and “magnitude of net benefit” to evaluate clinical preventive services, however USPSTF recommendation statements provide limited objective data comparing services in terms of relative benefit for patients.
- Health Partners Institute has developed microsimulation models to calculate US society-level benefits of preventive services in terms of health (improved length and quality of life) and value (cost-effectiveness).

Purpose

We aimed to calculate the individual survival benefit of USPSTF clinical preventive service recommendations using Health Partners Institute microsimulation model reports.

Methods

- Data Source: HealthPartners Institute Model-Health microsimulation model reports
- Input variables from HealthPartners reports:
  - Clinically Preventable Burden (CPB): defined as the total quality-adjusted life years (QALYs) that could be gained if the clinical preventive service were delivered at recommended intervals to a U.S. birth cohort of 4 million patients over the years of life for which a service was recommended based or modeling
  - Interventions delivered: the number of individual screenings, counseling sessions, or vaccinations delivered in a simulation model to a birth cohort throughout its life course
- Calculated variable:
  - Individual survival benefit: the CPB divided by the number of interventions delivered scaled to quality-adjusted life days (QALDs)

Modeling FAQs

What is microsimulation? A computerized analytic tool to estimate the effect of an intervention on the health of a population that models the progression of disease in each individual’s life history separately.

What are parameters? Parameters are the inputs that drive a model’s calculations, like the prevalence of a risk factor in a population or the frequency or effectiveness of screening. These are based on the best available evidence.

What is a birth cohort? A simulated population of patients with a distribution of disease risk factors (e.g., sex, race, BMI) proportional to the US population as a whole whose life-course is described by a microsimulation model.

How did this study use models? We used existing microsimulation models that were originally developed by HealthPartners for cost-effectiveness analysis and summarized the results from the perspective of the individual patient.

Simulation Model Design

Cardiovascular disease simulation model design diagram

This is an example of a HealthPartners Institute Model-Health microsimulation model used to estimate the effects of aspirin for primary prevention of cardiovascular disease in one individual within a birth cohort population. BMI = body mass index; BP = blood pressure; CRC = colorectal cancer; CVD = cardiovascular disease; HDL-C = high-density lipoprotein cholesterol; LDL-C = low-density lipoprotein cholesterol; SBP = systolic blood pressure.

References


Conclusion

The relative survival benefit of clinical preventive services varies widely, from a few hours to several weeks of quality-adjusted life depending on the service provided.

While the simulation-based average survival benefits of preventive services rely on numerous parametric assumptions, some understanding of the relative importance of various services may inform clinical and public health practice.

Acknowledgements

Special thanks to Michael F. Saslow, MD for insightful review of the manuscript.
The Department of Family Medicine and Family Medicine Residency at MedStar Franklin Square Medical Center have many opportunities for medical students at all levels of training interested in Family Medicine. We accept students from various LCME accredited institutions in the United States and Canada for elective rotation. Rotations are four weeks in length in an outpatient setting. In addition to medical students, we also host students in other related fields such as pharmacy and social work.

The Family Health Center also houses the Longitudinal Integrated Clerkship (LIC) for the Georgetown School of Medicine. In this program, third year medical students learn internal medicine, family medicine, pediatrics and obstetrics / gynecology simultaneously while caring for a panel of their own patients over the course of six months. More than 35 students have completed the LIC to date.

LIC students accompanied faculty member Kelly Ryan to observe the medical coverage provided at the horse races in Timonium.

The Fall 2019 LIC cohort poses for a “family” holiday photo!
Monica Gupta, Alena Hoover, and Anne Yeung reflect on their LIC experience:

“Participating in the Longitudinal Integrated Curriculum (LIC) has been one of the most rewarding experiences of medical school. The longitudinal aspect of the program allowed us to develop relationships with patients over six months of working with them. We could follow our patients’ medical conditions and experiences as they traveled from Family Health Center, to specialist clinics, to the Operating Room. This facilitated some of the most educational experiences and meaningful relationships of our third year of medical school.

Similarly, we were able to create lasting relationships with the physicians and staff with whom we worked at FHC. There is no learning community that could have been more supportive in ushering us into our clinical years than FHC. Residents and attendings alike were kind, excited to teach, and invested in mentoring us in our personal development as future physicians.

We may have left Baltimore at the conclusion of our clerkships, but we will always carry with us the relationships that helped us take our first steps into becoming the physicians we have always aspired to be.”
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