Baystate Health

Scholarly Commons @ Baystate Health

Baystate Medical Practices Annual Report

Newsletters and Blogs

2019

Baystate Medical Practices Annual Report - 2019

Andrew Artenstein MD

Follow this and additional works at: https://scholarlycommons.libraryinfo.bhs.org/bmpannual_report



Baystate Medical Practices

2019 | ANNUAL REPORT





Table of Contents

A Message from Andrew W. Artenstein, MD, President	1
A Message from Betty LaRue, MN, RN, COO	3
BMP Board, BMP Vision	4
Ambulatory Quality	5
Office of Admissions	6
Office of Education	7
Office of Faculty Affairs	8
Office of Research	9
Teamwork & Collaboration	
Facing the Opioid Crisis	10
Caring for the "Whole" Patient	12
DispatchHealth	14
Department Highlights	
Anesthesiology	16
Emergency Medicine	17
Medicine	18
Obstetrics & Gynecology	19
Pathology/Baystate Reference Laboratories	20
Pediatrics	21
Psychiatry	22
Radiology	23
Surgery	24
Baystate Heart & Vascular Program	25
Baystate Regional Cancer Program	26
Baystate Neurosciences & Rehabilitation	27
Baystate Primary Care	28
Advanced Practitioners	29
BH Eastern Region	30
BH Northern Region	31
BH Western Region	32
New Physicians and Advanced Practice Clinicians	33
BH Service Δrea	38



Andrew W. Artenstein, MD

Chief Physician Executive and Chief Academic Officer, Baystate Health President, Baystate Medical Practices Regional Executive Dean, University of Massachusetts Medical School-Baystate Professor of Medicine, University of Massachusetts Medical School-Baystate

In the past year, 2019, we significantly advanced our collective BMP VISION to be "the premier provider organization in the region and to be nationally recognized for delivering and evaluating high value health services and innovative medical education across a regionally integrated, strategically aligned system." Our teams, led by Department Chairs, Service Line VPs, and our Deans have worked tirelessly to address strategic and operational challenges and have achieved significant successes:

- Quality of Care: The inaugural five "learning collaborative" projects, selected through a competitive process and sponsored by the BMP Quality Council, completed their six-month interventions and have since reported their findings to the BMP Board. Several key revelations emerged that will help to improve access, clinical quality, safety, and our patients' experience in our practices. The second year projects are already underway.
- Access: Our Contact Center, which manages more than 10,000 patient-based issues per day, continues to demonstrate significant improvements in several key metrics, including quality assurance, customer service, and employee engagement and turnover. Schedule utilization in most practices has exceeded our aspirational 85% goal. Our primary care enterprises at the Community Health Centers and the community-based practices have created 60,000 same-day slots to ensure that patients who feel they need to be seen for an urgent issue can get in. This has had the additional salutary impact of lowering the "no-show" rates for these patients at our health centers. Analogous work is underway to enhance access to our specialists.
- Clinical Operations: We are nearly six months into an 18-24-month journey to optimize our ambulatory Electronic Health Record (EHR). It is more than just optimizing the EHR; it is a massive project that really involves re-imagining and reconfiguring how and by whom the work gets done in our ambulatory practices.
- Financial Performance: Again, we were nearly on-budget from a direct performance standpoint, representing the fourth consecutive year that BMP has met performance targets. This is no easy task for a 1,000-member provider group that provides clinical services in more than 80 practices across 40 sites. Provider groups are by nature volatile entities whose financial performance is impacted by numerous internal and external factors, many beyond the organization's direct control; thus, it makes the extraordinary work of each of our team members even more impressive.
- Engagement: Again, BMP has made significant strides in our engagement journey. Our overall national percentile rank level has steadily increased from 20th (2017) to 24th (2018) to 32nd (2019), demonstrating that our approach, a combination of tactics, many of which are centered on enhancing bidirectional communication and empowering problem-solving at the level where the work gets done, appears to be working. We are continuing our focus in this arena over the coming year as we still have significant opportunity.
- **Provider Wellness Initiative:** We have engaged nearly 5% of our providers in the Provider Wellness Council, the group charged with engaging their constituents and overseeing "tests-of-change" and other work unit-level interventions to mitigate and/or prevent provider burnout in our organization and help build resiliency among our team members. They have chartered several subcommittees and work groups which are in the process of trialing these efforts.
- UMMS-Baystate: The regional campus of the University of Massachusetts Medical School (UMMS) continues to exceed expectations. Our inaugural class (class of 2021) of students is now deeply engaged in clinical clerkships in BH hospitals and ambulatory practices, and the third cohort, the class of 2023 is already well into their pre-clinical studies. Feedback from our students continues to be highly favorable, and our candidate pool continues to be among the most accomplished that UMMS has seen in its history. In a mere 16 months our inaugural class will graduate!
- Research: We have seen more than a 15% increase in extra-mural grant funding correlating with dozens of new, funded grants, including 11 federally-funded ones. This is due to the efforts of our growing cadre of faculty investigators and the Office of Research. Additionally, the Baystate Clinical Trials Office is off and running with a newly acquired grant that will allow us to create the needed infrastructure and hire the operational leadership to optimize our chances for success.
- Scholarship: Our faculty members continue to successfully disseminate their investigative findings to improve patient care. Last year, we published more than 200 papers in the peer-reviewed medical literature, and these published papers appeared in higher impact journals than they had previously. This is one of the ways in which we achieve national recognition of our enterprise.

- Faculty Development: The Physician Leadership Academy (PLA) graduated another cohort of highly engaged and accomplished current and future leaders, and several PLA alumnae continue their leadership development journey as active members of the six BMP committees that participate in the operations of our organization and report directly to the BMP Board of Directors. We held the inaugural "Toast the Professors" event to celebrate the 45 members of our faculty who have reached the pinnacle of academic achievement at UMMS-Baystate and are working on plans to target the professional development and enhance the diversity of the next generation of senior rank faculty members. Additionally, we launched a "Visiting Professor" program to bring national expertise to bear on our faculty development and diversity activities. We revamped our provider orientation and added an initiative that debriefs our new recruits once they have worked here for several months so that we can ensure that we are meeting their needs and expectations. We have initiated a formalized mentoring process for our new providers and have expanded our peer-to-peer mentoring program ("Mentors Matter") for our talented early-mid career faculty.
- Creating and Optimizing an Integrated System of Care: this has been and continues to be a major thrust of our efforts. System-level chairs, service line leaders, program directors, and other team members have been hard at work executing plans that are aligned with the goals of BH and tailored to their respective areas. We have successfully integrated radiology, laboratory services, hospital medicine, cancer services, and emergency medicine and have made significant strides in surgery, medicine subspecialties, women's health, behavioral health, heart and vascular, and several other service areas. Our clinical leadership and team members have played significant roles in the conception and vetting of the new Master Facilities Plan for BMC and the metro Springfield campuses and are deeply engaged in the planning for our regional sites.
- **Growing Tertiary Care:** this represents a key strategic lever in our ability to compete and flourish into the future. We have made significant strides in Heart and Vascular, Neurosciences, Gastroenterology, Surgical programs, and other clinical service lines as we seek to grow those areas that will sustain our future and allow us to meet the BH Mission and advance its Vision.
- Population Health: another key strategic lever to ensure a sustainable and successful future. BMP providers made significant contributions to this year's successful performance in the Next Generation Accountable Care Organization (Medicare) and the Blue Cross and HNE risk contracts. Additionally, in partnership with HNE and Caring Health, our teams at the Community Health Centers have begun to transform care in the BeHealthy partnership (i.e. Medicaid ACO). And through it all we have continued to engage our community provider colleagues through our Network Development efforts and have successfully grown our "risk-based" and BH-aligned lives, consummating affiliations with several highly respected community-based primary care and specialty groups to expand our clinical delivery system and provide more access for our patients.
- We created a new clinical/academic department at BH this past year—the department of family medicine, and we successfully recruited an inaugural chair for this fledgling department. This will be the first department that will be anchored outside of Springfield, in Greenfield, at Baystate Franklin Medical Center. Early goals of the new department will be to recruit a family medicine faculty to round out the Greenfield and Northampton primary care practices (which are family medicine practices) and to create an accredited residency program in family medicine. Family Medicine represents the rational future of primary care (and care) in our northern region; our new work in this domain will be a game-changer for that region of our health system.
- We completed successful national searches for a new Chair of Pathology and an inaugural Chair of Family Medicine; we have also successfully recruited several new division chiefs and medical directors and have seen significantly improved recruiting in primary care and subspecialties over the past year.
- We completed a "deep dive" with a consulting group of national experts to find opportunities to better engage, understand, and work together with our Advanced Practice Provider (APP) team to optimize our current models of team-based care and to ensure that our APP colleagues remain vital contributors to our mission. This resulted in a new APP organizational structure and governance and has spawned a variety of improvement initiatives in this sphere.
- Through the concerted efforts of our COO and our ambulatory and human resources team members, we have created and implemented appropriate career development ladders for our non-provider teams.
- We continue to train our team members in "Compassionate Connections" and "Culture of Safety" principles and processes, and this past year, we engaged nearly 40% of our providers in "shared decision-making" training. Such activities will help to optimize our patient and team member experience, as these are critical to our future success.

We are fortunate to have a great team of system clinical, academic, and administrative leaders who think first and foremost about the greater good of BH. Most importantly, the BMP team—1,000 providers and nearly 1,500 other team members—is a strong one and possesses the commitment and passion to achieve our goals and advance our Vision while navigating through the challenges that lie ahead.



Betty LaRue, MN, RN

Chief Operating Officer, Baystate Medical Practices
Vice President, Baystate Health Ambulatory Operations

2019 was another stellar year for BMP and Ambulatory Care across BH. We made significant advancements on a number of fronts with continued focus on initiatives that forward the BH Vision to "Advance Care and Enhance Lives" both for our patients and caregivers. Here are some highlights:

ACCESS TO HEALTH

We continued our journey toward improving Access to Health and ensuring appropriate care at the right time and place for our patients across Baystate Health. Our Contact Center, in partnership with our departments and service lines, initiated a number of creative solutions to improve timely availability for clinic visits, tests, procedures, and surgeries. As a result, we booked 160,189 (8.58%) more appointments and 6,455 (5.58%) more procedures and surgeries than in 2018. Same day clinics; virtual visits for urgent care; regional scheduling coordinators; electronic prescription refills; centralized insurance prior authorization for imaging studies; and technology enhancements such as bidirectional patient texting, and imbedded Patient Service Ambassadors are examples of initiatives that have helped to streamline and improve timeliness of patient access into BH. Programs focused on clinical risk assessment for care prioritization are underway which will optimize appropriateness of care in this value-based environment.

SAFETY/QUALITY

The first five "Learning Collaboratives" concluded and each group presented their projects to the BMP Board. The results were impressive, showed positive results, and demonstrated significant learning around process improvement, while validating that clinical change is best achieved by those closest to the work. Across the ambulatory enterprise, we embarked on new, more rigorous infection control processes and procedures; implemented a point of care quality structure with a dedicated coordinator; and initiated HEDIS clinical quality metrics in selected specialty services. New policies and procedures were adopted around CIS message management, critical values, and medical emergencies. A nursing team continued its work on improving and standardizing patient education materials to address patient concerns about "adequacy of education and instruction." More than 300 of our providers completed Shared Decision Making education to improve our connection with patients as partners in their care.

ENGAGEMENT

We continue to make strides in improving our employee/provider engagement. Our most recent Press Ganey score of 4.02 represents significant improvement from 2018 (4.0), and 2017 (3.98). Feedback from region-wide open forum sessions provides the roadmap to address staff and provider concerns. Implementation of new/revised career ladders (18 RNs are advancing in the clinical recognition program, the largest group yet!), flexible work schedules, renovation of work space, and new staff positions have helped to improve employee work/life balance. The implementation of scribes at selected sites, provider schedule flexibility, and the beginnings of an enhanced, more intuitive, and simplified medical record aim to improve provider satisfaction and work/ life balance as well.

VALUE

BMP had another strong financial year. Net revenues grew by \$6 million above 2018 performance. Meaningful Use payments for eligible providers are estimated at \$700,000 and our Pay-for-Performance dollars from risk contract performance approximates \$7 million. We will be close to meeting our \$365 million operating budget but changes in the Defined Benefit Plan and premium labor costs incurred for provider vacancies will impact the final year-end performance. Provider productivity continues to improve as has the completion of timely documentation and billing, both areas we will continue to closely monitor.

REGIONAL GROWTH AND INTEGRATION

After two years of planning and significant contributions by many, the Baystate Health and Wellness Center-Longmeadow opened in February 2019. This 50,000 square foot state-of-the-art, multispecialty center combines expanded primary care services, multispecialty care, rehabilitation, radiology, and laboratory services. A consumer focus group helped to inform the building design and ideal patient experience. New models of care, clinical space and workflows, and technology enhancements were employed to support contemporary team-based care and serve as the model for future sites across BH. Since its opening we have seen over 18,000 patients and performed over 2,000 radiology procedures.

In April of 2019, the Noble physician practices were incorporated into BMP as part of the integration of Noble Hospital into BH. This added a total of 24 providers and their staff to the BMP family. In January of 2020, Connecticut River Internists (CRI), located in Turners Falls, will transition to a BMP practice, adding over 7,000 patient lives to our BH Primary Care Network. It is a joy to work with such a gifted team of caregivers. I have appreciated the comradery and cohesion of this group as it works to transform care in western Massachusetts.

2019 BAYSTATE MEDICAL PRACTICES

Board of Directors

OFFICERS

Andrew Artenstein, MD
Chief Physician Executive
and Chief Academic Officer
President,
Baystate Medical Practices
Regional Executive Dean,
UMMS-Baystate

Dennis Chalke Treasurer

Kristin Delaney Clerk

OUR VISION

BMP will be the premier provider organization in the region and by 2020 will be nationally recognized for delivering and evaluating high value health services and innovative medical education across a regionally integrated, strategically aligned system.



Andrew W. Artenstein, MD



Charlotte Boney, MD



Elizabeth Boyle, MD



Ronald P. Bryant, MHA



Kimberly Bucknor, MD



Dennis W. Chalke



Lisa Erickson, DNP,CNP, ACNP-BC



Edward Feldmann, MD



Cheryl Geoffrion, MD



Kevin Hinchey, MD



Nicolas Jabbour, MD



Mark A. Keroack, MD, MPH



Aaron Kugelmass, MD



Ramachandran Kuppuswamy, MD



Amir Lotfi, MD



Wilson C. Mertens, \mbox{MD}



Niels K. Rathlev, MD



Heather Z. Sankey, MD, MEd



Barry Sarvet, MD



Rakesh 'Kishi' Talati, MD, MBA



Abraham Thomas, MD, MPH, FACP



Kathleen B. Scoble, Ed.D. RN

Ambulatory Quality

The BMP Quality Council successfully concluded the inaugural class of "Learning Collaboratives." Learning Collaboratives are small, site-based quality improvement teams that meet weekly over a six-month time frame with the support of a process improvement specialist to work on quality, patient safety, or patient experience goals. These successful projects were as follows:

- **Primary Care:** Improving glycemic control in patients with diabetes using a teambased model of care.
- **General Surgery:** Improving the efficiency processes and communication for patients undergoing pre-operative assessment for elective procedures.
- Women's Health: Establishing a method for communicating information about medical complications of pregnancy (i.e. hypertension and gestational diabetes) as patients return to primary care providers.
- Endocrinology: Enhancing access to new patient consultations by transitioning stable patients back to their primary care provider when specialty endocrinology care is no longer needed.
- **Cardiology:** Enhancing patient experience by improving communication between patients and the practice.

Focus on Safety and Quality

- New infection control procedures instituted in ambulatory sites.
- Streamlined and standardized medication reconciliation processes.
- Beginning work to establish standards for ambulatory, anti-coagulation protocols.
- Engaging specialists in outpatient clinical quality measures (i.e. HEDIS) which supports our success in the Medicare- and Medicaid accountable care organizations and other risk-based contracts.
- Supporting workflows and processes to close gaps in care, improve the patient experience, and promote success in risk contracts.



Paul J. Helmuth, MD

Medical Director,
Quality and Population Health,
Baystate Medical Practices



Diane Russell, RN, MBA

Ambulatory Director,

Quality and Medical Management,

Raustate Health



OFFICE OF Admissions

The Office of Admissions serves as the unofficial "front door" of the University of Massachusetts Medical School-Baystate (UMMS-Baystate), the only regional campus of the Commonwealth's only public medical school. Admissions represents the initial interaction of our future students and physicians with the medical school and Baystate Health. We have enjoyed tremendous success in this Office since its inception in 2015 and achieved the following in 2019:

- Successfully recruitment of our third cohort of students, the class of 2023, to the UMMS-Baystate Population-based Urban and Rural Community Health (PURCH) track.
- Matriculated 28 students into the Class of 2023 from the following undergraduate institutions: Assumption College, Boston College, Brandeis University, Carleton College, Georgetown University, Hamilton College, Harvard University, Indiana Wesleyan University, Kent State University, Middlebury College, Mount Holyoke College, New York University, Northeastern University, Rensselaer Polytechnic Institute, St. Lawrence University, Tufts University, University of California-Berkeley, University of California-Los Angeles, University of Chicago, University of Washington, Vanderbilt University, Wayne State University.
- We have a diverse group of highly accomplished students: 15 Massachusetts residents and 13 from out of state; 7 male and 21 female, therefore 75% female; academically strong with an average GPA of 3.8 and an average MCAT of 84%.
- 10% increase in applications from our inaugural year to our past application cycle.
- This year's application cycle is off to an equally strong start with over 350 applications for our 25 positions.



Samuel H. Borden, MD, FAAP, FACP

Assistant Dean of Admissions Associate Program Director, Medicine —Pediatrics Residency Program, Associate Professor of Pediatrics and Medicine, UMMS-Baystate



office of Education

Baystate Springfield Educational Partnership (BSEP)

- Engaged 307 (unique number of participants is smaller) high school students from all Springfield High Schools and several charter and private schools.
- Coordinated summer internships at Baystate Medical Center for 13 graduating seniors from Springfield area high schools.
- Placed 14 students in work experience throughout the year as part of the Workforce Innovation and Opportunity Act (WIOA) program.
- Awarded 17 former BSEP participants \$25,000 in scholarships to support their pursuit
 of undergraduate and graduate education. Total Baystate scholarships awarded to
 date now exceeds \$695,000.
- Four BSEP alum began their nurse residencies at BMC. Also, BSEP trained four students as certified nursing assistants, one lab assistant, five phlebotomists, one operating room assistant, and one assistant in the Pain Management Office.

UMMS-Baystate

- UMMS-Baystate successfully enrolled its third class of 28 students.
- First cohort of UMMS-Baystate PURCH students began their clerkship rotations at Baystate Medical Center.
- UMMS-Baystate established an inter-professional health equity incubator group with local college, community, and organization leaders to create a shared vision and process for population health and advocacy in health professions students.
- UMMS-Baystate completed its first community pinning ceremony for students entering their clinical education, with community faculty acknowledged as a major part of their education.
- In addition to our residency and fellowship programs, Baystate provided training to over 450 medical students (completing clerkships and electives in various specialties), 1,000 nursing students and over 400 allied health students from local colleges and universities who completed clinical training as part of their associate, baccalaureate, master's and post-doctoral degree work.



Rebecca D. Blanchard, PhD

Senior Director of Educational Affairs, Baystate Health Assistant Dean for Education and Associate Professor of Medicine, UMMS-Baystate Director, BERST Academy



Kevin T. Hinchey, MD, FACP

Chief Education Officer, Baystate Health Senior Associate Dean of Education Associate Professor of Medicine, UMMS-Baystate

BERST Academy

- Currently has over 140 members, representing more than 60 professions across Baystate Health.
- Over 200 hours of formal educational content delivered since 2015.
- Content has inspired a "ripple across the pond" in the form of many spinoff educational innovations in various departments, including Patient Experience, Quality Improvement, Pharmacy, Internal Medicine, Baystate Reference Laboratories, and many others.
- IRB Educational project, consulted on by BERST, won national recognition.

Graduate Medical Education

- BMC achieved full institutional accreditation.
- 70% of programs are above the national average on Graduate Medical Council accreditation.
- 114 residents and fellows started their training at BMC this year.
- 12 of our graduating residents were hired as faculty by Baystate Heath, thus ensuring a talent pipeline for our region for the future.
- Newly accredited training program at BH: Child and Adolescent Psychiatry, starting in July 2020.

Continuing Interprofessional Education

- Over 24,000 credits awarded for educational activities in 2018 across 10 professions.
- The BERST Academy "Museum Rounds" experience was selected out of over 100 entries as a national best practice for interprofessional education by the Accreditation Council for Continuing Medical Education (ACCME) to be presented at the Joint Summit for Interprofessional Continuing Education.

Advanced Practice Providers

• First ever multidisciplinary meeting with representatives from local nurse practitioner and physician assistant educational programs was held with Baystate leadership. The goal of this meeting was to facilitate open communication regarding issues surrounding student placements and to present Baystate's new clinical placement process.



OFFICE OF Faculty Affairs

Having established the academic and professional development infrastructure to support our new regional campus, this past year the Office of Faculty Affairs (OFA) sought collaborative opportunities with other departments and service lines to engage our talented faculty.

- The Physician Leadership Academy (PLA) graduated another cohort of highly accomplished, emerging organizational leaders. Additionally, scores of PLA alumni continue their leadership development journey as participants in the PLA Alumni Luncheons, in which senior health system leaders speak about institutional challenges and opportunities, and as active members of six operations-oriented BMP committees that report directly to the BMP Board of Directors.
- The inaugural "Toast the Professors" event celebrated the 45 members of our faculty who have reached the pinnacle of academic achievement at UMMS-Baystate. Turn-out exceeded expectations and underscored the importance of bringing together this valuable organizational resource. Additionally, each Professor was given an engraved pin to be placed above his/her ID Badge denoting the individual as achieving this senior rank. Going forward, all newly appointed Professors will receive a similar recognition.
- · Hosted the inaugural Visiting Professorship (VP) to engage senior level and emerging leaders in discussions about what it means to be faculty in a world of health care consolidation and how leaders can invest inclusively in their workforce talent during times of change. VP activities included a luncheon and workshop with department chairs and service line leaders, a Grand Rounds lecture, and one-on-one mentoring sessions with women faculty.
- All newly hired physicians in the Heart & Vascular Service Line successfully completed a pilot Onboarding Mentorship Program. Each physician was paired with a senior mentor in the Service Line through a matching process that aligned professional interests and expertise. Mentors assumed responsibility for helping new physicians become oriented and connected to the organization to facilitate success in their roles.
- OFA launched a new website to better serve our 650 faculty, many of whom are at remote locations. The digital platform provides easy access to information and resources for appointment, promotion, and career development. It also highlights the on-going academic achievements of our faculty.

Please visit us at https://www.BaystateHealth.org/Education-Research/Faculty-Affairs.



Amy S. Gottlieb, MD, FACP Chief Faculty Development Officer, Baystate Health Associate Dean for Faculty Affairs Professor of Medicine and Obstetrics and Gynecology, UMMS-Baystate



OFFICE OF Research

Baystate research had a landmark year in FY19. Several mid-career clinician-investigators achieved research independence with the receipt of their first NIH "R" awards, and new investigators launched their research careers with mentored career development awards. The Clinical Trials Office received a major infrastructure grant from the Massachusetts Life Sciences Center. External funding grew over 50% from FY18.

VALUE

- Annualized external direct costs for research surpassed \$13.8 million in FY19 using a new, more accurate and reproducible accounting method, a 53% increase over \$9.0 million in FY18 using the same methodology.
- Received \$3.9 million grant from the Massachusetts Life Sciences Institute to build a clinical trials unit at BMC, a satellite unit at BFMC, and expand clinical trials capability across BH.
- Staff from the Human Research Protection Program were awarded the national PRIM&R Outstanding Poster Award for "implementation of an informed consent simulation workshop enlisting the feedback of former research volunteers."
- Human Research Protection Program developed a new competency-based Human Research Protection training.

ACADEMIC INNOVATION

- Baystate faculty on track to publish 205 peer-reviewed research articles in FY19.
- Institute for Health Care Delivery and Population Science (IHDPS) faculty received several major NIH awards including: mixed methods study to identify and refine implementation strategies to increase use of cardiac rehabilitation for patients with heart failure (1R01HL146884); Identifying effective strategies used by Medicare Accountable Care Organizations to improve outcomes for patients with heart failure: mixed methods study (5R01HL139985); Implementation of inter-professional training to improve uptake of noninvasive ventilation in patients hospitalized with severe COPD exacerbation (1R01HL146615); A contemporary subgroup analysis of cooling after non-shockable cardiac arrest: Insights from a large registry (1R21HL144447), and Massachusetts Justice Community Opioid Innovation Network (JCOIN).
- Three junior IHDPS investigators received new NIH career development funding to launch their research careers.
- IHDPS faculty have 22 active external grants and published 73 articles.
- Epidemiology and biostatistics staff published 23 articles with UMMS-Baystate faculty and are working on over 100 active research projects.

MANAGEMENT AND IMPROVEMENT

- Expanded sponsored program support service's resources to the Affordable Care Organization, Baystate Franklin, and Baystate Noble.
- Sponsored programs administration implemented billing and reconciliation for non-cost reimbursement and clinical trial accounts.
- Implemented a cash-based accounting system for research on consultation from Price-Waterhouse-Cooper.
- Implemented a coverage analysis procedure to ensure proper separation of billing to clinical trial's sponsors and insurance.



Peter Friedmann, MD, MPH, DFASAM, FACP

Chief Research Officer, Baystate Health Associate Dean for Research and Professor of Medicine, UMMS-Baystate

TEAMWORK & COLLABORATION

Facing the Opioid Crisis with Compassion and Determination

Last year more than 2,000 lives were lost to opioid use disorder (OUD) in Massachusetts. While state-wide the numbers declined slightly, western Massachusetts saw a sharp increase in deaths. Patients in our area face unique barriers to care, including a shortage of treatment facilities and addiction specialists, socioeconomic barriers and continued stigma surrounding OUD. Baystate Health is taking a multifaceted approach to care for these patients that includes education, prevention, and treatment.

"We're changing how we approach patients with OUD, and working to expand services for them and remove barriers to treatment," says William Soares, MD, MS, Baystate Medical Center Emergency Department and a member of the OUD Task Force at BMC.

Care from the front lines

For patients with OUD, the Emergency Department (ED) is often a last resort. Some patients are brought in after an overdose; some have suffered a complication due to injecting drugs; others come in wanting help and don't know where to go.

"We have radically changed the way we approach patients with OUD in the ED," says Soares. "We used to send them away with a list of resources, requiring they take responsibility for their recovery. Now we talk to them about their needs and help facilitate their entry into treatment. In doing so, we decrease barriers to care and improve compliance. And that is key to saving lives."

Buprenorphine

Buprenorphine (Suboxone) reduces cravings for opioids and is a highly effective treatment for OUD. Medication therapy has proven to be highly effective if provided on demand to those with OUD. A 2015 Yale study found that buprenorphine initiated in the ED doubled the rate of patients still in treatment after 30 days. In response to mounting evidence, Massachusetts passed legislation in 2018 requiring that EDs create protocols to treat patients with OUD, including offering buprenorphine and connecting to outpatient services.

Making buprenorphine available as part of routine ED care required a cultural shift. Providers had to learn to screen, appropriately treat and discharge patients with a plan for continued therapy. Through the coordinated efforts of emergency providers, nurses, and mental health professionals, the Baystate Medical Center Emergency Department created a low threshold treatment model for patients with OUD, the ED Buprenorphine Pathway. Patients can now be immediately started on Buprenorphine in the hospital and receive a prescription to control symptoms. In six months, nearly 40 patients have gone through the ED Buprenorphine Protocol.

"For many patients, they're grateful that we are able to talk to them about their opioid use and offer treatment," says Soares.

Vital follow-up care

When a patient is discharged from the ED on the Buprenorphine Protocol, a team of follow-up nurses and mental health professionals connect with the patient via phone to set up a follow-up appointment, as well as assist with barriers to care including transportation, insurance or financial issues.

"This is an incredibly at-risk population," says Soares. "If they survive an overdose their risk of dying at one year is between 5-10%. It's like sending someone home who's having a heart attack. We have to do what we can to ensure they don't fall through the cracks."

EMBED Trial

One of the challenges of implementing OUD treatment in the ED has been how to incorporate a traditionally outpatient model into the fast-patient environment of the Emergency Department. In an effort to comply with the ED Buprenorphine Protocol, Baystate Health is involved in an NIH study led by Yale called EMBED (EMergency Department-Initiated BuprenorphinE for Opioid Use Disorder). The goal of EMBED is to create a user-friendly electronic application that removes burdensome documentation and barriers to treating OUD. At Baystate, ED team members worked with IT and TechSpring to create a unique Cerner-based "Care Pathway" that allows ED providers to quickly and efficiently screen and treat ED patients with OUD via tools embedded in CIS.



(From left) Stephen Ryzewicz, MD, Hope Schaffrick, MSW, LICSW, and William Soares, MD, MS.

Helping those not ready for help

There are also resources for those patients not yet ready to quit. With these patients, the goal is to keep them alive and healthy. "We tell them: 'every time you inject, you're rolling the dice," Soares says. His team, in collaboration with Tapestry Syringe Access, provides resources as well as harm reduction supplies, alcohol swabs, saline, band aids and other materials to keep patients safe.

"We try to do a lot of gentle teaching: 'If you are going to still inject drugs, let me show you that you can avoid an infection, an overdose, or death," says Soares.

Inpatient Addiction Consultation Service

"The field of addiction medicine has changed greatly in the last 20 years," says Stephen Ryzewicz, an internist with Baystate's Hospital Medicine Program and medical director of Baystate's Inpatient Addiction Consultation Service. "Addictive diseases were not well understood, and you often needed specialized providers to assist in their management. We now have the resources to better serve our patients."

Several years ago a Task Force at Baystate Medical Center led by Peter Friedmann, MD, chief research officer, Baystate Health, and Barry Sarvet, MD, chair of Behavioral Health, explored how to improve resources and treatment for inpatients dealing with addiction at BMC.

Last year Baystate Medical Center createded an Inpatient Consultation Service which fully launched in December 2019 with Stephen Ryzewicz as medical director, a social worker and a nurse practitioner. The service is a valuable resource to help any provider better understand the complexities of opioid withdrawal and care. Consults are linked to an order in CIS; providers can page to explain their questions and the team will determine the type of consult needed.

Stopping the revolving door

In addition to educating care providers about addiction related topics, The Inpatient Consultation Service team also:

- assesses inpatients for addiction or withdrawal
- · assists in managing withdrawal treatment for a number of different drugs
- starts patients on medication-assisted therapy at the hospital
- assists with the discharge/follow-up process and referral to outpatient treatment

The goal is to detoxify patients and connect them to treatment in as timely a fashion as possible, without interruption. The social worker helps with external barriers to treatment, like transportation, housing or insurance issues, serves as a liaison to Behavioral Health staff, and helps connect patients with a recovery coach.

"We want to seamlessly discharge patients with connection to community drug, rehabilitation, detox, clinic appointments, so they don't have a waiting lag time between discharge from the hospital and a clinic appointment," says Hope Schaffrick, MSW, LICSW, clinical coordinator, Inpatient Addiction Consultation Service.

"They leave and we provide what we call 'a hot hand off.' We have people to advocate for them; people to follow up, to support them and help them make connections in order to and get started on the road to recovery," says Ryzewicz.

"We're reducing the barriers," he continues. "We're more quickly identifying patients with OUD. We're preventing readmissions and deaths. This is an area that's been tremendously underserved. We can do better and we are doing better."

TEAMWORK & COLLABORATION

Caring for the "Whole" Patient

The Transition of Care Team of the Medicaid Accountable Care Organization (ACO) plays a critical role in bridging the gap between hospital and home.

For many patients, the medical issues that lead them to the Emergency Department (ED) or an inpatient admission are often just one small part of a bigger story. Lack of transportation, behavioral health challenges, addiction, homelessness, food insecurity, lack of family support and other issues can serve as barriers to patients receiving care and acting on advice from care providers. A newly formed Transition of Care Team at Baystate Medical Center meets with inpatients facing compliance challenges and continues to follow up with home visits within their first 30 days after discharge. The results are telling: reduced ED visits and inpatient re-admissions, improved outcomes, and lives changed as the team addresses "missing pieces" and cares for the whole patient.

It starts in the hospital

Nurse Care Manager Anne Wright, RN, leads the Transition of Care Team, which includes community health workers, a social worker, clinical pharmacist, recovery coach, behavioral health provider, and an administrative coordinator. Each morning the team reviews ACO (Medicaid) patient admissions, flags high utilizers, reviews their charts and discusses amongst each other how the team might best help. Eligible patients must be adults readmitted within the past 60 days who have a primary care provider at one of the ACO health centers.

Wright makes the initial contact with patients in the hospital, seeking their consent to do a "needs assessment" (about 75% give consent). Each day she visits up to four new patients and returns with appropriate team members for follow-up visits with patients while in the hospital. To make patients feel more at ease, team members dress casually; many are bilingual.

"The team will ask: do they have additional social needs after they leave the hospital?" says Preeti Nakrani, MPH, ACO Program Manager, BeHealthy Partnership. "We're there to bridge the gap between the hospital and the care management team at the community health centers."

Home visits provide essential follow up

During the first 30 days after discharge, a patient is at the highest risk for hospital readmission. And the first 24-48 hours after discharge are most critical for ensuring a patient's care plan adherence. The Transition of Care Team helps with both.

"We give them a point of connection," says Wright, who works to visit every patient within 48 hours of discharge. "We want to find anything that is detracting from their healthcare and putting them at risk to return to the hospital."

A major challenge immediately following discharge involves taking medications or following the care plan. "If a patient is supposed to take medication but has no transportation to pick it up, that's an issue," says Nakrani. "If they have discharge instructions but have a language or educational barrier and can't read them, then that impacts their compliance."

The home visit, Wright says, would be much less likely without her first connecting with patients in the hospital.

"The hospital visit is vital, because you establish a connection. People are much more likely to allow you into their homes if they've already made a connection with you," she says.

We give them a point of connection.

 Anne Wright, RN Nurse Care Manager, Transition of Care Team



Homes visits continue with periodic check-ins from team members over the first month following discharge. The team works to connect patients with needed resources, including follow-up appointments with their primary care physicians. "These visits ensure no one, or no issue, falls through the cracks—and it's working," says Nakrani.

Making an impact

The Transition of Care Team has cared for more than 300 patients since its inception in September 2018. For patients seen between September 2018-January 2019, 90 days after their intervention: readmissions decreased by 64%; ED visits decreased by 56%; and admissions decreased by 61%—which resulted in an estimated \$1.4 million in cost savings. And lives are changed—for the better.

"We often receive feedback from patients saying, 'No one has cared this much about my health,'" says Nakrani. "This is community-based, face-to-face care management. We meet them at their comfort level, and we're invested in their health. It's just better care."

Transition of Care Team members (left to right) Agnes Jimenez, recovery coach, Anne Wright, nurse care manager, and Rafael Lopez, community health worker.

MEETING PEOPLE WHERE THEY ARE

Rafael Lopez has walked in many of his patients' shoes. A community health worker on the Transition of Care Team, Lopez recounts a childhood growing up "in the projects" and with family members who had behavioral health needs.

"I know the struggles, the stigma, the stereotypes," he says.
"I know what it takes to get past the barriers."

Lopez says one of the most important things his team does for their patients is learn their most pressing needs and set them up with the proper resources to get those needs met. That may mean everything from finding addiction counseling to helping them fill out SNAP or Social Security paperwork, to dropping off housing applications, or picking up medications.

One patient recently shared that he could not read or write and had been laughed at by people for trying to learn at his age. Within days the team had set him up with a Learn to Read and Write program three mornings a week.

Anne Wright saw one patient after he had recovered at home. He had gotten new clothes, a haircut, and a new outlook on life. "Someone helped me," he said, "and now I'm going to help myself."

Lopez sees this transformation often. "With our patients, something they need that might seem so small. When it's followed up on and taken care of quickly, it makes such an impact on them – and also on their compliance and follow-up with their care," he says. "They feel confident and engaged and that someone has their best interests at heart."

TEAMWORK & COLLABORATION

DispatchHealth Provides Alternative to Emergency Department Visits

In partnership with Baystate Health, Baycare Health Partners, and Health New England, **DispatchHealth** offers advanced home health care services to patients who would otherwise go to a hospital emergency department.

How it Works

DispatchHealth sends an advanced practitioner and a medical technician via "Rovers," small SUVs equipped to deliver acute care.

Providers from doctor's offices, skilled nursing facilities, and other care teams refer patients who live in Hampden and Hampshire counties to DispatchHealth based on specific criteria. Services are available 8 a.m.-10 p.m., seven days a week, including holidays.

Baycare nurse care managers/care coordinators and other clinicians, as well as the DispatchHealth team, carefully review requests to help ensure care is delivered in the right place at the right time. Occasionally a patient's care is deemed too complex or time-sensitive, and emergency medical services are recommended at the time of the referral or during a patient visit.

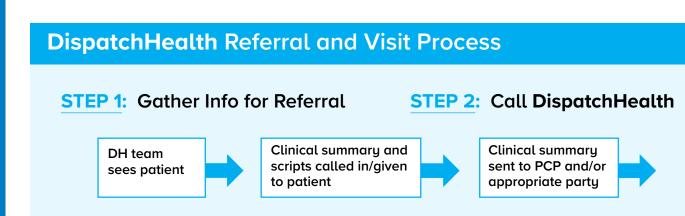
Since beginning in November 2018, DispatchHealth has served nearly 3,000 patients and has helped avoid close to 500 ED visits and hospital admissions. "These visits can be significantly less costly than an ED visit, which means cost savings to patients and insurers," says Nathan Stanaway, Senior Clinical Business Manager, Mobile Care & EMS.

Care Coordination

Every patient receives a printed care summary note, and a clinical summary is sent via call, fax or secure text to the patient's primary care provider, care management team and/or home care teams. Additionally, DispatchHealth providers follow up with primary care providers and patients on any labs or tests. Three days after the visit DispatchHealth calls patients to evaluate any further needs. After 14 and 30 days, DispatchHealth checks if the patient visited an ED. Nationally, only 8% of DispatchHealth patients are seen in an ED within 30 days after a home visit compared to about 20% after traditional ED visits.

Addressing A Need

DispatchHealth began after co-founder and then emergency physician Dr. Mark Prather witnessed the need for a better way to provide care to patients who lacked transportation, mobility or access to acute care when there was no life threatening need for care. He and his team started to travel to patients' homes equipped to provide acute care. He quickly confirmed that a high percentage of patients who would have called 911 could be safely and effectively treated at home at significantly lower cost and with a better patient experience. DispatchHealth was born shortly after in 2013.





Dr. Andy Artenstein, chief physician executive and chief academic officer, Baystate Health and president, Baystate Medical Practices, met Prather at a conference and the partnership was launched less than ten months later.

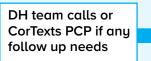
"The novel partnership between Baystate Health and DispatchHealth represents the first of its kind in the northeast United States and we believe addresses a key component in accessibility for our patients: the ability to receive care for acute medical conditions in a lower cost setting compared with emergency departments – their homes," says Artenstein. "The outcomes so far have been outstanding and patient satisfaction has been absolutely wonderful. We are hoping to expand the service over the coming years."

To learn more, visit DispatchHealth.com or contact Susan.Lanesey@DispatchHealth.com (607-624-2534).

these visits can be significantly less costly than an ED visit, which means cost savings to patients and insurers.

Nathan Stanaway
 Senior Clinical Business Manager,
 Mobile Care & EMS

STEP 3: DispatchHealth Team Calls Patient to Set Up Visit:



DH team reviews any tests/x-rays sent out once results are in



DH team calls patient and PCP with results



DH team attempts f/u call with patient 3 days after visit

DEPARTMENT Highlights

Department of ANESTHESIOLOGY

Peter Vieira, MD Interim Chair, Department of Anesthesiology



Baystate's Department of Anesthesiology is a team of 52 physician anesthesiologists, 52 certified registered nurse anesthetists (CRNA), four nurse practitioners, and 29 residents and fellows who provide anesthesia and pain management services in alignment with Baystate Health's strategic goals of top tier performance in safety, quality, patient experience and value.

SAFETY

- Developed a tracking system with live follow-up for patients who have had regional analgesic blocks in both the inpatient and outpatient settings to proactively detect any adverse events and evaluate patient satisfaction.
- Worked in partnership with multiple departments in the development of an improved disinfection process for ultrasound probes.

QUALITY

- Collaborating with multiple surgical subspecialties in the development of ERAS (Enhanced Recovery after Surgery)
 protocols which minimize opioid exposure and result in potential shortened hospitalizations.
- Developed a new program with Baystate Rehabilitation Services providing on-site physical therapy services at the Pain Management Center allowing for patients to receive physical therapy services following initial evaluation and after certain procedures to expedite functional rehabilitation.

EXPERIENCE

- Launched new pain procedures to improve pain control and minimize opioid use for chronic pain: viscoelastic supplementation fur knee osteoarthritis; cooled radiofrequency ablation of sacral nerves for low back pain; and dorsal root ganglion stimulation for chronic regional pain.
- Participated in a national patient experience survey for all patient encounters to assess patient satisfaction, evaluate for areas of improvement, and compare to national anesthesia benchmarks.

VALUE

- Tracking of intraoperative cases across the system to assist Baystate leadership with implementation of more efficient surgical care.
- The Department of Anesthesia has worked with our colleagues in Pre-Admission Testing and Blood Bank Services to ensure pre-operative testing is only performed if a patient's history dictates its need, eliminating unnecessary lab work and optimizing resource utilization.

- Three physician faculty are serving on the American Board of Anesthesiology as examiners.
- Introduced simulator training in the Pain Management Fellowship for fluoroscopy-guided injections, hastening the learning curve for interventional procedures by the pain fellows.
- Implementation of Objective structured clinical exams (OSCEs) and a mini-lecture series as well as creation of dedicated quality improvement and research lectures to enhance the preparation of residents for their board examinations.
- Development of a point of care ultrasound curriculum.
- Implementation of anesthesia knowledge tests for written exam assessment resulting in 100% board pass rate on the basic exam for our current residents.

Department of EMERGENCY MEDICINE

Niels Rathlev, MD Chair, Department of Emergency Medicine Professor of Emergency Medicine, UMMS-Baystate



The Department of Emergency Medicine continues to be the busiest ED in Massachusetts and has the highest acuity of illness this year of any ED in the entire country. The academic productivity is accelerating as the department now has five research grants funded by the National Institutes of Health (NIH) and Agency for Healthcare Research and Quality (AHRQ).

SAFETY

- The High Frequency Utilizer program has expanded to include more than 120 complex patients with substance use disorder and individuals who potentially pose a threat to staff and other patients.
- In conjunction with hospitalists, surgeons, and other specialty consultants, we have improved communication around hand-offs and recommendations for the further plan-of-care. This involves direct communication in person or by phone.
- Enhanced Fast-Track continues to provide access for ESI 3-5 (i.e. lower acuity spectrum) patients eight hours per day, five days per week. More than 30 patients are being seen in this area per day currently.

QUALITY

- Our pediatric behavioral health collaborative, in conjunction with the Departments of Pediatrics and Psychiatry has presented the opportunity for the department to be a national leader.
- A departmental faculty member serves as Chair for the National Disaster Life Support Foundation Basic Disaster Life Support Course Committee and the National Association of EMS Physician's Emergency Preparedness Committee.
- Zero catheter-associated urinary tract infections (CAUTI) were attributed to the ED in the last six months of the fiscal year.

EXPERIENCE

- The Pediatric ED is exceeding the goal for patient experience for "Willingness to Recommend."
- Emergency Medical Services (EMS) initiated collaboration with a commercial vendor to provide Mobile Integrated Healthcare. EM faculty serve as medical and administrative directors for this program. The hope is to reduce potentially avoidable ED visits.
- Physician engagement remains strong based on the 2019 survey.
- "Burnout" survey scores for physicians are significantly lower than the national average for emergency medicine.

VALUE

- The Baystate Medical Center ED has the highest acuity of any ED in the country based on Emergency Severity Index and Evaluation & Management codes compared with the Association of Academic Chairs of Emergency Medicine (AACEM) benchmarks.
- Work Relative Value Units (wRVU) per attending physician clinical hour exceeded 75th percentile compared with national benchmarks of AACEM.
- A departmental faculty member was appointed National American Medical Association CPT Advisor representing the American College of Emergency Physicians.
- Reserves and payments for medical malpractice cases have decreased significantly over the last 10 years.
- Net revenue exceeded BMP budget by over \$800,000 year-to-date.

- Departmental physician investigators are recipients of five federally funded research grants year-to-date. This
 includes two five-year "K" (i.e. early career) awards from the Agency for Healthcare Research and Quality and
 National Institute on Drug Abuse, respectively, a two-year K award, an R21 award from the National Heart, Lung,
 and Blood Institute, and a T32 training grant from the National Institutes of Health.
- A departmental faculty member received the "Excellence in Research Mentoring Award" for Baystate Health.
- A published meta-analysis by one of our faculty members on the topic of contrast-induced nephropathy was voted "Best Research Paper" by the Academy for Women in Academic Emergency Medicine.
- A departmental faculty member received the "Dean's Outstanding Mentor Award" from Tufts University School
 of Medicine.



Abraham Thomas, MD, MPH Chair, Department of Medicine Professor of Medicine, UMMS-Baystate



The Department of Medicine at Baystate Health has over 600 staff members, including 241 physicians and 72 advanced practice providers working as a team to serve our patients and our community in the areas of primary care, inpatient care, specialty care, and procedures. The Department is active in training the next generation of physicians and the production of scholarly activity. A selection of the numerous activities of the Department is highlighted below.

SAFETY

- Initiation of a dedicated Intermediate Care Hospitalist model enabling improved patient care and progression in the intermediate care unit at Baystate Medical Center (BMC).
- Overhaul of the BMC kidney biopsy program in order to provide better patient experience and safety through the
 multidisciplinary work of nephrology, radiology, nursing, and healthcare quality, which included culture of safety
 training.
- Developed two additional Clinical Care Pathways (atrial fibrillation with rapid ventricular response and alcohol
 withdrawal) in the electronic medical record and implemented them into clinical practice.
- Significant involvement by members of the department in the work related to decrease catheter associated urinary tract infections and unnecessary telemetry utilization by collaborating with areas such as nursing, quality and safety, process management, and other clinical areas.

QUALITY

- Increasing same day urgent/acute care slots for patients at each community health center to a minimum of 15 slots/ day has contributed to decreasing Emergency Department visits from patients who are enrolled in the BeHealthy Partnership (Medicaid ACO).
- Baystate Health received a grant for enhancing food and social service referrals and access at the Mason Square Community Health Center in collaboration with Martin Luther King (MLK) Family Services and the Food Bank of Western Mass.
- Baystate Health received a grant from CVS Health to assist the Community Health Centers to Combat Opioid Abuse.
- Initiation of the Addiction Medicine Service in conjunction with the Department of Psychiatry.
- Improvement in the process for managing patients in the observation unit has decreased length-of-stay there and led to the creation of an additional observation unit to expand on the success of this work.

EXPERIENCE

- All Hospitalists completed the "Compassionate Connections" workshop and "Shared Decision Making" education to improve the experience of our patients and their families while seeking care at Baystate Health.
- As part of a "learning collaborative" project, improved access for new patients to be seen in the endocrinology clinic
 was achieved by partnering with primary care physicians to return those patients who no longer need to be seen by
 endocrinologu.
- Received "Honorable Mention for Experience" for the President's Excellence Award for Expansion of Clinical Pharmacy Services at Baystate High Street Health Center-Adult Medicine team.

VALUE

- Overall winner of the President's Excellence Award and winner for the "value" category for the "Hurricane Disaster Strikes a Chord at Baystate Health: The Puerto Rico Evacuee and Triage Clinic Team" work.
- Hospitalist volume increased by 5.5% compared to FY18.

- Members of the Department of Medicine brought in 22 new grants and \$29,804,000 of total funding to Baystate Health.
- In FY19, the Department of Medicine had 105 peer-reviewed publications.
- Implemented a weekly newsletter, "IMPress" to inform the residents and the Department of Medicine teams as to upcoming events and to provide weekly recognitions for those who go above and beyond their duty.
- · Both the Medicine and Medicine-Pediatrics residencies achieved a 100% board pass rate.

OBSTETRICS AND GYNECOLOGY

Heather Sankey, MD
Chair, Department of Obstetrics and Gynecology
Professor of Obstetrics and Gynecology, UMMS-Baystate



The Department of Obstetrics and Gynecology provides services over the entire region, at all four hospitals, and at more than a dozen outpatient sites. We are designated a level 3 perinatal center by the department of public health and are the tertiary care referral center for western Massachusetts for high risk obstetrics, complex gynecologic surgery, gynecologic cancers and fertility treatment. We have successfully recruited physicians and midwives to fill gaps left by retirement and transitions. We look forward to increasing access over the coming year.

SAFETY

- Our obstetrics unit at Baystate Medical Center decreased the percent of women requiring blood transfusions due to postpartum hemorrhage from 2.5% last year to 0.74% this year (57 fewer women).
- Our Women's Evaluation and Treatment Unit leaders worked with the Emergency Department to streamline transfers of care for pregnant women arriving by ambulance to the ED.

QUALITY

- The surgical site infections for abdominal hysterectomy decreased to 0.81% through a collaborative effort with the operating room.
- We partnered with Premier consultants to perform a detailed assessment of Baystate Medical Center maternal and neonatal care as part of their "Bundle of Joy" initiative and will be focusing on improvements in the areas of hypertension and substance use disorder.

EXPERIENCE

- We expanded accessibility for patients to subspecialty care in Urogynecology in Westfield, Greenfield, and Longmeadow.
- Department members broadly supported the first annual Ovarian Cancer Walk, raising \$5,000 of the \$20,000 raised to support the needs of women in treatment for ovarian cancer.
- We instituted a Tele-Psych program with Pioneer Women's Health in Greenfield increasing access to care for pregnant women with mental health disorders.
- We are working with the March of Dimes to establish group prenatal care visits at Wesson Women's Clinic and Pioneer Women's Health in addition to our Centering Program at the BH Community Health Centers.

VALUE

- We have noted a significant increase in the Case Mix Index which measures the level of co-morbidities in our patient population. This is due to both increased accessibility to transfers from level I obstetrical units and to a coding improvement initiative.
- We expanded our work with the "EMPOWER" program for pregnant women with substance use disorder. Twelve women from the Springfield community trained as intrapartum and/or postpartum doulas. We are working with community partners to identify grant proposals to continue that work.

- Gyn Oncology created an Ovarian Cancer Registry with Pathology.
- Baystate continues to be national leader in inter-professional education with midwifery students and ObGyn residents.
- Over 15 peer-reviewed publications and four book chapters were published, and ten posters were presented this year at both international meetings and national meetings.
- Baystate Gyn Oncology was recognized as the top recruiter nationally for a Gynecologic Oncology Group cancer trial.
- We celebrated our 25th class of midwives to graduate from our Midwifery Education Program.
- Pioneer Women's Health is contributing to the work done at Baystate Franklin for the "Moms Do Care" grant provided by the state for mothers with substance use disorder.

Department of

PATHOLOGY AND BAYSTATE REFERENCE LABORATORIES

Ashraf Khan, MD, FRCPath Chair, Department of Pathology Professor and Chair of Pathology UMMS-Baystate



The Baystate Health Department of Pathology and Baystate Reference Laboratories (BRL) is staffed by 22 subspecialty-trained pathologists, and 600 technical and support personnel. Our 10 Clinical Laboratory Improvement Amendments (CLIA) licensed laboratories provide high quality pathology and laboratory testing services system-wide and across New England in keeping with the BH mission and promise.

SAFETY

- Introduced multiple software applications and date management systems across laboratories system-wide to ensure stringent quality control and consistent accuracy.
- With support from a government-funded program, replaced a Cesium source irradiator with an X-ray irradiator resulting in significant safety improvement for personnel and faster turn-around-times for irradiated blood products.
- Our Director for Transfusion Medicine Services is internationally recognized for his seminal work on early mitigation of Transfusion-related adverse reactions. He was also appointed to the Hemovigilance Technical Advisory Group (TAG) of the Massachusetts DPH.

QUALITY

- The Microbiology laboratory joined efforts with the Antimicrobial stewardship committee by implementing molecular (PCR) testing for MRSA colonization testing for pneumonia patients resulting in better antibiotic therapy.
- We established an integrated, system-wide quality management program, the Laboratory Quality Council, to increase engagement, standardize processes and enhance quality metrics across all BH clinical and anatomic pathology laboratories.

EXPERIENCE

- Due to faculty efforts and BH leadership support, we saw a significant rise in provider PressGaney Employee Engagement scores to tier 1.
- As a result of the formal Failure Mode Effect Analysis (FMEA) process led by Performance Excellence Team, made laboratory-led workflow and staffing changes to facilitate the admission and discharge process in the morgue resulting in an improved morgue process and compassionate care of our decedents.
- Implemented a monthly newsletter, Lab Links, to provide a forum across BRL to communicate ongoing changes and provide administrative updates.

VALUE

- By consolidating referral testing and altering national reference laboratory partnerships, the laboratory significantly reduced expenses for send-out tests.
- Implemented state of the art Next Generation Sequencing (NGS) testing for solid tumors to determine eligibility for novel cancer drugs adding to services for cancer patients.
- Partnered with physician groups outside the BH to seek new opportunities for growth and diagnostic support to tertiary care provider groups to generate new revenue and provide high quality tertiary care to the patients of greater Springfield.
- Working with BMP we recruited a dedicated coordinator for BMP practices to upgrade and standardize practices, enhance billing, reduce costs and increase compliance.
- In Anatomic Pathology we undertook quality improvement projects to evaluate workflow and resource utilization in histology resulting in cost savings, better turnaround time and reduced provider burnout in the processing of GI biopsies; we will continue this effort with other specimen types.

- In partnership with College of American Pathologists, faculty members and residents used innovative teaching methods
 including web-based self-assessment modules, podcasts and webcasts for CME and Maintenance of Certification
 requirements.
- Our GYN Pathology group in collaboration with GYN Oncology and the Pioneer Valley Life Sciences Institute (PVLSI) led the
 initiative to establish a new ovarian tissue registry to collect samples from consenting patients for research.
- One of our breast pathologists collaborated with breast oncologists at BH, cancer biologists at UMASS Amherst, and PVLSI
 to get funding for a Department of Defense research grant to develop new testing to facilitate prompt diagnosis and reduce
 mortality related to post-partum pregnancy-associated breast cancers in women with BReast CAncer (BRCA) mutations.



Charlotte Boney, MD
Chair, Department of Pediatrics
Professor of Pediatrics, UMMS-Baystate



Baystate Children's Hospital (BCH) is the only accredited children's hospital delivering tertiary care to infants, children, and adolescents in western Massachusetts. The Department of Pediatrics at UMMS-Baystate provides the majority of inpatient and subspecialty care in western Massachusetts and primary care to the underserved in greater Springfield. Our vision is to be the premier children's hospital in New England by combining safety, quality, and compassionate patient care with outstanding medical education and innovative clinical and quality improvement research.

SAFETY

- BCH joined Solutions for Patient Safety in 2015, a network of >130 children's hospitals sharing data and best practices to reduce harm. We had a 23% reduction in "serious harm events" in FY19.
- Central Line Associated Blood Stream Infections (CLABSI) and unplanned extubations declined in 2019: 3 and 16
 respectively in 2019 compared to 8 and 18 in 2018. The Neonatal Intensive Care Unit exceeded 170 days without a
 CLABSI on 9/30/2019.
- · Revamping the newborn screening process resulted in a cessation of specimen misplacement.

QUALITY

- A multidisciplinary initiative between the Pediatric Emergency Department, Behavioral Health, and Pediatric Hospital
 Medicine resulted in improved coordination of care and enhanced treatment for children with behavioral/mental
 health needs and inspired region wide collaborations among community mental health services, state Health and
 Human Services departments, and Baystate Health.
- The EMPOWER program to support new mothers and their newborns impacted by Opioid Use Disorder has been so successful that funding for the program was adopted into the Massachusetts FY20 State Budget. The focus on non-pharmacological care (e.g. keeping mother/baby together, skin-to-skin contact, encouraging breastfeeding) has decreased pharmacologic treatment and length-of-stay in the hospital.
- Pediatric Hospital Medicine assumed 100% of inpatient medical care on 1 October 2019, promoting a single, high
 quality standard of care for children at BCH.
- Keeping specialty care local was achieved through alliances with Boston Children's Hospital, Tufts, Connecticut Children's Medical Center, and UMass Memorial Children's Medical Center.

EXPERIENCE

 PressGaney surveys revealed that the Divisions of Cardiology, Infectious Diseases, Neurology, and Pulmonary met or exceeded the BMP threshold of > 89.1% of respondents "Willing To Recommend" (WTR) Baystate Health. The Division of General Pediatrics showed the most improvement with a >6% increase in WTR.

VALUE

- The Pediatric Antibiotic Stewardship Program reviewed 436 antibiotic prescriptions in the past 12 months. Using the
 metric "days of therapy/1000 patient days per month" results demonstrated a significant reduction in antibiotic use
 from 247.3 before program implementation in February 2015 to 183.0 since September 2018.
- Hospital Medicine and Critical Care collaborated to increase adherence to bronchiolitis guidelines, resulting in a 69% reduction of medications. Their collaboration to reduce costs of asthma admissions resulted in a reduction of \$258/case.

- Academic productivity decreased slightly to 24 publications; however, abstracts with residents presented at meetings increased.
- The pediatric categorical residency received 1,128 applications and interviewed 181 candidates to successfully match 9 medical students. The pediatric board pass rate has remained above 90% for 3 years: 92% in 2016, 94% in 2017, and 92% in 2018.
- An interdisciplinary task force created to improve residency training in mental and behavioral health disorders implemented a rotation in behavioral health, which is now a model for residency programs nationwide.



Barry Sarvet, MDChair, Department of Psychiatry
Professor of Psychiatry, UMMS-Baystate



The Department of Psychiatry is committed to the goal of advancing integrated and patient-centered models of behavioral health service delivery through the provision of innovative clinical programs across the health system. We also prepare the next generation of clinical providers for emerging models of psychiatric treatment and improve access to mental health care in our community.

SAFETY

- Formation of the Children's Behavioral Health Coalition, a multidisciplinary system-wide initiative to improve the safety of our patients and staff in the care of pediatric patients with behavioral health needs across the entire health system.
- Expansion of the Psychiatric Neurotherapeutics program to offer parenteral administration of the rapid-acting, antidepressant esketamine, a new treatment shown to reduce risk of suicide for patients with treatment resistant depression.
- Expansion of evidence-based suicide assessment and management protocols across behavioral health and related departments.

QUALITY

- Initial implementation of a cloud-based platform for the incorporation of patient reported outcome measures into the process of care for behavioral health treatments.
- Launch of an Addiction Consultation Team at Baystate Medical Center for improvement of quality and access to care for patients with substance use disorders.
- Staff development initiatives to support the provision of additional, evidence-based psychotherapy models for children and adult patients with post-traumatic stress disorder.
- Publication of MA Child Psychiatry Access Program clinical algorithms to promote best practices in treatment of depression, anxiety, Attention Deficit Hyperactivity Disorder (ADHD), and Obsessive Compulsive Disorder (OCD) in the pediatric primary care setting.
- Introduction of tele-mental health practice within the Integrated Behavioral Health division for improving accessibility
 of treatment for patients with behavioral health needs in the primary care setting.

EXPERIENCE

- Initiation of the Baystate Women's Mental Health Program focused on addressing perinatal psychiatric illnesses in collaboration with the Department of Obstetrics and Gynecology.
- Development and implementation of the Bridging and Acute Care Clinic to improve access to care for children with mental health needs.
- The Baystate Family Advocacy Center, a mental health treatment program devoted to caring for children and families impacted by traumatic stress, has an improved environment-of-care with their move into a newly developed facility on 300 Carew Street.

VALUE

• Ongoing planning for the development of a consolidated, inpatient psychiatric facility with opportunities for improved economy of scale and other enhancements.

- Planning for new Child and Adolescent Psychiatry Fellowship has been completed and approved by the ACGME; the program will launch on 1 July 2020.
- Members of the psychiatry department have published two books as well as over 20 abstracts and papers during
 the past year on themes including palliative care, primary care/mental health integration, and psychiatric care of
 medically ill patients.
- The department is collaborating on a grant from Agency for Healthcare Research and Quality (AHRQ) focused on
 evaluating the feasibility and value of measurement-based care practices in the treatment of depression.
- The department was awarded a \$1M supplemental grant from Substance Abuse and Mental Health Services Administration (SAMHSA) to conduct a project to provide innovative training programs to build capacity in trauma-informed mental health care for primary care providers and mental health professionals in Puerto Rico.
- Initiation of a new psychiatric clerkship for physician assistant students in collaboration with Westfield State University.

Department of RADIOLOGY

Richard Hicks, MDChair, Department of Radiology
Associate Professor of Radiology, UMMS-Baystate



The Baystate Health Department of Radiology is staffed by 45 radiologists and over 350 technologists and support personnel supplying imaging services across 4 hospitals, 6 large outpatient centers, and 7 smaller outpatient sites. We are proud to perform approximately 660,000 high-quality diagnostic imaging studies per year.

SAFETY

- Launched a first in the region program developed by a partnership between interventional radiology and radiation oncology to inject Space OAR gel to lessen rectal toxicity from prostate cancer radiotherapy.
- Contributed to the development of the Pulmonary Embolism Response Team to standardize reporting language for pulmonary embolism and offer consistent treatment options, including catheter-directed pulmonary artery interventions.
- An ongoing comprehensive quality assurance review process was instituted for radiology technologists.

QUALITY

- Baystate Mary Lane Imaging Center opened in September, culminating a multi-year roll out of digital breast tomosynthesis (3D mammography), which is now available in all regions.
- Funding received for a spectral cardiac CT to be installed at BMC in the next year, enabling significantly faster, higher-quality cardiac studies as well as dual-energy CT capabilities.
- Continued work with a multidisciplinary team towards achieving National Accreditation Program for Breast Centers certification.
- Joint venture MRI sites at Wason Ave, BFMC, and BWH awarded "Center of Excellence" status by Covera; Walmart employees will be the first to be steered towards these sites.
- Participation in multiple national registries confirms radiologists are meeting or exceeding standards.

EXPERIENCE

- New dual-purpose room created for ultrasound-guided procedures and less complex interventional radiology cases utilizing C-arm guidance, increasing capacity for two, critical high-demand services.
- Engagement scores improved with several divisions moving into Tier 1.
- Outpatient BMC radiology overall scored better than 85%, surpassing its target for Top Box "Willingness to Recommend," and 7 out of 8 radiology divisions are beating their individual goals.
- Outpatient radiology services were provided to new, joint venture Urgent Care Centers in Longmeadow and Westfield
 and were integral to the successful debut of the Baystate Health and Wellness Center-Longmeadow.

VALUE

- With the incorporation of radiology services at Baystate Noble, one tightly-aligned academic radiology group now
 performs all imaging across Baystate Health. This has enabled further integration of distributed service sites into a
 cohesive radiology department.
- BMC radiology volume continues to be strong, up by 2.7%. Distribution is favorable, with inpatient volumes flat, while ED volume is +2%, and outpatient volume is +5.7%.
- BMC radiology annualized gross revenue of \$241M is 8% ahead of last year and \$14M better than budget, while expenses have been kept flat.
- Clinical decision support pilots continue and the groundwork has been laid for a system-wide rollout in advance of the 1 January 2020 deadline.

- Six radiologists joined the department as assistant professors, and four new radiologists have pending academic
 appointments. The first thoracic radiologist joined our staff. There were two promotions to associate professor and
 one promotion to professor.
- Seven peer-reviewed articles and 40 national presentations/abstracts/posters were produced by staff.
- Multidisciplinary efforts to promote cardiac MRI and CT with the addition of a cardiologist to the reading panel.
- Strategic artificial intelligence partnership formed with Life Image and Google, coordinated through TechSpring.
 Projects will mine data from imaging and the EMR looking at selection of stroke patients for intra-arterial therapy, optimizing clinical utility of image comparison algorithms, and matching disease and patient characteristics with oncology clinical trials. This initiative includes funding support of BMC efforts for 3 years.







The Department of Surgery is a team of 51 surgeons, 38 advance practice providers, and 165 employees. We have made significant progress in the past fiscal year towards advancing Baystate Health's strategic goals.

SAFETY

- Colorectal Surgery, Thoracic Surgery, and Advanced Abdominal Wall Reconstruction have enhanced recovery programs including Immunonutrition guidelines "Prehab."
- Expanding the robotics program for Thoracic Surgery.
- "Stop the Bleed" initiative brought to the Springfield schools.
- Trauma Nurse Education lecture series on burns and adolescent suicide prevention.
- The Baystate Weight Loss Surgery Program became a participating center for the national Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP) "BSTOP" initiative to make bariatric surgery safer by tracking and controlling opiate prescription practices.

QUALITY

- GI surgical Quality Workgroup: quarterly auditing and improvement of parameters include cost of care, surgical site infection rates, readmission rates, discharge to home, and length of stay.
- Adult and pediatric National Surgical Quality Improvement Program (NSQIP). The American College of Surgeons (ACS)
 NSQIP is a nationally validated, risk-adjusted, outcomes-based program to measure and improve the quality
 of surgical care.

EXPERIENCE

- The department of surgery surpassed the % Top box "Willingness to Recommend" 92.4%.
- Postoperative telemedicine program for Colorectal surgery patients to connect with patients in the first week after discharge to identify early postoperative issues.
- Streamlined scheduling process to get patients a definite surgical date in a timelier fashion.
- Baystate Plastic Surgery has expanded to better serve the communities of western Massachusetts including Metro Springfield, BWH, Longmeadow, BFMC, and Northampton.

VALUE

- Overall positive per case margin in Colorectal Surgery with supporting attempts to reduce cost of care with reduced length of stay and postoperative complications including Surgical Site Infection (SSI).
- Baystate Breast Specialists practice continues to grow with an 18% increase of newly diagnosed breast cancer patients.
- Establishing BMC as a regional referral center for complex esophageal surgery.
- 100th Peroral Endoscopic Myotomy (POEM) procedure performed at Baystate Medical Center. POEM is an endoscopic approach to treat achalasia, performed with both a surgeon and a gastroenterologist present and because it is less invasive than the traditional surgical approach to this disease, it results in a significantly shorter hospital stay for patients.

ACADEMIC INNOVATION

- Achieved 8 new academic appointments, 1 promotion to UMMS-Baystate, and 1 Emeritus Professor of TUSM.
- Instituted robotic simulation and training for Surgical Residents.
- Matched Chief Residents in Pediatric Surgery at Toronto Sick Kids and in Cardiothoracic Surgery at Allegheny Medical Center.
- 26 journal and textbook chapter publications.
- Residency received approval from the Accreditation Council for Graduate Medical Education Residency Review Committee for a permanent expansion of complement from 6 to 7 per postgraduate year.
- The American Board of Surgery reported that Baystate graduates have a 100% pass rate on the Qualifying Exam.
- The Baystate Simulation Center—Goldberg Surgical Skills Lab received its Level 1 reaccreditation from the American College of Surgeons Education Division, retaining its prestigious status as one of the early members of this 93-center international consortium.

BEST PLACE TO WORK

• A number of divisions are piloting programs with the physician wellness team to identify opportunities in surgeon schedules for modification to allow for more time outside of the hospital to help with resilience.

SERVICE LINE Highlights

BAYSTATE HEART AND VASCULAR PROGRAM

Aaron Kugelmass, MD

Chief of Cardiology and Vice President/Medical Director, Baystate Heart and Vascular Program
Professor of Medicine, UMMS-Baystate



Baystate Heart and Vascular Program remains focused on achieving top performance in safety, quality, experience, value and academic innovation.

SAFETY

• As part of our ongoing Culture of Safety effort, we have redesigned our Root Cause Analysis processes in order to enhance team work and collaboration.

QUALITY

- Blue Cross/Shield Cardiovascular Center of Excellence designation.
- US News and World Report "High Performing" designation for Aortic Valve Surgery (AVR), Coronary Artery Bypass Graft (CABG), and Congestive Heart Failure (CHF).
- Society of Thoracic Surgery 3 Star designation—the highest possible—for mitral valve surgery.
- The mortality rates for Transcutaneous Aortic Valve Replacement (TAVR) and Percutaneous Coronary Intervention (PCI) are in the top decile nationally, as are many related process measures.
- The Heart and Vascular Critical Care/Progressive Care Unit (HVCC/PCU) received the national Beacon Silver Award for the second time.
- The Left Ventricular Assist Device (LVAD) program continues to achieve benchmark survival for its patients. The program received Joint Commission Accreditation.

EXPERIENCE

- The Baystate Medical Center Heart and Vascular Center (Mass Mutual) patient floors achieve top PressGaney patient experience scores.
- The Wing Hospital Cardiology outpatient practice was recognized by PressGaney to be in the top 10% of clinics nationally.
- The Baystate Franklin Medical Center cardiology and vascular clinic and the Springfield vascular non-invasive laboratory were identified by PressGaney to be amongst the top 25% of outpatient clinics nationally.
- The "SeamlessMD" patient education tool was implemented for cardiac surgery patients with excellent patient acceptance.

VALUE

- Cardiac surgery reduced length of stay by 20% and hospital inpatient and observation re-admissions by 70%.
- A CHF bundle program was created within the Pioneer Valley Accountable Care Organization (PVAC), which significantly reduced costs for these patients.
- The Heart and Vascular Program completed and implemented a regional planning process designed to optimize the distribution of clinical services throughout the region.
- A Telehealth-based joint cardiology call program for Baystate Noble and Baystate Wing hospitals was implemented.
- The education required for nurse supervised extra corporeal mechanical oxygenation (ECMO) was completed; implementation of this program has begun.
- A post-acute CHF Center of Excellence was established in conjunction with Berkshire Health in their East Longmeadow facility.
- Significant schedule optimization was achieved in the Heart and Vascular Operating Rooms (HVOR) which has resulted in increased procedural scheduling and better patient access.

- The cardiology fellow board pass rate remains at 100%.
- A Baustate Medical Practice cardiologist received the Baustate Health Early Career Investigator Award.
- Baystate achieved top enroller designation for the Low Risk TAVR Continued Access clinical trial.
- Heart and Vascular sponsored several, successful continuing medical education (CME) programs including the Plotkin Annual Cardiovascular Symposium, the Enhanced Recovery after Cardiac Surgery Symposium, and the Western New England Regional STEMI Conference.
- Heart and Vascular faculty and trainees published 48 peer reviewed manuscripts and book chapters.

BAYSTATE REGIONAL CANCER PROGRAM

Wilson C. Mertens, MD, MSBA

Vice President and Medical Director, Cancer Services Chief, Division of Hematology Oncology Baystate Regional Cancer Program, Baystate Health Professor of Medicine at UMMS-Baystate



SAFETY

- The multi-year project to completely replace and update our radiation therapy equipment was completed, with the
 final linear accelerator and CT-guided brachytherapy planning implemented. Commissioning data on radiation beam
 delivery from the Radiation Physics Center at M.D. Anderson Cancer Center confirms excellent accuracy and precision
 regarding radiation beam delivery.
- The new chemotherapy pharmacy at the D'Amour Center for Cancer Care substantially expanded and fully compliant with new national and state regulations opened.
- Expansion of the D'Amour Center for Cancer Care's infusion suite, with additional chairs, examination room, and convenient patient waiting room, also opened. An additional expansion is planned for the coming year.

QUALITY

- Baystate Regional Cancer Program continues participation in the American Society of Clinical Oncology's Quality Oncology Practice Initiative (QOPI), with a 2019 certification score of 98.6%, one of the highest scores achieved nationally.
- The program's radiation oncology division application for accreditation with American College of Radiation Oncology
 has been accepted, and we are awaiting an external review.
- In collaboration with Baystate's Clinical Engineering and Information Services departments and Techspring, the
 division of radiation oncology is employing 3—D printing to develop more accurate skin overlays for surface
 brachytherapy treatment (the only such program in Massachusetts) and skin overlays for more even radiation dose
 distribution resulting from linear accelerator treatment.

EXPERIENCE

- The Program's Patient and Family Advisory Council (PFAC) has been formed and productive meetings have been held. The program's patient experienced scores, while improved, merit further attention, both in Springfield as well as in our regional sites.
- Construction was completed on our enhanced and expanded infusion suite and cancer center at Baystate Mary Lane Outpatient Center; it was officially opened in March 2019.
- Overall cancer program employee engagement scores continued to be high and exceeded the overall score of BH and BMC; provider scores were particularly high.
- The D'Amour Center for Cancer Care marked the 15th anniversary of its opening with a successful celebration in June 2019 to express appreciation for our generous donors, as well as key community and health system members.
- Plan is underway for expansion of clinical examination space to handle the increased number of patient referrals to the cancer program, to expand our benign hematology and survivorship/surveillance efforts, and for our hematology oncology fellowship program.

VALUE

- The cancer program, in partnership with BayCare and Pioneer Valley Accountable Care, is participating in an oncology chemotherapy treatment bundle, designed to test approaches to improve efficiency and reduce the cost of care.
- Volumes continue strong, with continued increase in cancer market share. Radiation therapy volumes are at program
 record highs, notwithstanding ongoing strong efforts to implement appropriate and evidence-based reduced
 fractionation, omission of radiation, and active surveillance.

- The program's faculty expanded substantially with the successful recruitment of three new specialists in hematology oncology, increasing our depth of oncologists in malignant hematology, gastrointestinal cancers, and breast cancer.
 Two of these oncologists are graduates of our hematology/oncology fellowship program. In addition, new faculty in radiation oncology and gynecologic oncology were recruited.
- Patient accrual to National Cancer Institute clinical trial cooperative group molecular therapy "basket studies" continues to be strong, demonstrating our commitment to "precision therapy" in cancer care.

BAYSTATE NEUROSCIENCES AND REHABILITATION

Edward Feldmann, MD, FANA, FAHA
Vice President and Medical Director,
Neurosciences and Rehabilitation, Baystate Health
Chair, Department of Neurology
Professor of Neurology, UMMS-Baystate



Baystate Health Neurosciences and Rehabilitation Service Line comprises the Department of Neurology and the divisions of Neurosurgery and Physical Medicine and Rehabilitation (PM&R), as well as outpatient rehabilitation. We are the tertiary referral site for neurosciences for western Massachusetts, providing state-of-the-art, technically advanced care for stroke and other time-sensitive diagnoses. We had several important accomplishments in 2019 that served to advance our health system goals:

SAFETY

- Improved infection control processes resulted in improved surgical site infections for laminectomy (0% Q1).
- There were no hemorrhage events in thrombolysis-treated stroke patients; the overall complication rate of 4.8% was below the benchmark for Coverdell academic centers.
- We implemented an improved, mandatory Falls Prevention Screening process in the BMC Emergency Department.

QUALITY

- Cervical Spine fusion: O/E (observed to expected ratio) for readmission of 0.92, and O/E length-of-stay of 0.76
 exceeded benchmark targets.
- The BMC Stroke Program received "Get With The Guidelines/Coverdell Gold Plus"- and Target Stroke: Honor Roll Elite Plus awards.
- The Baystate Sleep Center underwent program expansion and is the only laboratory in the region to perform intelligent Volume-Assured Pressure Support (iVAPS) to treat obstructive sleep apnea.

EXPERIENCE

- The infrastructure for an intake/navigation/care coordination spine care pilot was created and launched.
- Overall, "Willingness to Recommend" reached 86.3% (a 1.5% improvement).
- Neurosurgery reduced non-surgical visit volumes by creating a new patient visit workflow that evaluates and recommends conservative treatments for non-surgical patients; this workflow has also increased our surgical volumes.
- We introduced Neurology, PM&R and Sleep Medicine to the Baystate Health & Wellness Center-Longmeadow.

VALUE

- Overall schedule utilization reached 89% (target 85%), with new patient visit rates of 28.7% (target 24.25%), both contributing to improved accessibility for our patients.
- We have integrated video telemedicine through 2 clinic sites.
- We completed and initiated collaboration with the University of Massachusetts Medical Center to grow our Neurovascular Intervention service.

ACADEMIC

• Stroke clinical trials expertise has been recruited and developed; multiple clinical trials are in the process of startup.

BAYSTATE PRIMARY CARE

Elizabeth Boyle, MDVice President Primary Care and Clinical Integration
Assistant Professor of Medicine and Pediatrics, UMMS-Baystate



Primary care providers within the BMP Primary Care Service Line (PCSL) provide care for more than 108,000 adults and 11,900 children in western Massachusetts. We see more than 230,000 annual visits. Our affiliation with several well reputed, high quality, community-based, independent primary care groups, such as Cardiology and Internal Medicine Associates, Western Mass Medical Group, Valley Medical Associates, Springfield Medical Associates, and Connecticut River Internists expand the BH footprint in primary care to another nearly 37,000 patients.

SAFETY

- We improved access to health to meet the needs of more members of our community in 2019 by adding more than 55,000 same day/next day visits; 7,500 new patient visits; and 4,800 Medicare annual wellness visits.
- We are collaborating with the American Medical Society (AMA) to prevent heart attack and stroke by better controlling high blood pressure for our patients.
- We participated in the inaugural group of "Learning Collaboratives" at BH with an interdisciplinary team working on improving diabetic care and glycemic control using a team-based model of care.

QUALITY

- Established a PCSL Quality Council to help oversee, direct, and standardize quality care across the 15 practice sites.
- We collaborated with Baystate Health hospitals and specialty practices on improving the transitions-of-care process from the hospital, from specialty endocrine care, and from complicated obstetrics post-partum care back to primary care
- We continue to demonstrate top decile performance in most HEDIS quality measures, supporting institutional success in the Next Generation Medicare ACO, Blue Cross, Health New England, and other risk contracts.

EXPERIENCE

- We successfully recruited and on-boarded 16 physicians and 18 Advanced Practice Providers (APP) for the Primary Care Service Line filling in critical shortages for western Massachusetts and improving accessibility for our patients.
- We continued to focus on making steady improvement in our PressGaney scores on ""Willingness to Recommend" by
 providing physician and APP training on Shared Decision Making; "Compassionate Connections" training for all staff
 and providers; and successfully redesigning processes to provide patients with information at the end of their visit.

VALUE

- We have expanded our multidisciplinary care teams with APP, Integrated Behavioral Health professionals, and care management staff as we aim to increase access to care and add value for our patients.
- Our care teams are caring for patient panels that have grown over 50% over the past three years.
- Added several modes of alternative visits, such as telemedicine, portal, phone, and group visits to enhance affordable, convenient access to health for our patients.
- We launched a virtual urgent care program that provided more than 400 tele-visits and 4,500 phone visits in 2019.

- Many of the PCSL practices serve Longitudinal Preceptor sites for our UMMS-Baystate PURCH students.
- The physicians and APP in our Greenfield and Northampton primary care sites are the foundation and inaugural faculty for our newly created academic department of Family Medicine.

ADVANCED PRACTITIONERS

Lisa Erickson, DNP, CNP, ACNP-BCDirector of Advanced Practitioners



This year in conjunction with our APP consultant group Sullivan Cotter, we went on a journey looking at all aspects of advanced practice (engagement, utilization, compensation, credentialing etc.). As a result of this comprehensive work, we have created a new APP compensation structure. We also began work on models of care delivery within three service lines: Primary Care, Surgery and the Emergency Department. While work continues on these areas, we have extended this work in Vascular Surgery, and Heart/ Vascular Critical Care.

ACADEMIC INNOVATION

- Developed a workshop for our current nursing and allied health workforce to discuss options when considering transitioning into the APP role.
- · Streamlining our academic affiliations to reflect the future workforce needs for APP's.
- Partnering with our local Universities to streamline the student placement process for NP/PA students on a bi-annual basis.
- · Continuing Education: holding our first ever CME day developed by the APP committee for all BH APP's free of charge.

Grant Funding: Secured two grants to fund and develop a community based Family Nurse Practitioner Residency

- MassHealth DSRIP Investments in Community-based Training and Recruitment Program: Nurse Practitioner Residency Training (RFP) for one year.
- HRSA-19-001 Advanced Nursing Education Nurse Practitioner Residency (ANE-NPR) Program in conjunction with University of Massachusetts-Worcester will fund year two and three of the residency program.

REGION Highlights

BAYSTATE HEALTH EASTERN REGION

David L. Maguire, MDChief Medical Officer
Baystate Health Eastern Region and Baystate Wing Hospital



The Baystate Health Eastern Region comprises two campuses, Baystate Mary Lane (BMLOC) and Baystate Wing Hospital (BWH), and five primary care and specialty care outpatient sites. Currently, all regional outpatient gastroenterology endoscopies are performed at the BMLOC and all surgeries at the BWH Campus. Surgical specialties performing surgery at BWH include General Surgery, Orthopedics, Gynecology, Plastic Surgery, ENT, Podiatric Surgery and Ophthalmology.

SAFETY/QUALITY

- Movement of all regional mammography to 3D Mammography at BMLOC.
- Relocation, expansion and integration of the substance use disorder clinic with Behavioral Health at the BWH campus.
- · Transition of the BWH intensive care unit to an intermediate care unit, in recognition of actual patient needs

EXPERIENCE

- Concentration of the OB/GYN services to the BMLOC campus with more robust outpatient diagnostic and treatment procedures.
- BWH PressGaney data show consistent improvements, exceeding goals in "Willingness to Recommend," including the inpatient/outpatient/services areas.



BAYSTATE HEALTH NORTHERN REGION

Kinan K. Hreib, MD, PhD, MBA Chief Medical Officer Staff Neurologist, Baystate Franklin Medical Center

SAFETY

- A new program for peer review has been instituted, which consists of a multidisciplinary team that will identify any opportunities for improvement.
- The Anti-Ligature Construction Project on the Mental Health Unit began in July and represents a key component of the care and safety of patients at BFMC.
- Baystate Franklin Medical Center (BFMC) hospital-based nurses instituted bedside report at the change of shift to make sure that the bed alarms are on and the correct IV fluids are running.
- This year we completed the installation of overhead lifts for all of the hospital beds to help facilitate patient movements and prevent injuries.
- The Neonatal Hospitalist Program at the Birthplace underwent a restructuring with a newly appointed full time Director of Newborn Hospitalists. The Director has designed and implemented a continual readiness program with quarterly experiences to update and renew our provider's skills.

QUALITY

- BFMC was awarded an 'A' from The Leapfrog Group. The designation recognizes the hospital's efforts in protecting
 patients from harm and providing safer health care. The grade is based on 28 measures of publicly available
 hospital safety data.
- The Quality Department has started work on a Failure Mode & Effects Analysis to improve the process for patient notification of positive lab results following discharge from the Emergency Department or inpatient units.
- BFMC is participating in the system initiative to transition the Root Cause Analysis process to our RL Solutions electronic system. This will increase accountability and tracking for follow up.
- BFMC instituted a new quality assurance (QA) failure report schedule that identifies any QA issues in real time, resulting in more timely investigation and/or correction of any QA failures identified throughout the laboratory.

EXPERIENCE

- Most of our service lines have exceeded target for patient experience in "Willingness to Recommend" including the Emergency Department, Surgery, Heart and Vascular, Radiology, Rehabilitation, OB/GYN and Oncology.
- Providers in the hospital and in the Emergency Department are undergoing training to help in recognition and management of patients with Opioid Use Disorders (OUD), which will create a non-stigmatized approach to the care of these patients and provide an initial access point to treatment.

BAYSTATE HEALTH WESTERN REGION

Britton T. Percy, MDChief Medical Officer
Baystate Health Western Region and Baystate Noble Hospital



SAFETY

- Baystate Nobel Hospital (BNH) repurposed intensive care unit beds to intermediate care beds based on patient need, choosing to transfer critically ill patients to Baystate Medical Center, where those services are best provided to our patients.
- BNH received an "A" letter grade for safety reporting from the Leapfrog group and the Stroke Gold Plus Quality Achievement Award from the American Heart/American Stroke Association.

QUALITY

- BNH and teams from BMP and I&T completed implementation of CIS, a major step in the completion of BNH's integration into Baystate Health.
- Three new chiefs were hired in 2019: Chief of Hospital Medicine, Chief of Pathology, and Chief of Radiology.

EXPERIENCE

- Tele-tracking, implemented in September of 2019, allows greater system flexibility in management of resources for patients.
- Our new outpatient reference laboratory has opened in the front lobby of the facility, improving patient experience by making parking, registration, and lab collection more accessible and convenient.

VALUE

 Radiology services have transitioned from the Jefferson Radiology group to Radiology and Imaging (R & I), the BH radiology provider group.

New Physicians & Advanced Practice Clinicians



Jaya Agrawal, MDBaystate Gastroenterology
Department of Medicine



Vanna Albert, MDBaystate Emergency Medicine
Department of
Emergency Medicine



Joshua Allgaier, DOBaystate Health Hospital Medicine
Department of Medicine



Sunitha Alluri, MD Hematology Oncology Baystate Regional Cancer Program Service Line



Ariea Almassi, PABaystate Neurosurgery
Neurosciences & Rehabiliation
Service Line



Rami Al-Sumairi, MD Baystate Behavioral Health— Child Psychiatry Department of Psychiatry



Algernon Anatol, MDBaystate Health Hospital Medicine
Department of Medicine



Kashif Aslam, MD Baystate Pulmonary & Critical Care Medicine Department of Medicine



Robert Baldor, MD
Department of Family Medicine
Chair, Department of
Family Medicine



Sarah Barton, CNMBaystate Midwifery &
Women's Health
Department of Obstetrics & Gynecology



Alina Bayer, MD Baystate Neurology Neurosciences & Rehabiliation Service Line



Tyler Branco, PABMP-Wilbraham Adult Medicine
Community Primary Care
Service Line



Kevin Broems, PABaystate Emergency Medicine
Department of
Emergency Medicine



Dawn Brooks, MD Hematology Oncology Baystate Regional Cancer Program Service Line



Megan Burgielewicz, NP BMP-Greenfield Family Medicine Community Primary Care Service Line



Jake Carvalho, PA
Baystate Emergency Medicine
Department of
Emergency Medicine



Drew Chapman, PABaystate Emergency Medicine
Department of
Emergency Medicine



Samridhi Chikersal, MD BMP-Pioneer Valley Family Medicine Community Primary Care Service Line



Min Ho Cho, MD
Baystate Geriatric Medicine,
Palliative Care &
Post Acute Medicine
Department of Medicine



Laura Clubb, NP
Baystate Primary Care—
Turners Falls
Community Primary Care
Service Line



Stephen Contompasis, MD Behavioral Developmental Pediatrics Department of Pediatrics



Christopher Cowan, NP Baystate Endocrinology Department of Medicine



S. Jamie Dalhaus, NP-C Baystate Plastic & Reconstructive Surgery Department of Surgery



Adam David, MDBaystate Pediatric Neurology
Department of Pediatrics



Cecilia Davis, MDBaystate Endocrinology
Department of Medicine



Meaghan Delaney, MD Reproductive Endocrinology Department of Obstetrics & Gynecology



Stephen Derose, MD Baystate Neurology Neurosciences & Rehabiliation Service Line



Catherine Dodds, MD
Baystate Primary Care—
Turners Falls
Community Primary Care Service Line



Kaitlyn Dorman, CNM Wesson Women's Clinic Department of Obstetrics & Gynecology



Samantha Duffy, NPBaystate Critical Care Medicine
Department of Medicine



Frederick Engstrom, MD Baystate Behavioral Health— Psychiatry Department of Psychiatry



Ivan Enriquez Leal, MD
Baystate Health Hospital
Medicine
Department of Medicine



Monica Evans, PABaystate Newborn Medicine
Department of Pediatrics



Jacqueline Fable, MDBaystate Pediatric Hospital
Medicine
Department of Pediatrics



John Fanton, MD Baystate Behavioral Health— Child Psychiatry Department of Psychiatry



Mina Ferig, MD Baystate Health Hospital Medicine Department of Medicine



Daniel Fish, MDBaystate General Surgery
Department of Surgery



Ryan Flynn, NPBaystate Health Hospital Medicine
Department of Medicine



Joseph Gabriel, MD Hematology Oncology Baystate Regional Cancer Program Service Line



Jordyn Gallant, PA Baystate Emergency Medicine Department of Emergency Medicine



Danielle Gibbs, MDBaystate General Pediatrics
Department of Pediatrics



Svitlana Girenko, MD Baystate Primary Care— Southwick Community Primary Care Service Line



Marta Golasinski, NP Baystate Health Hospital Medicine Department of Medicine



Kathleen Grandison, MD BMP-Pioneer Valley Family Medicine Community Primary Care Service Line



Lora Grimes, MD BMP-Pioneer Valley Family Medicine Community Primary Care Service Line



James Hansel, NP Baystate Emergency Medicine Department of Emergency Medicine



Lee-Jay Henry-Thompson, NP Baystate Emergency Medicine Department of Emergency Medicine



Sophie Hermann, MDBaystate Urgent Care
Community Primary Care
Service Line



John Horak, PABaystate Cardiac Surgery
Heart & Vascular Service Line



Stephanie Hucker, NPBaystate Mason Square
Health Center
Department of Medicine



Mridula Ann Jacob, MDBaystate Health Hospital Medicine
Department of Medicine



Leeor Jaffe, MDBaystate Cardiology
Heart & Vascular Service Line



Jumana Jaloudi, DOBaystate Health Hospital Medicine
Department of Medicine



Erin Johnson, MD
Baystate Behavioral Health—
Psychiatry
Department of Psychiatry



Edward Kelly, MDChief , Baystate Trauma and
Acute Care Surgery
Department of Surgery



Ashraf Khan, MD Baystate Pathology Chair , Department of Pathology



Anna Liza Kilcoyne, NP Baystate Primary Care— Longmeadow Community Primary Care Service Line



Kristina Kramer, MD Baystate Trauma and Acute Care Surgery Department of Surgery



Olga Krasnozhen-Ratush, MD Baystate Pathology Department of Pathology



Matthew Kronick, MD Baystate Vascular Surgery Heart & Vascular Service Line



Wendy Kwartin, MD Wesson Women's Group Department of Obstetrics & Gynecology



Tracie Lacasse, NPBaystate Cardiology
Heart & Vascular Service Line



Robin Lawrence, NP
Baystate Primary Care—Palmer
Community Primary Care
Service Line



Connie Leung, NPBaystate Primary Care—Monson
Community Primary Care
Service Line



Alexander Ly, DOBaystate Health Hospital Medicine
Department of Medicine



Leslie Lyness, DOBaystate Neurosurgery
Neurosciences & Rehabiliation
Service Line



Nathan Macedo, MD BMP-Greenfield Family Medicine Community Primary Care Service Line



Gregory Marakovits, PABaystate Cardiac Surgery
Heart & Vascular Service Line



Celia Martinez, DOBaystate Mason Square
Health Center
Department of Medicine



Rochelly Martinez Maldonado, CNM Baystate Midwifery & Women's Health Department of Obstetrics & Gynecology



Michael McCool, PA BMP—Wilbraham Adult Medicine Community Primary Care Service Line



Elizabeth Morgan, MD Baystate Maternal Fetal Medicine Department of Obstetrics & Gynecology



Shilpa Muddasani, MD Baystate Health Hospital Medicine Department of Medicine



Katherine Oberwager, NP Baystate Behavioral Health— Child Psychiatry Department of Psychiatry



Jaime Onofrey, PA BMP–Pioneer Valley Family Medicine Community Primary Care Service Line



Georgios Orthopoulos, MD Baystate General Surgery Department of Surgery



James A. D. Otis, MD Baystate Neurology Neurosciences & Rehabiliation Service Line



Ignatius Oyula, MD Baystate Health Hospital Medicine Department of Medicine



Sharjeel Panjwani, MD Baystate Neurology Neurosciences & Rehabiliation Service Line



Sharada Paudel, NP BMP—South Hadley Adult Medicine Community Primary Care Service Line



Sarah Perez-McAdoo, MD Director, Population Health UMMS-Baystate



Janice Peterson, NP
Baystate Primary Care—
Turners Folls
Community Primary Care Service Line



Paul Pirraglia, MD
Chief, General Medicine &
Community Health
Department of Medicine



Malgorzata Platz, NP Baystate Primary Care— Longmeadow Community Primary Care Service Line



Brian Priest, NPBaystate Cardiac Surgery
Heart & Vascular Service Line



Ashley Provost, PABMP-Pioneer Valley Urology
Department of Surgery



Aravind Raghavan, MDBaystate Health Hospital
Medicine
Department of Medicine



Rohit Rattan, MDBaystate Health Hospital
Medicine
Department of Medicine



Marlene Reil, NP Baystate Behavioral Health— Psychiatry Department of Psychiatry



Wendelin Reymond, MD Baystate Urgent Care Community Primary Care Service Line



Gabriel Ryb, MDBaystate Trauma and
Acute Care Surgery
Department of Surgery



Siavash Saadat, MD Baystate Cardiac Surgery Heart & Vascular Service Line



Yasir Saleem, DO BMP—Pioneer Valley Family Medicine Community Primary Care Service Line



Gottfried Schlaug, MD Baystate Neurology Neurosciences & Rehabiliation Service Line



Amanda Schlosky, PA
Baystate Neurosurgery
Neurosciences & Rehabiliation
Service Line



Anna May Seaver, NP BMP-Greenfield Family Medicine Community Primary Care Service Line



Paul Silvi, PA **Baystate Cardiac Surgery** Heart & Vascular Service Line



Jacob Smith, MD Baystate Infectious Diseases Department of Medicine



Meghan Sullivan, NP BMP-Quabbin Adult Belchertown Community Primary Care Service Line



Hannah Sullivan, PA Baystate Emergency Medicine Department of **Emergency Medicine**



Jill-Beth Sweeney, NP Baystate Behavioral Health-Psychiatry Department of Psychiatry



Nicole Torchia, PA Baystate Health Hospital Medicine Department of Medicine



Julianne Touchette, NP BMP-South Hadley Adult Medicine Community Primary Care Service Line



Leanne Vallee, PA BMP-Quabbin Adult & Pediatric Medicine Community Primary Care Service Line



Nadia Villarroel, MD Baystate Emergency Medicine Department of Emergency Medicine



Kelly Wanamaker, MD **Baystate Cardiac Surgery** Heart & Vascular Service Line



Brian Wasserman, MD **Baystate Cardiology** Heart & Vascular Service Line



Deanna Welch, NP Baystate Primary Care-Turners Falls Community Primary Care Service Line



Lindsay West, MD Gynecology Oncology Baystate Regional Cancer Program Heart & Vascular Service Line Service Line



Danielle Winslow, NP Baystate Cardiology



Justyna Wos, PA Baystate Emergency Medicine Department of **Emergency Medicine**

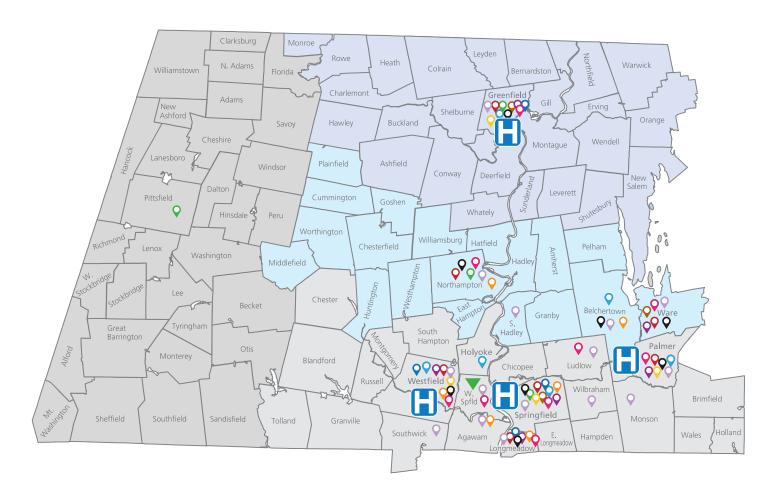


Jessica Zepke, NP BMP-Pioneer Valley Urology Department of Surgery



Alexander Zozula, MD Baystate Emergency Medicine Department of **Emergency Medicine**

Baystate Health Service Area





BEHAVIORAL HEALTH

Baystate Behavioral Health	
- Adult Outpatient	Springfield
- Adult Partial Hospitalization Program	Springfield
	Westfield
- Adult Psychiatric Treatment Unit	Springfield
- Child Outpatient	Springfield
- Greenfield Inpatient	Greenfield
- Griswold Center	Palmer
- MCPAP Program	Holyoke
- Neuropsychology	Springfield
- Psychiatry Consultation Service	Springfield
Baystate Child Partial Hospitalization Program	Holyoke



Baystate Hematology Oncology	Springfield
Baystate Radiation Oncology	Springfield
Baystate Regional Cancer Program	Greenfield,
	Springfield, Ware

CHILDREN'S HOSPITAL/PEDIATRICS

Baystate Adolescent Medicine	. Springfield
Baystate Developmental Behavioral Pediatrics	. Springfield
Baystate Family Advocacy Center	. Springfield
Baystate General Pediatrics	, 0
Baystate Medical Genetics	. Springfield
Baystate Newborn Medicine	. Greenfield, Springfield
Baystate Pediatric Cardiology	. Pittsfield, Springfield
Baystate Pediatric Critical Care Medicine	. Springfield
Baystate Pediatric Endocrinology & Diabetes	Northampton, Pittsfield, Springfield
Baystate Pediatric Gastroenterology & Nutrition	Northampton, Pittsfield, Springfield
Baystate Pediatric Hematology/Oncology	. Springfield
Baystate Pediatric Hospital Medicine	. Springfield
Baystate Pediatric Infectious Disease	. Springfield
Baystate Pediatric Neurology	. Springfield
Baystate Pediatric Neurosurgery	
Baystate Pediatric Pulmonology	. Springfield
Baystate Pediatric Rheumatology	. Springfield

Q	HEART & VASCULAR		SURGERY	
•	Baystate Cardiac Surgery		Baystate Ear Nose & Throat	
	Baystate Cardiology Baystate Vascular Services	Northampton, Palmer, Springfield, Ware, Westfield	Baystate General Surgery	Northampton, Palmer, Springfield, Ware, Westfield
		Springfield	Baystate Orthopedics	
			Baystate Orthopedic SurgeryBaystate Pediatric Surgery	
Y	HOSPITAL MEDICINE		Baystate Plastic Surgery	
	BMP-Hospital Medicine	Greenfield, Palmer, Springfield, Westfield	· J.····	Northampton, Palmer, Springfield
Q	MEDICINE		Baystate Sports & Exercise Medicine	Amherst, Greenfield, Northampton
	Baystate Brightwood Health CenterBaystate Critical Care Medicine		Baystate Surgical Oncology & Breast Specialists	Palmer, Springfield,
	Baystate Endocrinology	Longmeadow, Northampton, Palmer, Springfield	Baystate Thoracic Surgery	
	Baystate Gastroenterology	Palmer, Springfield, Ware,	Baystate Trauma and Acute Care SurgeryBaystate Urology	
	Baystate Geriatric Medicine Baystate High Street Health Center - Adult Medicir		Baystate Wound Care and Hyperbaric Medicine	
	Bugstate night street neutin Center - Adult Medicin		BMP-Valley Orthopedic and Sports Medicine	
	Baystate Infectious Disease			
	Baystate Mason Square Neighborhood Health Cer		URGENT CARE	
	Baystate Pulmonary		Baystate Health Urgent Care	Longmeadow, Northampton, Springfield,
	Baystate RheumatologyBaystate Travel Medicine	Palmer	Baystate Medical Practices Rapid Care	Westfield Belchertown
0	NEUROLOGY		WOMENS HEALTH	
	Baystate Neurology	Greenfield, Longmeadow, Springfield, Westfield	Baystate Gynecologic Oncology Baystate Maternal Fetal Medicine	Springfield
	Baystate Neurosurgery		Baystate Midwifery and Women's Health Baystate Reproductive Medicine	
	Baystate Physical Medicine & Rehabilitation		Baystate Urogynecology	
	Baystate Sleep Medicine		Dagstate Groggitecologg	Springfield
		Palmer, Springfield	Baystate Wesson Women's Clinic	
Q	PRIMARY CARE		Baystate Women's Health	Westfield
•	Baystate Primary Care	Longmeadow, Ludlow,	BMP—Northampton Obstetrics & Gynecology BMP—Pioneer Womens Health	
		Monson, Palmer,	Daystata Franklin Madical Contar	Croonfield
	BMP-Greenfield Family Medicine	Southwick, Westfield	Baystate Franklin Medical CenterBaystate Medical Center	
	BMP-Northern Edge Adult and Pediatric Medicine		Baystate Noble Hospital	
	BMP—Pioneer Valley Family Medicine	. •	Baystate Wing Hospital	
	BMP-Quabbin Adult Medicine		<u> </u>	
	BMP—Quabbin Pediatrics Medicine		Baystate Home Health & Hospice	West Springfield
	BMP-South Hadley Adult Medicine	South Hadley	, <u> </u>	II
	BMP-West Side Adult Medicine	. •		
	RMP_Wilhraham Adult Madicina	Wilhraham		

BMP-Wilbraham Adult Medicine.....Wilbraham

BAYSTATE MEDICAL PRACTICES

BY THE NUMBERS | FAST FACTS 2019

1,080

EMPLOYED PROVIDERS

PHYSICIANS

370



220,000

HOSPITAL MEDICINE **ENCOUNTERS**

122,500 ED

PEDIATRIC 31,094



OVER **4,500**

OBSTETRICAL DELIVERIES

IVF CYCLES PERFORMED



CONTACT CENTER



10,000 DAILY CALLS

1.9 MILLION VISITS BOOKED

CARDIAC **SURGERIES**



RADIOLOGY EXAMS 660,000

AND ONLY

REGIONAL CAMPUS OF THE COMMONWEALTH'S ONLY PUBLIC MEDICAL SCHOOL

PEDIATRIC **SUBSPECIALTIES** MILLION LAB TESTS

ANNUAL VISITS by

PRIMARY CARE PROVIDERS 7,000

NUMBER OF PATIENTS TREATED BY **REGIONAL CANCER PROGRAM**

STROKE CONSULTS 3,000 NUMBER OF NEW