Baystate’s Geriatrics Workforce Enhancement Program Combines Clinical and Educational Innovation to Improve Outcomes for Older Adults in our Community

We interviewed Maura Brennan, MD, IHDPS Fellow and Professor of Medicine at UMMS-Baystate, about her recent success in the Geriatrics Workforce Enhancement Program (GWEP) competition. The $3.75 million HRSA-funded project The Regional Geriatrics and Palliative Care Initiative: Geri-Pal TLC Project (Transformation through Learning and Collaboration) includes 5 years of funding for the program. This award makes Baystate one of only 48 federally-supported geriatrics education centers; Baystate has the only GWEP in the state of Massachusetts. This project will enhance geriatrics resources and supports for primary care practices and includes close collaboration with BH’s Community Health Centers (CHCs), community-based organizations, and educational and training programs in the area. It will meld clinical and educational innovation/quality improvement to better meet the needs of our aging patients.

Maura, can you provide some context to this grant? Why is building Geri-Pal capacity so important in our region?

By 2030, approximately 72 million Americans (20%) will be age 65 or older. Massachusetts is also aging; 11.6% of Springfield’s population is 65+. Springfield elders are more racially and ethnically diverse than Massachusetts overall and many more are poor. Over a third of these seniors live in households with annual incomes under $20,000 and they face many health inequities, with 41 health indicators that are below the Massachusetts average and include some of the worst rates in the state for obesity, multimorbidity, depression, dementia, and functional impairment. Despite high need, there is limited access to the expert geriatrics and palliative inter-professional care required to support these older adults. This is a national problem due to insufficient numbers of geriatrics certified doctors, nurses, social workers, pharmacists, etc., and the gap between need and available geriatrics specialty care will only widen in the years to come. Thus, it is crucial to devise methods to extend the impact of geriatrics teams by identifying opportunities for them to collaborate with, develop, and support the frontline clinicians who are providing the bulk of these patients’ care.

Baystate had a past GWEP program which was funded through this June. What were some of its achievements and lessons learned, and how is this next phase different?

We organized a wide range of training programs for practicing clinicians, students, residents, and community groups as well as for patients and their families. Our clinical work included a number of initiatives on our Acute Care for Elders (ACE) unit. Our recent article in the Journal of Hospital Medicine reported that costs savings for our ACE patients rose from $171 per patient at the 25th percentile of comorbidity to $3,687 at the 90th percentile.
Kudos

Tara Lagu, MD, MPH, was recently chosen as one of the American College of Physicians Hospitalist’s 2019 Top Hospitalists.

Lili Peacock-Chambers, MD, MSc recently received a 3rd percentile score on her K23 application “Integrating a Parenting Intervention for Mothers with Opioid Use Disorders into Child Development Services.”

Tim Mader, MD, was recently awarded a 2-year, $222,000 grant from NHLBI for his R21 application “A contemporary subgroup analysis of cooling after non-shockable cardiac arrest: insights from a large registry.”

Cristina Huebner Torres, PhD, recently was awarded the BusinessWest 2019 Healthcare Heros award for innovation in healthcare and wellness.

Aubri Drake, MSW, MLS, recently finished hiking all of the Northeast 115 4000’+ peaks, which includes the New England 67, Adirondack 46, and 2 summits in the Catskills.

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Health Care Proxy documentation rates on the unit have climbed to about 85%, and structured/prompted goals of care conversations are tied to a subsequent decrease in acute care costs. Another inter-professional team assists with the care of homebound patients of Baystate’s Community Health Centers (CHC). Virtually all patients have had new geriatric syndromes identified and patient satisfaction scores are superb. This team also has shown a decrease in costs in the months following their initiation of care. These two teams’ efforts resulted in Baystate Medical Center and its 3 CHCs becoming the first institutions in the nation to be designated as “committed to care excellence” in the age-friendly health system movement by the Institute for Healthcare Improvement.

The new grant is exclusively outpatient based and will scale up the numbers of patients served by the inter-professional home care team which will expand to include a transitions of care program, supporting older frail CHC patients discharged from our ACE unit. We will build upon and expand our opiate risk reduction program for older adults in the CHCs. We are working with the Rehab Department to design a gold standard falls risk reduction programs through shared medical visits with the inter-professional geriatrics team, and careful PT assessments and gait training. In coming months, we plan to offer Annual Wellness Visits to CHC patients as well. Finally, we will be initiating a Project ECHO program with weekly tele-coaching via video conference to support frontline primary care clinicians. Participation in ECHO will include quality improvement coaching and will be available to all Baystate primary care practices as well as other practices throughout Western Massachusetts.

What are the goals of this project and why is it important?

The overarching goal of the project is to increase access to expert team-based geriatrics care for older adults by designing new clinical and professional development programs. This is an effort to democratize and spread expertise in geriatrics and palliative care. We will be emphasizing identifying and addressing the “4 Ms” of age-friendly care—what matters most (values, goals, and advanced care planning), mentation (delirium, dementia, depression), medications (polypharmacy, inappropriate drugs), and mobility (falls, immobility, dependence). We will tracking and report multiple outcomes including: new dementia diagnoses, numbers of patients/families with dementia who are counseled and referred to appropriate services, 30 day readmissions, rates of polypharmacy and inappropriate prescriptions, percent of patients on chronic opioids who are counseled and assessed for risk, advanced care planning rates, costs of acute care and ED utilization, and rates of risk assessments for falls and rates of ED visits for injurious falls.

What will this project mean for clinicians at Baystate and their patients?

This multi-faceted program is not a research project but is a wide-ranging quality improvement and educational initiative which will expand support for primary care providers and extend services to some of our most vulnerable patients. These goals and services matter to our patients—avoiding readmissions and injurious falls and having access to true team-based home care are important outcomes. In addition, the work will ease the burden for our dedicated primary care workforce by offering case-based advice and direct care for some of their most complex and challenging patients. Finally, the work is critical to the success of Baystate’s population health approach by expanding access to care, managing risk, and providing true value and cost savings through better coordination and improved clinical outcomes. In short, the work supports all of the Baystate Health strategic compass points—safety, quality, experience, and value.
**Upcoming events**
Weekly seminar, 12-1pm, MM5

**Oct 30:** Raphael Arku, ScD
*Developing high-resolution air and environmental noise pollution estimates in sub-Saharan African cities*

**Nov 6:** Hasmeena Kathuria, MD
*Implementing tobacco dependence treatment for hospitalized smokers*

**Nov 13:** Molly Waring, PhD, MA
*Leveraging social media for weight management among pregnant and post-partum women*

**Nov 20:** Geoffrey Chupp, MD
*TBD*

For a full listing of events, see [here](#).

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**IHDPS in the News**

Dr. Lindenauer’s editorial in *JAMA* about the unexpected harm from an intensive COPD intervention was picked up and highlighted by Medscape.

Summer student Kevin O’Sullivan and Drs. Lagu, Lindenauer, Stefan, Pekow, and Pack’s recent *Journal of Hospital Medicine* publication on serum potassium and outcomes in hospitalized heart failure patients was picked up and highlighted by NEJM Journal Watch.

For other IHDPS news stories, see [here](#).

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**Why do some pediatric practices perform better on quality measures than others?**


We interviewed Sarah Goff, MD, IHDPS Adjunct Fellow and Associate Professor of Emergency Medicine at UMass Amherst about her recent paper, which appeared in *Health Care Management Review*.

**What was the motivation for the study?**

This positive deviance study was part of the research I proposed for my K23 Career Development Award from NICHD. Studying quality of care has been an integral part of hospital-based research for decades but less so in the ambulatory setting, particularly for general pediatric care. This gap, along with my interest in maternal-child healthcare quality, and an interest in how certain aspects of a health care organization may be related to quality of care stimulated this set of questions. Dr. Peter Lindenauer, Dr. Kathleen Mazor, Dr. Penny Pekow, Aruna Priya, Michael Moran, and others played an integral role in this study. We first determined which pediatric practices in Massachusetts were “high performers” (positive deviants) based on their scores on common quality measures. We then interviewed pediatric providers, nurses, and medical assistants at 10 high performing practices across the state to find out if there were some commonalities that might explain why they did so well on these measures. We incorporated what we learned from the interviews into a statewide survey to determine whether the things that seemed like they might matter were actually associated with higher scores.

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**What were the main findings?**

We looked at scores on measures related to clinical quality, like whether children receive a well-child visit when they need one, and patient experience scores. We learned that having clinical quality scores, having a quality champion, offering co-located specialty services, believing that families in a practice should feel respected, being a privately owned practice, and having a high percentage of patients privately insured seemed to make a difference in clinical quality scores. Patient experience scores were most strongly associated with private practice status and workers feeling like they had some control over their schedule. Overall, the results suggested that it isn’t only technical factors like electronic health records that matter for providing high quality care, but that work environment also seems to matter both for clinical quality and patient experience measures. From an
organizational standpoint, it directed us to ask why there are differences in clinical quality due to being a privately owned practice or having many patients with private insurance. It is important to understand that this study design can show these links, but it doesn't tell us why or take into account factors we didn’t ask about in the survey.

How do the results apply to patients in the greater Springfield region?
In some ways, this study generated more questions than it answered, many applicable to health care systems that care for vulnerable populations. Since private practices that take care of more privately insured patients seemed to do better on the quality measures included in this study, it makes us ask why that is and how that can be changed. A related question is how our current quality measures account for patient factors that contribute to care, such as social determinants of health, and how health care systems can begin to address the associated deleterious effects. Baystate’s BeHealthy ACO is doing just that, an exciting pathway that brings health care, population health, and public health together. The study’s results also suggested that some aspects of the health care work environment were associated with performance in quality measures, another area that health care institutions across the country are evaluating in the fast-changing landscape of health care delivery. This study showed health and health care are complex entities that require complex thinking and solutions to solve the challenges we encounter every day.

Population Health Snapshot: 
Diabetes control in the Baystate Medical Practices

According to the CDC, about 23 million adults, or 9.9% of the US population aged 18 or greater, had received a diagnosis of diabetes in 2015. The prevalence of diabetes varies significantly according to sociodemographic factors including race, ethnicity, and education. For example, 7.4% of non-Hispanic white Americans have diabetes, while the rates are much higher in Black (12.7%) and Hispanic Americans (12.1%). With respect to educational attainment, those American adults with less than a high school education are more likely to have diabetes than those with more than high school (12.6% vs. 7.2%).

In Massachusetts, the prevalence of diabetes was 8.0% among adults in 2015, which is somewhat lower than the national median. The CDC reports notable differences in prevalence of diabetes in our local counties: Hampden (8.6%), Hampshire (5.4%), and Franklin (6.0%).

Within the nearly 125,000 patients seen in Baystate Medical Practices primary care sites in the Pioneer Valley, approximately 11% have been diagnosed with having diabetes. The practices maintain a registry of all patients who have diabetes to maintain contact with patients, encourage recommended health screenings, improve blood sugar control, and manage co-morbid conditions. We not only track statistics on diabetes management and monitoring for our internal quality programs, but we also report those findings to payers annually as required in our value-based contracts.
Presently, 12.9% of all diabetic patients in our Baystate Practices have inadequate control of their diabetes as measured by HbA1C. As noted in the figure, glycemic control among our patients varies by sex, race, ethnicity, and insurance coverage. Moreover, we see worse glycemic control in urban areas (see map), consistent with national trends and reporting by Massachusetts counties. In addition to ongoing outreach efforts, the BMP primary care providers have begun working to enhance development of a coordinated, team-based model of care so that our patients with diabetes can receive education, support, and medical management not only from physicians, but also advanced practice providers, nurses, diabetes educators, integrated behavioral health providers, and medical assistants.
A Dignified Ending by Lewis Cohen

We interviewed Lew Cohen, MD, a Professor in the Department of Psychiatry at UMMS-Baystate, about his newly published book, *A Dignified Ending* (Rowman & Littlefield). Dr. Cohen has had a lengthy career built around his interest in the integration of palliative medicine, nephrology, and psychiatry.

**Why did you choose to focus your research on the end-of-life issues in renal disease and how did this lead to your writing *A Dignified ending*?**

I first became interested after conducting a psychiatric consultation of a woman with end-stage renal disease who had made an elaborate suicide attempt. I was puzzled why she had done this when it seemed more logical to have merely stopped dialysis. But she thought that neither her family or her nephrologists would allow her to terminate treatment and that the only course left to end her suffering was to take an overdose. When she subsequently discussed this with her husband and doctor, they were both agreeable to her withdrawing from the treatment. This took place in the hospital and over the next week, she had an opportunity to thank the many people who had taken care of her. They, in turn, had a chance to say goodbye to a wonderful individual who had been a model patient. This experience changed a lot of attitudes, but it spurred me to begin studying the circumstances when people decide they’ve suffered sufficiently and want to assume control over the manner and timing of their deaths. Dr. Michael Germain and I conducted the first research investigation about the quality of dying that ensues, and we wrote about the need to implement the recent advances in palliative care in the management of nephrology patients. My first nonfiction book written for the general public and clinicians was called *No Good Deed*. It told the story of two Baystate nurses and a nursing assistant who accused them of killing a patient when dialysis was stopped. It became the inspiration for me to examine the people in society who oppose and take offense at any practices that hasten dying.

**How did this lead to the new book?**

*No Good Deed* stirred up a fair amount of controversy among nurses and palliative care practitioners, which was heightened when I conducted a national survey of palliative medicine physicians who were subjected to ethical or criminal investigations following the death of a patient. This led me to be invited to participate in a think tank about assisted suicide/dying. It was organized by a physician who had helped his parents to end their lives, and I became intrigued with his narrative. I interviewed more than 200 people on both sides of the issue. They included disability activists who feared the untoward effects of assisted dying, and the founder of the Hemlock Society who had prompted America’s right-to-die movement. I also interviewed the widower and the best friend (a young pediatrician) of Brittany Maynard. The latter was a 29-year-old Californian who was diagnosed with a glioblastoma and moved with her family to Oregon where she could take advantage of that state’s death with dignity law. Her YouTube videos and feature stories in People magazine turned her into a celebrity during the last weeks of her life, and she was greatly responsible for California and several other states subsequently passing laws.

**What are some of the main findings of the book?**

I’ve been aware for a long time about the wonderful things that palliative medicine offers to ameliorate suffering, but the book’s background research helped me appreciate the limits of that help. It also taught me the varied ways people can suffer and how neither medicine or psychiatry may hold effective answers.
What are some of the surprises you discovered?
I had not thought about the perspectives of the disability community. They are bifurcated like the entire country. Stephen Hawking came to be a very public supporter of assisted dying, while I met a number of folk who had been affronted by Jack Kevorkian’s campaign and fiercely oppose the new laws. I also came to realize that I consider dementia to be a fate worse than death. Yet, none of the American laws facilitate people with dementia having assisted dying as an option. Canada and The Netherlands are directly tackling this issue, and our country will likely do the same as baby boomers demand more control over their deaths.

How do these lessons apply to the patients we care for at Baystate?
Massachusetts is one of the states where a law is likely to be passed within the next couple of years. It is already dealing with determinations to withdraw or withhold life-support, initiate voluntary stopping eating and drinking, and considerations of palliative sedation. I think there is a new generation of Baystate physicians who are more accepting of people demanding to make autonomous life and death decisions. However, we can anticipate further controversy as the practice of medicine continues to evolve.

Last thoughts about writing books for the educated public and clinicians?
There are numerous fellowships available for authors, and I have been in several stimulating programs based in Italy sponsored by the Rockefeller and Bogliasco foundations. I’ve also been awarded a Guggenheim Fellowship in Health and Medicine—I suspect because there aren’t an overwhelming number of physician applicants. I have been very fortunate in being supported at Baystate by my colleagues who helped cover patients during my absences, and by my family who tolerated the pursuit of this passion. It takes a certain degree of boldness to become an author, and I hope that others here at Baystate will take the challenge.

Recent IHDPS Publications: August-September

IHDPS by the Numbers

HDPS
Institute for Healthcare Delivery & Population Science

$3,234,943
Total grant funding in the last year (2018)

14
Number of active grants

21
Employees at IHDPS

DID YOU KNOW?
Six research staff have gone on to graduate school after working at HDPS.

In 2018, there were 80 peer reviewed publications

As of 2018, there are 13 specialties and departments that are represented at the Institute.

5.23
Average Impact Factor for 2018

1,278
Number of citations in 2018

12
2019 Summer Students

Grant submissions 2016-2018

35
Grants submitted

14
Active Grants

192
Publications