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on the cover: social determinants of health

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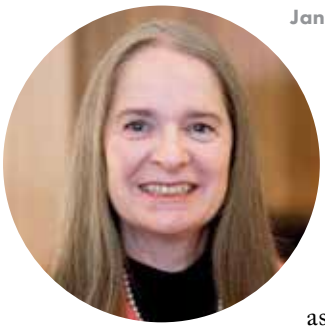

Jane Lochrie, MD

The Massachusetts Medical Society (MMS) adopted a policy in April that states "the enjoyment of the highest attainable standard of health, in all its dimensions, including health care services, as well as optimizing the social determinants of health, is an ethical obligation of a civilized society". Massachusetts is the first state medical society to affirm that health care is a basic human right.

Everyone knows that poverty limits access to healthy foods and safe housing and that more education is a predictor of better health. In addition, we understand that differences in health are conspicuous in communities with poor social determinants of health (SDOH) such as unstable housing, poverty, unsafe neighborhoods, or substandard education.

How does Worcester measure up to the MMS policy?

Unfortunately, a study by the Blue Cross Blue Shield of Massachusetts Foundation found that Worcester had one of the state's largest pockets of people without health insurance (6,035 people or 3.3% of the city's population). The foundation identified Main South, College Hill and Vernon Hill as areas with the highest number of uninsured. A report of the state's public higher education campuses report that 44% of community college students and 33% of state university students said that they were struggling to feed themselves, while 49% of the former and 32% of the latter also struggled with permanent housing. According to a Worcester School Department report, there are 2,412 homeless students in the city's public schools. Clearly, we need to do better. This issue of Worcester Medicine explores on what is being done to alleviate this crisis.

Dr. Michael Sheehy defines the social determinants of health and states the Medicaid ACO requires that groups work with community partners to identify and provide needed social support services. He describes how the Reliant Medical Group has been providing primary care services in the home to our most frail, homebound and isolated population. He suggests that all providers start by creating a culture of wellness in our offices with our staff and our patients, encouraging exercise and healthy eating and asking patients directly about SDOH.

In a heart-wrenching account, Warren Ferguson highlights the difficulty for person who has been incarcerated to re-enter society. Without employment, individuals lack food security are typically unstably housed or homeless. He provides some solutions to these problems including care coordination following release, providing medications for opioid uses disorder during incarceration and criminal justice reform.

In a multidiscipline-authored article, Janet Fraser Hale, PhD, MA, MS, RN, FNP, Jill Terrien, PhD, MS, ANP-BC, Heather-Lyn Haley, PhD, MS, Suzanne Cashman ScD, MS and Linda Cragin, MS describe the approach that the School of Medicine (SOM), Graduate School of Nursing (GSN) and MassAHEC Network collaborated to develop a interprofessional curriculum to address all determinants of health. Students are required to complete a two -week Population Health clerkship working with populations made vulnerable by social determinants. They participate in discussions regarding health systems, health literacy, health disparities, racism and cultural humility, health policy and the ethics of health care.

Mary Ellen Swydan, MS, RDN, LDN, CNSC, a retired dietician/nutritionist states that malnutrition can affect 30-50% of hospitalized patients and is related to poor wound healing, infections, immune dysfunction, and decreased survival rates and increased length of stay. She describes the role of the dietician in helping patients with food insecurity, such as social service consults, food stamps and other government programs. Unfortunately, patients now have to choose between food, heat and rent.

Jean McMurray, the Executive Director of the Worcester County Food Bank starts by telling us that 1 in 12 people and 1 in 9 children so not have enough healthy food to eat and this disproportionately affects their health increasing their risk for diabetes, hypertension and poverty-related obesity. They are more likely to struggle with psychological and behavioral health issues. The Worcester County Food Bank is dedicated to engaging, educating and leading Worcester County in creating a hunger-free community through food distribution and advocacy and improving people's access to healthy food.

"3 OUT OF EVERY 4 PEOPLE DIAGNOSED WITH MENTAL ILLNESS HAVE EXPERIENCED STIGMA THAT IS A BARRIER FOR SEEKING TREATMENT"

Jennifer Dante, LICSW explains that 3 out of every 4 people diagnosed with mental illness have experienced stigma that

is a barrier for seeking treatment. In addition, many patients and their families are often not met with the same level of compassion by their communities and providers due to the stigma associated with mental illness.

Evis Terpollari, the Homeless Project Manager for the Department of Health and Human Services, describes the formation of the Housing First Coordinating council in July 2018 that had committed to secure housing sustainability for the chronically homeless population. The goal is to reduce the length of time a person experiences housing instability and work towards a level of "functional zero". The council is composed of social services providers and financial institutions that work toward achieving actional and measurable goals. He explains many of the programs that the council is working on to achieve the reduction in the homeless population.

The pharmacy perspective is provided by four faculty members from the Mass College of Pharmacy and Health sciences, Drs. Havkins, Ruthsatz, Coppenrath and Yogaratnam. They opine that low medication adherence is associated poor clinical outcomes. They introduce us to the term "pharmacy desert" (defined as a community where at least 33% of the population lives more than a mile away from a pharmacy). Minorities and poor individual experience disproportionately worse access to neighborhood pharmacies. These pharmacies are more likely to be out of stock of common medications, less likely provide home delivery, are open less hours, provide less educational material and have an inadequate supply of opioids. They suggest providers screen for pharmacy access, transportation issues and interpreter availability.

The medical students also focused on food insecurity. Brennan Dagle states that every person has a unique set of social circumstances that evolve over time. Certain populations are more vulnerable to food insecurity, such as single-parent households and college/medical students. University of Massachusetts Medical School has implemented a community garden initiative and campus food bank to assist with students. He reports on the Massachusetts Food is Medicine Plan that provides food prescription programs and medically tailored meal delivery programs.

As always, don't close this issue of Worcester Medicine without reading The President's Message, Legal Consult and Society Snippets.

President's Message

I hope you all had a wonderful summer. It has certainly been a busy time for Worcester District Medical Society!

I would like to take this opportunity to thank everyone who attended our 225th Anniversary Gala on Friday, September 27, 2019. It was a great success and my heart felt gratitude to Martha, Melissa, Katrin, Francine and everyone else who volunteered and worked behind the scenes to make this Gala so memorable for all of us. If you missed the event, please take some time to view the "History of WDMS" video produced by Dr. Dale Magee, it is posted on our website (www.wdms.org). He has done a magnificent job in summarizing the past 225 years of our Society in 17 minutes! It was the highlight of the evening. I consider myself very fortunate to have served as your president during this exciting time.

I am pleased to report that the Gala was a great success and we raised more than $50,000. Once the expenses have been paid, the remainder of the money will go directly to the WDMS Scholarship Committee. This scholarship benefits our medical students, who are the future of our country's health care system. On November 21, 2019, during our Fall District Meeting, we will get to meet those deserving students who will be awarded the scholarships.

Wishing you all peace, health and prosperity during the upcoming holiday season and thank you very much for your ongoing help and support for our great organization.

Sahdev Passey, MD

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Social Determinants of Health

Michael Sheehy, MD

Anyone who has spent time in healthcare has long known that there are non-medical conditions that are associated with adverse health outcomes. We've even attached names to some of the consequences of these conditions, such as "unnecessary utilization", "avoidable hospital admission", or some of the patients may simply have been labeled as "noncompliant". It has only been in the last few years that we've begun to more accurately identify and define some of these conditions as social determinants of health (SDOH). SDOH is a very broad term, as defined by the world health organization (WHO), it is "the conditions in which people are born, grow, live, work and age" [1]. With a global view, WHO has focused on health inequities, driven largely by the unequal distribution of money, power and global resources, but we see the same conditions throughout the United States and even in our very own neighborhoods.

What are the Social Determinants of Health?

SDOH are the social and geographic conditions in which individuals or populations live that can impact health outcomes, including:

- Financial resources – income level, employment opportunities, debt
- Availability of medical resources – healthcare coverage, access to healthcare
- Safe housing – neighborhood safety, stable housing, geography and crime rates
- Food availability – access to stable healthy food choices
- Education – including health literacy
- Racial, cultural and gender inequality
- Transportation accessibility
- Social support – family and community, isolation
- Recreation and physical activity opportunities
- Clean water, air and local environment – including workplace safety

Why the interest now in SDOH?

Interest in SDOH accelerated following the shift towards value-based payments in healthcare and away from traditional fee-for-service contracts, largely at the federal level starting with the Affordable Care Act (ACA) and subsequent Centers for Medicare and Medicaid's (CMS) Medicare ACOs, and the federal expansion of Medicaid. Commercial payers have also been active in moving toward value-based or outcome-based payment arrangements, i.e. our own Massachusetts BCBS AQC model which compensates provider groups better for improving quality scores and managing total medical expense (TME). Massachusetts has been at the forefront of healthcare reform going back more than a decade and most recently launched our own state version of a Medicaid ACO model which pays participating provider groups (health plans and providers) a fixed dollar amount per member per month based not only on known disease burden but also on SDOH factors. The Medicaid ACO also requires that groups work with community partners to identify and provide needed social support services, behavioral health services, and other gaps in care driven in part by identifying and managing SDOH. Of course, this population by definition is already high risk, qualifying by at least one major SDOH: income and financial disparity.

Is there any supporting data on SDOH?

There may not be general agreement yet on the magnitude of impact that specific SDOH conditions have on health outcomes but there is good research in some populations that SDOH can have a greater impact on health outcomes than known disease burden or even genetics in an individual or in a population [2]. There have been numerous international, national and local interventions with outcome data, a few are noted below:

- Nationally, states with higher spending on social services and public health have had significantly better health outcomes in obesity, asthma, behavioral health, lung cancer mortality, acute MI and type II diabetes [3].
- ACA Medicaid expansion has saved lives, with a measurable mortality reduction of 11.36 deaths per 100,000 or a 3.6% reduction in mortality in the Medicaid population between the ages of 20 – 64 [4, 5].
- Montefiore health system in the Bronx, NY invested in housing for the homeless population

with frequent ED and hospital use. Since starting their Health and Housing Consortium in 2011, they have seen a 300+% return on investment due to lower hospital use.

- Locally here at Reliant Medical Group we have been providing primary care services in the home to our most frail, homebound and isolated patient population, resulting in 30-40% reduction in TME and 350+% ROI annually [6].

As healthcare providers what can we do?

Thinking about SDOH in our patient population and our communities can be daunting but each of us can act locally, regionally, and even nationally. We can start by creating a culture of wellness in our office with our staff and patients. Encourage physical activity such as taking a walk at lunchtime and making healthy eating choices. Lead by example. Consider the health impact of employees and populations in all corporate and legislative policies. Be sensitive to financial barriers for patients when ordering tests, medications, or procedures. Have a high index of suspicion with "non-compliant" patients and ask directly about food insecurity, stable housing, and financial barriers when that A1C level remains high or the blood pressure remains poorly controlled, or when faced with a patient or family struggling to follow through on appointments or procedures. Uncovering and understanding these issues can help determine a more appropriate, and ultimately more successful, plan of care.

Summary

The concepts, understanding, and use of SDOH is only just beginning, the possibilities are truly vast. Medicine continues to move away from managing one patient/one disease, and more towards improving the health status of entire populations. The explosion of increasingly sophisticated population health data, analytics, and outcomes research will not only improve decisions on the allocation of precious resources in healthcare, but should also have a much broader effect on public policy by using sound, evidence-based data rather than our often fragmented public discourse[7].

Footnotes:

- "Social Determinants of Health", World Health Organization http://www.who.int/socialdeterminants/sdh_definition/en/
- "Neighborhood Social Economic Conditions, Built Environments, and Childhood Obesity". Health Affairs, Vol. 29 No. 3 PP 503-512 G. Singh, M. Siahpush, M. Kogan.
- "Variation in Health Outcomes, the Role of Spending on Social Services, Public Health, and Healthcare 2000-9". Health Affairs, May 2016, 760-8.
- "Medicaid and Mortality" National Bureau of Economic Research, NBER working paper No. 26081, August 2019
- "Did Medicaid Expansion Save Lives?" Institute of Labor Economics Discussion Paper, August 2019, M. Borqshulte, J. Vogler
- Reliant Medical Group unpublished data 2014-2018
- You Tube: Making the Connection: Our City, Our Society, Our Health

(Wellesley Institute, Toronto CA)
https://www.youtube.com/watch?v=q-3mUiGi6bA

Michael Sheehy, MD,
Chief of Population Health and Analytics, Reliant Medical Group

The Case for Mass Incarceration as a Root Cause for Health Inequity from a Social Determinant Perspective

Warren J. Ferguson, MD

Miguel and I celebrated with a hug when he received his Section 8 housing voucher. For eight years, I had written letters of support to the housing authority about his commitment to sobriety, engagement in treatment and lack of arrest after spending 30 of his 55 years in prison or jail. A survivor of childhood sexual abuse by a priest, he had turned to heroin to quell his flashbacks. Of course, the expense of quelling was increasing his need for opioids to avoid withdrawal. This ultimately led to crimes and Miguel's incarceration. His last conviction led to 20 years in prison. While incarcerated, both parents and his only brother died. He grieved, following release, at the cemetery where they were buried and vowed to stay engaged in mental health and substance use disorder care. As his primary care provider, I vowed to be his advocate. Victories come infrequently when you are tagged with a record of felony convictions and alas, this victory too was short-lived.

Public housing vouchers are delivered with the meter running: find housing or you lose your voucher in 90 days. With no net worth and living check to check, Miguel had no transportation, no smart phone, no computer and was computer illiterate. Sadly, his partner had died of an overdose a year prior and armed with her smarts and skills, he lamented that she would have found them a place to live; it reminded him how much he missed her. He hobbled with an arthritic hip to every lead he could find from the housing authority only to be told he'd be put on a wait list (estimated at 2 years sometimes) or be turned down by landlords who had checked his criminal record. With my help, he got a 30-day extension on the voucher, but he ultimately failed. While couch surfing among friends and former "associates", he relapsed. While laws in the Commonwealth and community reentry programs stress assistance to returning citizens, what's on paper does not often translate into success post-release. From a social determinant perspective, the criminal justice system in the United States has traditionally been designed for high rates of recidivism. Without employment, individuals lack food security and are typically unstably housed or homeless. High rates of serious mental illness and substance use disorders, often to self-medicate the pain of post-traumatic stress, further hamper an individual's success with community reentry and this constellation of problems carries with it a high risk of death by overdose. In a recent report by the Department of Public Health, the triad of unstable housing or homelessness, serious mental illness and opioid use disorder led to the highest risk of nonfatal overdose and fatal overdose.[1]

In the United States, we spend $81 billion taxpayer dollars annually on the costs of incarceration according to the Bureau of Justice Statistics. However, including other costs, that estimate may increase to $181 billion.[2] Data from Worcester suggests that the cost of incarcerating individuals in the Piedmont neighborhood of Worcester eclipses the entire annual budget of the Division of Public Health in Worcester.[3] With a hard line on petty crime, lack of substance use disorder treatment in jail and prison, concentrated policing and racial profiling in low income communities of color and poor reentry support services, mass incarceration is destined to continue. So, you may ask, what can be done and how can health care professionals help? Fortunately, we are beginning to see some slivers of light shine on potential solutions, at least in some parts of Massachusetts and across the country.

Care Coordination following release:

There are multiple models involving rapid access to care navigated by community health workers and health navigators that are evolving. The Transition Clinic Network is now a well-tested national model assigning a community health worker pre-release to incarcerated persons and ensuring entry into care within two weeks post-release and assisting with other social needs. To qualify for employment, community health workers must themselves have experience in the criminal justice system.[4] Recently, MassHealth in collaboration with the Commonwealth Medicine Division of UMass Medical School has started a first-in-the-nation program to fund two agencies to provide navigators to individuals with behavioral health problems referred from jails, prisons, parole or probation to coordinate care and address the social determinants of health. The program is being piloted in Worcester and Middlesex counties. If Miguel had access to this support, he would have had a fighting chance to get housed.

Providing medications for opioid use disorder during incarceration:

Seven jails and three prisons in Massachusetts are piloting a program to provide all FDA-approved medications for opioid use disorder and coordinating care post-release. Signed into law in August of 2018 by Governor Baker, this program has bipartisan support and will be evaluated by the Massachusetts Department of Public Health.[5] This evaluation will be supported by a grant

from the National Institute of Drug Abuse through the Justice Community Opioid Intervention Network. A team of researchers from UMass-Baystate, UMass-Amherst, UMass Medical School, Tufts University and Cornell will be conducting this work in partnership with DPH and the seven jails piloting the program. Sadly, Worcester County is not one of the seven counties engaged in this pilot and is the largest county jail in the Commonwealth not providing the full scope of evidence-based treatment for opioid use disorder due to policy to exclude opioid agonist treatment.

Criminal Justice Reform:

Massachusetts has joined several other states in providing specialty treatment courts as alternatives to incarceration for substance use disorders, mental illness, sex crimes and several other conditions often resulting in arrest. UMass Medical School is partnering with Massachusetts trial courts to develop and evaluate this program via the Center of Excellence for Specialty Courts. In Suffolk County, the district attorney was elected on a platform of criminal justice reform and is making good on that promise, sometimes with tremendous pushback from other criminal justice and governmental jurisdictions.

These changes are incremental and will hopefully lead to improved health and social justice outcomes. Ultimately, more wholesale reforms are needed. I always come back to this question. If we are the greatest nation in the world and we are a model for human rights, why do we incarcerate 7 to 15 times more people than other Western developed countries and why is there an extreme disproportionate of persons of color so disaffected? In the context of incarceration's impact on health equity, I believe that physicians should be invested in righting this paradox.

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Warren J. Ferguson, MD, Senior Vice Chair and Professor of Family Medicine and Community Health, UMass Medical School

Engaging Interprofessional Teams to Incorporate the Social Determinants of Health into Practice: A Success Story

Janet Fraser Hale PhD, MA, MS, RN, FNP;
Jill M. Terrien PhD, MS, ANP-BC; Heather-Lyn Haley PhD, MS;
Suzanne B. Cashman ScD, MS; Linda Cragin, MS

Only 20% of health outcomes are directly linked to clinical care while 50% are based on the social conditions (County Health Rankings, 2016) into which "people are born, grow, work, live, age" as well as circumstances that are shaped by policies, governance, culture, norms and other "systems shaping the conditions of daily life" (WHO, 2015). The University of Massachusetts Medical School (UMMS) has long recognized the importance of both the medical and non-medical determinants of health through formal curricula and clinical experiences as well as through electives and volunteer opportunities.

This article builds on a recent Worcester Medicine article (Beckman et al., July/August 2019) that documents one-way UMMS addresses implicit bias, a critical foundational determinant of health. The Graduate School of Nursing (GSN) and the School of Medicine (SOM) have developed curricula that include a profession-specific as well as an interprofessional focus on all determinants of health. During the schools' numerous interprofessional experiences, the curriculum identifies the influence social determinants exert on health status, highlight advocacy initiatives aimed at effecting positive change, and help learners see that they can use the lens of social determinants of health (SDH) to meet the four major competencies of the Interprofessional Educational Collaborative (IPEC, 2016): roles and responsibilities, communication, values/ethics, and teamwork/team-based practice.

Since 2005, the two schools have required the Population Health Clerkship (PHC) in the second year for GSN Graduate Entry Pathway nursing and SOM medical students. Through the PHC, each student is matched with a community-based entity for a two-week immersion experience. Using service-learning pedagogy, the PHC links academic concepts and real-life experiences and the clerkships are co-led by UMMS faculty members and health and human services community leaders. Students rank their preferences from a list of 30 small groups. Options include, for example: Injury Prevention is Public Health, which brings together public health specialists and community partners to deepen students' understanding of community-level risks for injury and preventive strategies to reduce those risks. Another clerkship focuses on "Language Access and Patient Encounters," and students learn from medical interpreters and community health workers about the importance of plain language and partnering with trained interpreters in care delivery. Other options include "Introduction to Veterans/ Military Health Issues," "Living with Disabilities," "Medicine in Motion: Physical Activity in Worcester," and "Oral Health in Underserved Populations." The clerkship allows medical and graduate nursing students to learn from, with, and about each other while also providing opportunities to learn from, with, and about members of interprofessional community-based care teams. This achieves a goal of exposing learners to the full range of professionals who will work with them and their patients outside of clinic walls.

"TO COMPLETE A REQUIRED ADDITIONAL 45 HOURS OF COMMUNITY SERVICE-LEARNING, GSN STUDENTS WORK WITH POPULATIONS MADE VULNERABLE BY SOCIAL DETERMINANTS."

To complete a required additional 45 hours of community service-learning, GSN students work with populations made vulnerable by social determinants. Some students delve more deeply into the work they began in the PHC; others elect to direct their energy to other community populations such as the Worcester Community Health Improvement Plan Initiative (CHIP), a city-wide plan for improving health and overall quality of life.

In addition to required course work, students have had co-curricular opportunities to address social determinants using a cost containment strategy. These SOM and GSN students worked with the UMass Memorial Health Care Office of Clinical Integration to review claims data to identify patients who were readmitted to the hospital within 30 days of discharge or with frequent emergency department visits. While these patients represent only 1% of the patient population, they contribute to 30% of health care costs. In the "Hot Spotting Program" each student was paired with a case manager to contact and/or to make home visits to patients identified as chronic high emergency department users; the objective was to assess and address the social determinants affecting their health.

Coupled closely with examining the impact of social determinants on the health of populations is the importance of advocating at the individual, community and legislative level. Opportunities to advocate for vulnerable populations are stressed and encouraged throughout the schools' curricula. A PHC introductory session identifies where there are opportunities to advocate and identifies role model health professionals who are strong advocates. The Student Coalition for Advocacy, Diversity and Inclusion brings together students through a biannual forum for many extracurricular student groups with similar aims to share information and advocacy goals.

"TOPICAL DISCUSSIONS INCLUDE, FOR EXAMPLE: HEALTH SYSTEMS, HEALTH LITERACY, HEALTH DISPARITIES, RACISM AND CULTURAL HUMILITY, HEALTH POLICY AND THE ETHICS OF HEALTHCARE, ALL IN ADDITION TO BECOMING ACQUAINTED WITH SPECIFIC COMMUNITY RESOURCES THAT CAN HELP ADDRESS PATIENTS' NEEDS."

The full scope of the broadly defined social determinants of health are addressed in required courses. Several models are used to demonstrate the inter-relationships of the factors that contribute to patient and population health. For example, the Dahlgren and Whitehead model, the Healthy People 2020 determinants model and the National Academy of Sciences, Engineering and Medicine model of Pathways to Health all visually depict the relationships, intersections and ratios between and among the multiple determinants of health on populations. The SOM students have several small group SDH sessions as part of their Foundations of Medicine curriculum, including assessing for specific SDH in their Doctoring and Clinical Skills course. Similarly, GSN students are exposed to the Social Needs Screening Tool (Health Leads, 2016) as part of the semester-long Societal Forces course which addresses health determinants' impact on population health. Topical discussions include, for example: health systems, health literacy, health disparities, racism and cultural humility, health policy and the ethics of healthcare, all in addition to becoming acquainted with specific community resources that can help address patients' needs.

During Societal Forces, GSN faculty also evaluate national best practices of community initiatives that seek to resolve social needs once they have been identified through social needs screening. These "best practices" demonstrate the importance of solid interprofessional communication and seamless connections between health care organizations and community resources to facilitate and ensure the integration of social care into healthcare delivery. These practices are key to improved health outcomes, population health improvement and cost containment. Through their studies and practical application, UMMS GSN and SOM graduates are prepared to lead best practices that address the integration of social care into healthcare delivery. Truly, success stories that continue, are rewarding and sustainable thanks to the work of our IP faculty, students and community partners! (end with this sentence if we go with title #2)

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Role of Nutrition in Healthcare: Perspectives of a Registered Dietitian/ Nutritionist (RDN) at St Vincent Hospital, Worcester, Massachusetts

Mary Ellen Swydan, MS, RDN, LDN, CNSC

The role of an RDN is to advance and advocate for the health and well-being of our patients through optimization of their food and nutrition. We translate the science of nutrition into understandable terms and practical use for our patients. For example, the use of a low cholesterol, low sodium diet for patients with heart disease or a low potassium, low sodium, low phosphorus diet for patients who are on dialysis, or a diabetic diet for patients with diabetes.

RDNs can specialize in a particular field. Dialysis centers in Massachusetts require an RDN for a specific number of hours based on their patient population. Here at St Vincent Hospital there is an RDN who specializes in Oncology. My specialty is critical care, parenteral and enteral nutrition. Some advanced certifications require retesting every 5 years. Other specialties include Pediatrics, NICU, Obesity and weight management, and Clinical Nutrition Management to mention a few.

In the hospital setting, patients are first assessed at the time of their admission by the nurse. If specific criteria (weight loss, poor intake TPN (Total Parenteral Nutrition) or EN (Enteral Nutrition) are met, then the RDN is consulted. We meet with the patient, family and other caregivers at the bedside. We assess the following: height, weight, diagnosis, past medical and surgical history, medications—both current and prior to admission, laboratory findings, skin integrity (e.g. pressure injuries), GI function, and nutrition history, allergies as well as religious and cultural preferences.

A nutrition focused physical exam is performed, involving an evaluation of fat and muscle stores, edema, status of intake, and weight loss over time. This exam is for the purpose of diagnosing malnutrition.

Malnutrition can affect 30-50% of hospitalized patients. It is related to the following outcomes: poor wound healing, infections, immune dysfunction, and decreased survival rate of 48.5% vs 9% at 3 years, increased hospital and ICU length of stay. Estimated costs are ~158 billion dollars annually. Therefore, identifying, diagnosing, coding and treating malnutrition is very important. The American Society for Parenteral and Enteral Nutrition (ASPEN) and the Academy of Nutrition and Dietetics (AND) have partnered to develop criteria for diagnosing malnutrition. Malnutrition is classified as severe or non-severe. Etiologies include acute and chronic illness, social and environmental. The criteria are: weight loss over time, nutritional intake over time, muscle mass, fat mass, fluid accumulation, grip strength. Two of the six criteria must be met in order to diagnose malnutrition.

For example: severe malnutrition of chronic illness due to weight loss of 10% in 6 months, and < or = to 75% of energy needs in > or = to 1 month. Or, severe malnutrition of acute illness due to < or = to 50% of energy intake for > or = to 5 days and severe 4+ pitting edema of LE.

With a malnutrition diagnosis, the next step is management. Most of the time patients are willing and able to accept oral liquid nutrition supplementation in the form of Ensure, Boost, etc. Enteral nutrition may be needed in the short or long term. If the GI system is not functioning, then TPN may be initiated. Most treatments must continue after hospital discharge as well. In 2019, food insecurity has come to the forefront. It has always been present, but more recognized today due to increased need for community services. The homeless populations carry multiple inherent health risks, one being food insecurity. Some of these patients have had a weight loss caused by food insecurity. The RDN will recommend a social service consult to see if the patient is, for example eligible for food stamps or other government programs (Women Infant and Children's program for pregnant, lactating and their children (WIC), among others). According to the Worcester County Food Banks (WCFB) website (accessed 10/4/19), one in 10 people in Worcester County do not have enough to eat. WCFB distributed enough food for 5.1 million meals in 2018. They estimate that greater than 30% of college students are also food insecure. They partner with multiple agencies to help stamp out hunger in Central Massachusetts. These agencies served 82,000 people including 27,500 children and 10,300 seniors.

Not having enough money for food can severely impacts multiple chronic conditions. Diabetes, heart failure, obesity, CAD are some examples. More education is needed, in all care areas, to help people with these issues that eating healthy is not more expensive. It is unfortunate that people have to choose between food, heat and rent.

In the past most of the patient education regarding nutrition was done while they were in the hospital. However, with decreased length of stay in the hospital over the past several years, most nutritional education is now completed as an outpatient. Outpatient visits are the best for learning. While time in the hospital is very competitive - between physicians, nursing, rehab services, blood draws, etc. Learning as an outpatient is beneficial because the time is dedicated to that one patient, helping him/her to understand the rationale of the prescribed regimen and how to accomplish appropriate changes to be "lifestyle change" vs "a diet".

Reach out to the RDNs. You'll be glad you did, and so will your patients.

Mary Ellen has recently retired from St Vincent Hospital. maryellen.swydan@gmail.com.

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Food Bank Works to Create a Hunger-Free and Healthy Worcester County

Jean G. McMurray

A recent visitor to the Worcester County Food Bank (WCFB) exclaimed, "I had no idea how big an operation this was and everything that goes on to help people, with food." Two other visitors, a mother and her young son, also did not know what to expect when they came to WCFB. The stress was visible in her face and in her voice as she spoke with me. While a WCFB colleague put together several boxes of food containing frozen meat and poultry, fresh fruits and vegetables, milk, eggs, cereal, peanut butter and a variety of canned goods, she and I spent some time talking about the food pantry in her neighborhood that could help her and where she could get help in applying for SNAP, the Supplemental Nutrition Assistance Program, formerly known as food stamps. She thanked us and seemed relieved. As my co-worker helped carry the food to her car, the little boy took his mother's hand and said with a smile, "See, Mommy, we're rich again."

In Worcester County, 1 in 12 people and 1 in 9 children do not have enough healthy food to eat. As Thanksgiving and winter months approach, the public's awareness and acts of generosity turn towards their less fortunate neighbors. Yet, hunger is a year-round problem whenever people lack money or other resources for the food, they need to stay healthy. For them and their families, hunger is: worrying where your next meal will come from; working full time and still not being able to make ends meet; having to choose between groceries and medicine; going to school and feeling too distracted by an empty stomach to learn; skipping meals so your child or grandchild can eat; not being able to sleep because of hunger pains.

Hunger and health are deeply connected. People who are hungry are disproportionately affected by diet-sensitive chronic diseases such as diabetes, high blood pressure, and poverty-related obesity. People struggling with hunger experience stress and are more likely to struggle with psychological and behavioral health issues. And children who are hungry are more likely to have developmental problems that impact their ability to learn in school and interact in other social situations.

WCFB is dedicated to engaging, educating and leading Worcester County in creating a hunger-free community and we do this through food distribution and advocacy. We partner with food and fund donors, volunteers, and business and community leaders to provide donated food to neighbors who need it. As a regional organization, WCFB operates as a centralized hub, collecting donations of fresh, frozen and non-perishable food from the following sources: the government of the Commonwealth of Massachusetts, the United States Department of Agriculture, regional food retailers, local farms and community food drives. WCFB distributes the food at no cost to a network of 115 food pantries, community meal programs and shelters located throughout Worcester County. Over half of the food distributed falls into two broad categories: fresh fruits and vegetables and proteins. Last year, WCFB distributed 6.1 million pounds of donated food, enough for 98,000 meals a week. These meals nourished 75,000 neighbors – people of all ages and backgrounds – who turned to WCFB and its network of Partner Agencies for assistance. Of those, 32% were children and 14% senior citizens. Anyone in Worcester County needing assistance can use WCFB's agency locator at foodbank.org to find the nearest food pantry or community meal program to where they live or work.

"HUNGER IS A SOLVABLE PROBLEM, BUT IT TAKES MORE THAN DONATED FOOD TO END HUNGER."

Hunger is a solvable problem, but it takes more than donated food to end hunger. WCFB's commitment to ending hunger focuses on food for today, for tomorrow, for everybody. It begins with our food distribution and continues with our advocacy for policies and programs that work to decrease hunger by improving people's access to healthy food. WCFB partners with individuals and groups to speak up about the problem because we know our voices are stronger when joined with others who care about ending hunger. To encourage others in our collaborative advocacy, WCFB offers interactive workshops that are open to the public across the region. These workshops help lead people through a process on how to make changes in their communities and work to end hunger. We emphasize the importance of sharing our perspectives and our stories because they help inform and influence decision-makers, like legislators and other community leaders, to care about ending hunger, too.

Among WCFB's advocacy priorities is SNAP. It is our nation's most effective anti-hunger program as well as an economic driver; the financial benefit is spent locally at supermarkets and farmers markets. WCFB works to keep SNAP strong and available to all those who are eligible by co-facilitating the Central Massachusetts SNAP Coalition with the Central West

Justice Center / Community Legal Aid. We also support two college interns who assist people with applying for SNAP at locations throughout Worcester County.

Breakfast After the Bell is another of our current legislative priorities. This legislation would ensure that all Massachusetts schools with a high percentage of students qualifying for free/reduced meals serve a nutritious breakfast to all students as part of the school day. Universal Breakfast After the Bell reduces stigma by providing free breakfast to all students, ensuring children can start their day ready to learn and free from hunger.

Because hunger is bigger than any one organization alone can solve, WCFB established the Fund to End Hunger at the Greater Worcester Community Foundation. The Fund seeks to support sustainable solutions to the problem of hunger through advocacy and programs that incorporate practices that have shown promise throughout the country or here in Worcester County.

If you have been to WCFB, then you know it is a unique place: a place where the community comes together to make incredible things happen…one advocate, one agency, one dollar, one pound of food and one volunteer at a time. If you haven't visited, we invite you to come see WCFB in action and learn what you can do to help create a hunger-free and healthy community.

Jean G. McMurray is Executive Director of Worcester County Food Bank, Shrewsbury, MA. She may be reached at jean@foodbank.org. Learn more at foodbank.org.

Stigma: A Social "Deterrent" of Health

Jennifer A. Dante, LICSW

When I was first asked to write about the Social Determinates of Health, I began to contemplate the multiple possibilities on how to approach this piece, as they impact so many facets of my work. In my work as a clinical social worker I have dedicated much of my career in providing quality services for individuals with a Serious Mental Illness (SMI) and their families. I feel that mindful incorporation of the Social Determinates of Health in clinical practice is crucial. We now know the long-term impact that the social determinates impact a person's mortality, morbidity, life expectancy, health care expenditures, health status and more. The World Health Organization (WHO) defines the Social Determinants of Health as: "The conditions in which people are born, grow, live, work and age." The Center for Disease Control has stated that, "Addressing social determinants of health is a primary approach to achieving health equity. Health equity is "when everyone has the opportunity to 'attain their full health potential' and no one is 'disadvantaged from achieving this potential because of their social position or other socially determined circumstance'."
I opine that stigma can play a significant role in the quality of these conditions people are born, grow, live work and age in, negatively impacting their ability to "attain their full health" potential.

"MOST OF THE PEOPLE I HAVE BEEN PRIVILEGED TO SERVE OVER THE YEARS HAVE STATED THAT THEY HAVE EXPERIENCED STIGMA RELATED TO SMI..."

Most of the people I have been privileged to serve over the years have stated that they have experienced stigma related to SMI, and I began to ponder the impact of the stigma people with SMI and their family experience and how this interfaces with the Social Determinates of Health. So, if the social determinants of health can lead to health equity, does the stigma surrounding SMI lead to health inequity? I believe that it does. In fact, studies have stated that three out of four individuals diagnosed with a mental illness have experienced stigma. That's 75% of people diagnosed with a metal illness! If stigma is a barrier for seeking treatment, how many of the 75% have put off or declined treatment for their illness as a result?

The answer? Too many! Too many people and their families are often not met with the same level of compassion by their communities, and care providers due to the stigma associated being diagnosed with a serious mental illness.

Stigma is classified into three major categories of mental health related stigma the people we are privilege to serve experience: Public Stigma, Institutional Stigma, and Self-Stigma, and these categories source back to the Erving Goffman's work Stigma: Notes On The Management Of Spoiled Identity (1963).

For some, being diagnosed with an SMI generates self-stigma, which includes negative, destructive thoughts about one's self. Unfortunately, this is then typically reinforced by Public and Institutional Stigma. We know that stigma is fueled by misinformation and it is this misinformation that taints the way people respond to people with an SMI and their families. It is also what keeps people from seeking treatment, prior to a crisis. And this can negatively impact health outcomes for both the life of the person with the diagnosis and their family.

So, what can we as health professions do about this? A great place to start would be by increasing the amount of education provided about SMI, and treatment options. Connection and support are important social determinates of health. So, as a professional, I try to provide referrals to support groups and other resources, such as NAMI's Peer to Peer and Family to Family Support groups and classes. I find that they can offer both information and community, and both of these can support mental health recovery. I also try to be mindful of the language I use in both my personal and professional life. Using words associated with a mental health diagnosis as a derogatory term can have a much larger impact, than you could imagine. I realize that these are very basic starting places for decreasing stigma. The Dalai Lama said, "Just as ripples spread out when a single pebble is dropped into water, the actions of individuals can have far-reaching effects." It is my hope that these "pebbles" also have a far-reaching effect.

I implore you to take a moment and consider how stigma impacts the people served in your practice. What adjustments can be made to begin to reduce the stigma experience by the people served by your practice?

Jennifer A Dante LICSW is a Clinical Social Worker at Worcester Recovery Center and Hospital. She can be reached at jennifer.a.dante@state.ma.us.

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Community Efforts to End Homelessness

Evis Terpollari

Since the formation of the Housing First Coordinating Council by City Manager Edward M. Augustus Jr. in July 2018, the City of Worcester, in conjunction with its supportive services partners, is fulfilling the commitment to secure housing sustainability for the chronically homeless population. The Council also recommends evidence-based practices proven around the country as models for serving homeless individuals with a goal to enhance existing efforts and reduce the length of time a person experiences housing instability as we work towards a level of "functional zero" in terms of chronically homeless individuals.

Functional zero is reached when the number of persons experiencing (chronic) homelessness within a community is less than the average number of persons being connected with permanent housing each month. In achieving this measure, a community has demonstrated the system and capacity to quickly and efficiently connect people with housing and ensure that homelessness within the community will be rare, brief and non-recurring. To achieve this goal, a community must have a system with the capacity to quickly and efficiently connect people with housing to ensure that homelessness within the community will in fact be rare, brief and non-recurring.

The Council, which is composed of social service providers and financial institutions, volunteered additional time to support the four working groups which consist of the Data Committee, Crisis Response, Housing Supply and Stabilization and Supportive Services. The purpose of each working group is to achieve actionable, and measurable goals through, clear, accountable leadership, prioritized access to housing, with active case conferencing that respects confidentiality, public commitment and transparent reporting, funder education and alignment and sufficiency of resources.

The Finally Home Loan Fund has opened with $4.5 million available for loans from a consortium of financial institutions, accompanied by a $1.5 million loan guarantee pool, towards the construction of 103 modular units that will be dedicated to chronically homeless individuals. The City of Worcester has been leading the efforts for other cities and towns across the nation in combating the stigma that is associated with mental health and substance abuse disorder. The City's office of Health and Human Services has also launched a new free mobile application known as "Stigma Free Worcester" which provides information on local supportive services.

Many people are not visibly homeless, some are working or disabled with very low incomes, including families who lose their housing through job loss, illness, or eviction. Most people who become homeless experience a one-time crisis that is resolved when they obtain new housing through a method termed "rapid re-housing." Some of Worcester's homeless are people suffering from mental illness or substance use disorder. The chronic homeless population, which makes up less than one percent of Worcester's entire homeless population (55 out of 609 homeless persons), experiences long-term and repeat homeless episodes and faces multiple barriers to obtaining and maintaining permanent housing. There is no one cause of homelessness. Contributing factors may include: lack of availability of low cost housing; economic conditions including lack of employment opportunities; the failure to develop an adequate community health system in the aftermath of deinstitutionalization for persons with mental health difficulties; the failure to appropriately rehabilitate and discharge individuals leaving the prison or criminal justice system; a national substance abuse epidemic; persistent and intergenerational poverty; natural disasters; and racial inequalities.

Also included are individual vulnerabilities, often in combination with: poverty or financial crisis; domestic violence; mental illness; alcohol and/or drug abuse; low levels of education; poor or no work experience; and childhood abuse and time in foster care.

Erosion of the social safety net can also be a factor in terms of; welfare reform; more limited eligibility for public benefits and oversubscribed and underfunded supportive services.

The City of Worcester utilizes federal funding sources from the U.S. Department of Housing and Urban Development (HUD) to support homeless services and subcontracts to local community partners. Local agencies leverage the HUD funds with Health and Human Services grants, Substance Abuse and Mental Health Services (SAMHSA), and other state/federal funding sources for operating expenses.

The Emergency Solutions Grant, which most shelters utilize, supports case management and assessment at the Triage & Assessment Center, street outreach, rapid re-housing, shelter operations (utilities, furnishings), and housing stabilization case management. Within the City of Worcester, the Continuum of Care (CoC) supports families and individuals county-wide, providing beds that are dedicated to chronically homeless individuals. HOME Tenant-Based Rental Assistance is also an alternative support for homeless adults administered by the Greater Worcester Housing Connection Triage & Assessment Center. This program is only operated within Worcester.

Another program that has been a tremendous support, is the HOPWA (Housing Opportunities for People with HIV/AIDS). This particular program does not require individuals to be homeless. Households must have one member with HIV/AIDS and be income-eligible. However, many clients that receive permanent housing placement (RRH) or permanent supportive housing do come from homeless situations. This program also provides short-term rent and mortgage and utility assistance for homelessness prevention.

While the City continues to make great strides in the reduction of its chronically homeless population, we know there is much more work to do and we look forward to continued collaborations with our many community partners.

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Pharmacy Deserts: Can We Find an Oasis for Minority and Low-Income Patients?

Daniel Havkins, PharmD; Olivia Ruthsatz, PharmD; Valerie Coppenrath, PharmD; Dinesh Yogaratnam, PharmD

The success of a treatment regimen begins with adherence. Low medication adherence (usually defined as < 80%) has consistently been associated with poor clinical outcomes, including worse mortality, among patients with chronic diseases, such as asthma, diabetes, and hypertension, and after acute illness, such as heart failure exacerbations or myocardial infarctions.[1-6] Some recognized barriers to adherence include insurance coverage, healthcare literacy, and access to healthcare providers. However, a less recognized barrier to adherence may be a patient's ability to easily access a neighborhood pharmacy.

There is growing evidence that minorities and poor individuals experience disproportionately worse access to neighborhood pharmacies than either non-Hispanics, whites or wealthier individuals. For example, in an analysis of "pharmacy deserts" (defined as a community where at least 33% of the population lived more than 1 mile from a pharmacy) among Chicago neighborhoods, 54% of black communities were designated as pharmacy deserts versus 5% of segregated white communities. Among low-income communities, this racial disparity in pharmacy deserts persisted; 58% (black) vs 30% (white).[7] In an analysis of pharmacies in New York City, the density of chain pharmacies was lowest among the poorest neighborhoods. In addition, pharmacies in these areas were also more likely to be out of stock of the most commonly prescribed medications than pharmacies in more affluent neighborhoods.[8] While home medication delivery may be useful for those who may be geographically isolated or physically limited, these services have been shown to be more limited in communities with lower incomes and employment rates. In Shelby-County, Tennessee, pharmacy home delivery services were less likely to be available in zip codes associated with lower median household income, lower employment rates, and higher personal crime risk. [9]

Even when minority patients have access to a pharmacy, the services and resources available there may be suboptimal. In a Michigan county, pharmacies near African American women were open fewer hours, provided less educational materials on contraception, and offered less convenient access to condoms than pharmacies near white women.[10] In a study of pharmacies in Michigan, after adjusting for income levels amongst residents, it was found that pharmacies in minority neighborhoods were approximately 50 times less likely to stock adequate opioid analgesics compared to pharmacies located in primarily white zip codes.[11] Further, in New York City, after adjusting for crime rates and drug-related arrests in the area, it was found that only 25% of pharmacies in non-white neighborhoods had adequate opioid supplies to treat severe pain compared to 72% of pharmacies in white neighborhoods.[12] Limited access to pharmacies among minority and low-income patients may disproportionately place them at greater risk for medication non-adherence. However, by identifying potential barriers to patients' access to pharmacies, healthcare providers can proactively provide patient-centric interventions to overcome these limiting factors within their own communities.

For minority or low-income patients who may be at high-risk of living in a "pharmacy desert", a more detailed screening of pharmacy access could be part of the patient interview. In addition to asking the patient where they would like to have their prescriptions filled, consider also asking about potential barriers they may have in going to their preferred pharmacy. Does driving or public transportation pose a challenge? Is the pharmacy open during hours that are convenient? Is the pharmacy staffed by employees who speak the patient's preferred language? If the patient is taking multiple chronic medications, ask if the pharmacy provides a medication synchronization service. This is a process whereby the pharmacy gradually aligns a patient's prescription refills to fall on the same date each month, thereby resulting in fewer required trips to the pharmacy. To avoid travel altogether, ask if the patient would prefer to enroll in a home-delivery or mail-order service. These patient-level interventions may make a meaningful difference with respect to a patient's medication adherence. On a macro-level, the healthcare industry, larger communities, and policymakers can also make a difference.

An important consideration when addressing social determinants of health is to ensure patients are empowered and engaged in their care. CareOregon, a health plan servicing low-income residents,

implemented a tool called "My Easy Drug System" which encourages patients to describe emotions surrounding their medications.[14] By giving patients the opportunity to voice their concerns, pharmacists are able to address barriers that may not be immediately visible. Pharmacy corporations are also making strides to address social determinants of health. CVS Health recently announced a $100 million investment in programs aimed to increase access to healthcare and social services in underserved communities.[15] From a policymaker standpoint, maps of pharmacy deserts can be used to guide improvements in public transportation services or promote incentives for retail pharmacy store openings in underserved areas. Future studies should examine the impact of patient-level interventions or larger-scale policy changes that attempt to improve pharmacy access on improvements in medication adherence and clinical outcomes among minority and low-income patients.

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Social Determinants of Health - Food Insecurity/Food is Medicine

Brennan Dagle, M.D. Candidate

The United States Department of Agriculture (USDA) defines food insecurity as "lack of consistent access to enough food for a healthy and active lifestyle." Food insecurity remains a complex and often poorly characterized reality. According to the USDA, roughly one in ten households in the U.S. were food insecure in 2018. Moreover, people who cannot afford healthy food are prone to food insecurity. Chronic disease burden, lack of transportation, and food deserts also contribute to poor access to healthy food. However, the underlying social determinants of health that put people at risk of experiencing food insecurity are just as impactful. What makes food insecurity so complex is that every person has a unique set of social circumstances that constantly evolve over time. While there is no one-size-fits-all solution to the problem of food insecurity, there are ways to tackle the issue on an individual need basis.

Federal food assistance programs like the Supplemental Nutrition Assistance Program (SNAP) and Supplemental Nutrition Assistance Program for Women, Infants, and Children (WIC) are foundational to the fight against hunger. The Healthy Incentives Program (HIP) under SNAP provides an additional monthly household allotment of funds which can be used exclusively on fruits and vegetables. The USDA reported that SNAP served roughly 40.3 million people in 2018, or about 12% of the population. However, only about half of the households that were food insecure participated in a federal food assistance program like SNAP. Healthcare institutions have been working diligently on improving SNAP application rates, but this is not enough. Another problem is that many food insecure people may not qualify for SNAP or WIC based on borderline household income. For example, a single mother of one child does not qualify for SNAP if she makes more than $16,910 per year. These people may resort to a food pantry to avoid going hungry, but there is a lack of nutritious food and fresh produce in most instances. It can also be difficult for people to understand why the type of food that is available is not necessarily contributing to a healthy life. Granted, federal food assistance programs help to reduce underlying economic burden on individuals. Nevertheless, they fail to address the individual needs of each person. A more practical approach is to address the social determinants of health that can prevent people from eating healthy.

Stress is a major factor that can severely inhibit a person's will to eat healthy. Combine chronic stress with a general lack of time or feeling overworked, and this can be enough to push somebody over the edge of food insecurity. Major life events such as the loss of an occupation, change in school, or the birth of a child could be the deciding factor in whether somebody is able to eat well or not. Even uncontrollable circumstances such as the cold weather in New England may prevent certain people from accessing healthy food. It is more convenient and less costly to turn to calorie-dense food options like fast food in these situations, but this is not conducive to a "happy and healthy lifestyle". Certain populations are more vulnerable to experiencing periods of food insecurity, such as single-parent households and college/medical students. For instance, the University of Massachusetts Medical School has implemented a community garden initiative and campus food bank (Max Baker Resource Center) to assist food insecure students. This type of community-based support not only provides the means to overcoming food insecurity, but also empowers students to want to eat healthy. Understanding that food is medicine dramatically changes a person's perspective on the importance of eating nutrient rich foods like fresh fruits and vegetables.

The Massachusetts Food is Medicine State Plan was published in June 2019. This document assessed the need for and access to Food is Medicine interventions, such as food prescription programs and medically tailored meal delivery programs. Non-profit organizations like Community Servings help to bridge the gap between hungry people and the resources that are available through medically tailored meal delivery programs. Other organizations provide vouchers or food prescriptions that can be used at mobile farmers markets and farm stands to purchase fresh fruit and vegetables. The state plan also presented a strategy for the future role of healthcare in reducing food insecurity. This starts with improving screening and referral processes by primary care providers, as the lack of a standardized protocol for food insecurity screening and referral is a major problem. There is also poor documentation of food insecurity on electronic health records and underutilization of proper diagnostic codes. However, the main issue reported by providers is the lack of time, institutional support, and funding for food insecurity screening among healthcare organizations. MassHealth made it mandatory for ACO's to screen for social determinants of health starting in 2018. Starting in January 2020, ACO's will also receive funding for Food is Medicine interventions.

It is no surprise that when people are hungry, they are generally not happy or healthy. Food insecurity and hunger are not simply economic issues. Consequentially, we must approach the problem from the perspective of the social determinants of health that place people at risk of becoming food insecure. Understanding that food is medicine and empowering people to eat healthy is difficult, but something as simple as a community garden can instill the motivation and means to avoid food insecurity. Food is Medicine interventions like food prescription programs and medically tailored meal delivery programs are making an impact, yet there remains a lack of funding and resources for these types of interventions. There is also a need for a unified system of screening and referrals by primary care providers. The Food is Medicine State Plan is a useful resource for understanding the complex nature of food insecurity and what is being done to fix it.

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As I See It: A Different Perspective on the Opiate Crisis

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Frederic H. Schwartz, MD

A few years ago, I received a call from the Massachusetts's Attorney General's office. A young attorney in the office, calling on behalf of Maura Healy, was interested in my experience with pharmaceutical representatives promoting the prescribing of opiates. I was curious as to how he got my name. I never found out but it is certainly possible that I was an outlier in the volume of opiate prescriptions as I work in a short-term rehabilitation facility in Worcester. Working in this environment, I frequently care for patients recovering from major surgeries such as hip replacements who require potent analgesic medications to allow them to fully participate in their rehabilitation. I told him that while in my experience as a primary care physician, I had a boatload of pharmaceutical reps knocking on my door to promote their products, there was a minimum of contact with reps pushing narcotic medications. Furthermore, the ones I remembered were never outlandish in any way in what they had to say. Apparently, this was not what the young attorney wanted to hear because he kept on asking me if I had been pushed to prescribe opiates. It was obvious to me that he had his mind made up and was disappointed in my response. From his point of view, pharmaceutical companies had badgered and cajoled doctors to prescribe their products. Only later did I realize that this call was part of a larger effort to collect evidence in order to sue pharmaceutical companies that manufacture opiates who were allegedly responsible for the opiate crisis.

It seems there is a consensus among the media outlets that pharmaceutical companies deliberately and with malice caused this crisis in their effort to enrich themselves and their stockholders. I do not share that perspective.

I want to make it clear that this essay is not pro-pharmaceutical company or intended to defend all of their policies. Just to list one concern, I am greatly disturbed by the egregious prices they charge for some of their brand name, and more recently, generic products. However, if, as a society, we wish to effectively address this crisis, we need to understand its actual origins rather than find a convenient scapegoat.

Several years ago, I was approached by the director of nursing at the skilled nursing facility where I worked. A significant part of my responsibility was taking care of patients following joint replacements and other major surgeries. At that time, she strongly encouraged me to prescribe Oxycontin or my choice of long acting opiate to address my patient's pain. She was concerned, as was I, that pain might interfere with the patient's focus on physical and occupational therapy. It is interesting that since the opiate crisis has been in the news, patients are less interested in taking potent opiates and I have significantly decreased my prescribing of them.

I also work as a consultant for a disability insurance company. This work requires me to review medical records from all over the country, from small private practices to large group practices, from all different medical specialties. Admittedly, I see a skewed population of people seeking disability. In that context they often report pain as one of their symptoms. What I have been astonished by is the incredible number of controlled drugs, including opiates, prescribed by physicians, physician assistants and nurse practitioners. It is quite common to see polypharmacy (greater than 9 medications prescribed to the same patient) and the same patient receiving multiple drugs which affect the central nervous system. Furthermore, in many cases, there is no clear indication for the use of opiates. Many of these patients have a chronic pain syndrome defined as a severity and/or duration of pain that is unable to be explained by the medical evidence. Chronic pain syndromes are frequently found in patients with mental illness.

Pharmaceutical companies have an incentive to sell as much of their product as they can. This is similar to the current fee for service medical system in the United States. The more patients a doctor sees, the more money they make. Both entities, pharmaceutical companies and physicians, are part of the medical industrial complex which is designed to seek profit whenever possible. But in the case of the drug companies they do not have the legal authority to prescribe a single pill. That responsibility is completely (100%) in the hands of the healthcare provider. No one forces the physician to prescribe the opiate and in my experience as a primary care physician in Massachusetts and Pennsylvania no undue influence from the drug companies has been placed on the physician to prescribe them.

It is my opinion that physicians, as the leaders in the healthcare field, have the responsibility to be role models for appropriate use of pharmaceuticals. I ask myself why these physicians are prescribing such large quantities of opiates and other controlled substances to patients who may have no clear medical indication for the drug. As a general internist, I realize the pressure placed on the primary care physician both by their patient and employer. The patient is begging them to alleviate their suffering, something that the physician has taken an oath to do, and the employer is demanding 100% patient satisfaction or "dinging" them on their quality of care reports. Physicians by their very nature want to satisfy their patients' needs and when appropriate they should but not if in the process, they foster opiate dependency. Predictably

one response from primary care physicians is to refuse to accept new patients into their practice who will be requiring the use of opiates on a chronic basis. Unfortunately, this posture is incentivized by the nightmare of paperwork now required by many states in their misguided attempt to restrict their use.

One of major deficiencies in the healthcare system in the United States is the lack of affordable and accessible mental health care. In addition, there is a stigma that continues to discourage patients from seeking assistance with their emotional problems. It is my contention that in many instances patients seek mind altering drugs, such as opiates and other controlled substances (many of which are addicting), as a substitute for seeking bonafide mental health care. It is incumbent on the medical profession to educate the public that there is no McDonald's (i.e. quick and easy) approach to addressing mental illness. Rather, just as in promoting physical health, it takes a long term, patient approach with the support and assistance of mental health clinicians.

As I review the medical charts for my consulting work, it becomes obvious to me that in many instances the supervision of nurse practitioners and physician assistants are inadequate and they are treating patients whose complexity of illness is well above what they are suited for based on their training and experience. In many states, mid-level providers (i.e. PAs and NPs) are legally entitled to practice on their own without direct supervision. However, in the great majority of the records I see, there is a physician present in the practice. Mid-level providers are rapidly becoming the mainstay for the provision of primary care in this country. I just hope that in the process they will have the appropriate oversight so that the quality of care is not sacrificed. In many pain management practices, the delegation of prescribing opiates is to the mid-level provider while the physician focuses on the procedures (eg. spinal injections) for the patients. It seems as long as the patient provides the urine specimen to screen out the use of other controlled substances (i.e. benzodiazepines) or possible diversion, the patient is routinely given a new prescription at each visit without any legitimate effort to consider weaning them off their narcotic or controlling their pain through other means.

I have shared just a few of my thoughts as to the origins of the opiate crisis. It may be easy to place the blame on the wealthy pharmaceutical industry but as a nation we do ourselves a huge disservice to ignore the actual underlying causes for this scourge. If we truly hope to eradicate this public health emergency it is incumbent that as a society, we take the necessary steps to face this great menace. Those steps begin with a more accurate understanding of its origins. I hope in this essay I have begun this process.

Frederic H. Schwartz, MD
Assistant Professor
University of Massachusetts School of Medicine

Legal Consult: Teaching As Healing

"Empty is that philosopher's argument by which no human suffering is therapeutically treated. For just as there is no use in a medical art that does not cast out the sickness of bodies, so too there is no use in philosophy, unless it casts out the suffering of the soul." – Epicurus

Peter J. Martin, Esq

In Massachusetts, the so-called "Dover Amendment" statue exempts from certain zoning restrictions uses of land and buildings for educational purposes. McLean Hospital Corporation proposed to site in Lincoln a residential program for young males with "emotional dysregulation." A town commissioner's determination that the proposed use was educational was challenged by several nearby residents before the town's zoning board of appeals, which reversed the commissioner's determination and ruled that the project was medical or therapeutic. Does the Dover Amendment construe "educational" so broadly that it encompasses a program addressing "emotional dysfunction"?

In The McLean Hospital Corporation vs. Town of Lincoln & others, the Massachusetts Supreme Judicial Court answered this question in the affirmative, ruling that the McLean Hospital program was not a conventional educational curriculum but a "skills-based curriculum" that fell within the Dover Amendment's meaning of "educational purposes." At the same time, the court rejected the Land Court's analysis that the proposed program focused on "inward-facing skills" that address internal manifestations of symptoms of a mental disorder rather than "outward-facing skills" that improve individuals' ability to engage in society. The SJC noted that the ability to cope with everyday problems is an educational process that also serves a therapeutic purpose. "We accordingly agree with McLean that, in situations of this type, an attempt to sever that which is educational from that which is therapeutic is ordinarily a rather futile exercise."

The proposed program seeks to provide life, social and emotional skills to adolescent males who have been unable to succeed in a traditional academic setting, using a dialectical behavior therapy approach. The program involves eleven hours per day of instruction and practice in social and emotional skills, comprised of group mindfulness exercises, approximately six hours of classroom instruction, one and a half hours of structured athletic time or family therapy, more group mindfulness group exercises, then skills practice and homework worksheets. Only two percent of the weekly program hours are devoted to individual therapy. In its description of the program, the Court noted that although a registered nurse is on hand to treat any medical issues that may arise, "no medical interventions are included as part of the program."

The Dover Amendment test is twofold: a program must have as a goal something that is "educationally significant," and this goal must be the primary or dominant purpose of the program. Prior case law held that "educational" includes "the process of developing and training the powers and capabilities of human beings" and incorporates the idea that "education is the process of preparing persons for activity and usefulness in life." The concepts of "education" and "rehabilitation" are not mutually exclusive. The Court noted that the Department of Elementary and Secondary Education's strategic plan includes as a core strategy schools' "supporting the social, emotional, and health needs" of students.

The Court rejected defendants' argument that a residential program could simply add an informal educational component in order to secure Dover Amendment protections. Examples of this would be adding optional coursework to a luxury condominium complex or an informal arts and crafts program to a nursing home. In contrast, the Court noted that McLean Hospital's program was a mandatory, full-time, highly structured curriculum with a goal of returning students upon graduation to school and community.

The Court also rejected the argument that the McLean Hospital program featured educational components for the predominant purpose of offering a course of treatment for a particular psychological condition. The Court noted that just because students may be on medication or engaged in counseling does not make a school a "medical" facility. The focus should be on the nature of the program, not the nature of the students, where the program is "a specialized form of education to learn the complex emotional, social, and daily living skills necessary to participate actively and succeed in life."

For purposes of Dover Amendment analysis, the Court in this case declines to make a significant distinction between education with a therapeutic purpose and education with a traditional academic purpose. Indeed, the Court noted that the Dover Amendment was passed in part to protect non-traditional educational programs from a locality's desire to exclude disfavored types of educational facilities. For purposes of Dover Amendment law, the Court is defining "education" in the broadest sense of preparing individuals for life in society by helping them overcome dysfunction; by providing them concepts and training that help them deal with destructive and disabling emotions. The learning that education can provide thus leads to reduced outbursts of fear, anger or self-loathing.

Epicurean philosophy holds that destructive emotions are rooted in false beliefs, and that overcoming the resultant fear, pain and anger requires deep probing of the sources and validity of those beliefs through therapeutic argument in a highly structured learning and training environment. That sounds a lot like what McLean Hospital proposed to do in Lincoln. In that effort, Epicurus would concur.

Table Twelve: The Sequel

Bernie Whitmore

Table Twelve
175 West Boylston Street, West Boylston
(774) 261-8644
tabletwelvekitchen.com

Restaurant start-ups seem to happen all the time and though I try to pay attention and keep track of them, there's one that I've anticipated with special interest. That's due to its pedigree; after I heard that Table Twelve was a project by the owners of the Black & White Grille of Spencer, I knew it was just a matter of time before I paid them a visit.

Though they're well known to the people of Spencer, the Black & White ranked as one of our more noteworthy 'discoveries' in the past few years with a wide-ranging menu, quality preparation and friendly service. I've recommended it ever since that first visit.

We'd soon find the B&W tradition has been successfully transplanted to West Boylston in the location that previously housed Keepers Pub.

To start, the interior's been totally overhauled. It's a long building with the main dining room and lounge area facing the street. It's light and airy, totally uncluttered. Behind that is a long hallway with a couple more dining rooms. Upon arrival, we were seated in a booth up front. Kaitlin, our server, greeted us with a level of friendly enthusiasm that made her a welcome guide to our first visit.

In choosing an appetizer I was tempted by the Honey Sriracha Shrimp, one of the items that scored so high in our meal at the B&W. That impulse gave way to curiosity when we noticed Devil's Shrimp, a pairing of deviled eggs topped with Cajun-blackened shrimp. Two hardboiled eggs were sliced in half, stuffed with their mashed yolks and topped with large shrimp that had been blackened over high heat till crusted with Cajun seasoning mix.

They were served lined up on a long rectangular dish over a bed of arugula leaves and drizzled with spicy sriracha aioli. The easy approach was to eat the shrimp and eggs separately; but to discover if there was 'flavor magic' in combining the two I jabbed a piece of egg and shrimp together. Alas, no alchemical magic occurred, but the contrasting flavors and textures were pleasing and made this an ideal appetizer.

My glass of Bay State Beer Company's 'Becky Likes the Smell' was the ideal counter to the salty crust of Cajun spices. Its piney citrus flavor profile smooths the hoppiness and alcohol level of this imperial double IPA. Initially attracted by the colorful graphics of their 16 oz. cans, I've become a fan of 'Becky' and look forward to Bay State's expansion into Worcester.

Browsing beyond appetizers, the menu contains a comprehensive list of salads and soups and continues with 'between the bread' sandwiches; 'between the buns' burgers; steak and chop 'main meals' and 'from the pasta pot' selections that includes six variations of mac 'n cheese. Seafood options are all market priced which would seem to bode well for freshness.

And then there's a section of 'pan pizza from the hot stone oven' and a half-dozen meals for the 'little ones'. On this mid-week evening several families were taking advantage of this. From this comprehensive array my companion kept things autumn-traditional with an entrée of Stuffed Bacon Wrapped Meatloaf. Meatloaves come in many forms and seasoning strategies. At Table Twelve the meat mixture had been molded into single-portion meatloaf that encased sautéed mushrooms and mozzarella cheese. Then it was wrapped in bacon slices and baked till the exterior was tasty and dark brown. It arrived pre-sliced and drenched in beef gravy alongside a heap of mashed red bliss potatoes. (vegetables would be ordered from the list of sides). The result? A moist and tender meatloaf that yielded rich cheesiness and mushrooms in each bite.

Table Twelve seems to favor options in their menu. My entrée, simply termed 'Scampi', is an example. It can be customized to include no protein or outfitted with chicken or shrimp. I chose shrimp and was pleased to discover more than a half-dozen of them luxuriating in the olive oil white wine-soaked angel hair pasta.

Assuring us that desserts are 'divine' and baked 'just up the road', Kaitlin approved our choice of the Caramel Apple Tart. An almond pastry shell contained warm apple filling topped with streusel ribboned with caramel sauce. It came with a puff of whipped cream over a drizzling of creamy cinnamon syrup. Everything about this spelled 'scrumptious'. It disappeared in a flash.

All too often the expectations of a sequel are way too high and, when finally experienced, prove disappointing. But this was not so with Table Twelve; the owners have replicated the successful features of their Spencer enterprise and developed a very different dining experience in West Boylston.

Worcester District Medical Society

Calendar of Events

2019

September 13 (Friday, 7:30 a.m., Beechwood Hotel)

28TH ANNUAL WOMEN IN MEDICINE BREAKFAST

Speaker: Marcia Lagerwey, senior curator of Education, Worcester Art Museum

Title: A Medical Journey: Pregnancy and Birth in the Art of Otto Dix

Co-Sponsored by Physicians Insurance

September 27 (Friday, 5:30 p.m., Mechanics Hall)

WDMS 225TH ANNIVERSARY GALA

Celebrating our Society with a display of historic artifacts, music, dancing, and other surprises. Tickets MUST be purchased in advance.

For more information and to register

October 23 (Wednesday, 6:30 p.m., Leo's Ristorante Worcester)

MMS NETWORKING EVENT AT LEO'S RISTORANTE, WORCESTER

This is a professional networking event with complimentary hors d'oeuvres, drinks, and good fun! Physician members and non-members are invited and welcome to bring a guest.

October 24 (Thursday, 5:30 p.m., Beechwood Hotel)

14TH ANNUAL LOUIS A. COTTLE MEDICAL EDUCATION CONFERENCE

Speaker: Larry Garber, MD, medical director for Informatics, Reliant Medical Group

Title: Using the Power of Your Electronic Health Record to Energize Your Practice, Instead of Causing Burnout

A generous bequest from the Louis A. Cottle Trust was received allowing WDMS to establish an annual lecture series in memory of Dr. Cottle, a dedicated Worcester physician.

November 21 (Thursday, 5:30 p.m., Beechwood Hotel)

FALL DISTRICT MEETING AND AWARDS CEREMONY

The dinner meeting includes the Dr. A. Jane Fitzpatrick Community Service Award, the WDMS Career Achievement Award, and Medical Student Scholarship Award Presentations.

December 6 & 7 (Friday and Saturday, 9:00 a.m., MMS Headquarters and the Westin Hotel, Waltham, MA)

2019 INTERIM MEETING AND MEETING OF THE MMS HOUSE OF DELEGATES

All WDMS members are invited to attend as guests and may submit a resolution to the Massachusetts Medical Society (MMS).

December 19 (Thursday, 5:30 p.m., Washburn Hall, Mechanics Hall)

HOLIDAY RECEPTION AND A NIGHT AT THE MOVIES

Join us for a holiday buffet and movie with a group discussion to follow.

2020

February 13 (Thursday, 5:30 p.m., Beechwood Hotel)

224TH ANNUAL ORATION

Orator: Sanjiv Chopra, MD, MACP, professor of Medicine, Harvard Medical School, and former dean for Continuing Medical Education, Harvard Medical School

Title: Dharma, Health, and Happiness

February 28 (Friday, 7:00 p.m. Pre-concert Reception; 8:00 p.m. Program; Mechanics Hall)

CHANTICLEER

Founded in San Francisco in 1978, Chanticleer is known around the world as "an orchestra of voices" for the seamless blend of its 12 male voices ranging from countertenor to bass and its original interpretations of vocal literature, from Renaissance to jazz, and from gospel to venturesome new music.

March 30

DOCTOR'S DAY

March 30 is National Doctor's Day when patients, friends, family, and colleagues honor physicians and express their gratitude for physicians' continuing commitment to patients and exceptional medical care.

The event to be announced and will be sponsored by the MMSA.

April 15 (Wednesday, 5:30 p.m., Beechwood Hotel)

ANNUAL BUSINESS MEETING

Meeting includes presentation of the 2020 Community Clinician of the Year Award.

April–May 30 & 2 (Thursday and Saturday, 9:00 a.m., Seaport Hotel and World Trade Center, Boston, MA)

2020 MMS ANNUAL MEETING AND HOUSE OF DELEGATES

All WDMS members are invited to attend as a guest and may submit a resolution to the MMS.

May 13 (Wednesday, 5:30 p.m., Beechwood Hotel)

WOMEN IN MEDICINE LEADERSHIP FORUM

Speaker: TBD

Co-sponsored by Physicians Insurance.

May (Thursday, 5:30 p.m., University of Massachusetts Medical School)

MEET THE AUTHOR SERIES

Date, Author, and Title: TBD

Co-sponsored by the Humanities in Medicine Committee of the Lamar Soutter Library.

For more information about our Society, please visit **www.wdms.org.**

28th Annual Women in Medicine Breakfast
September 13, 2019

Marcia Lagerwey, PhD, Senior Curator of Education, Worcester Art Museum
A Medical Journey: Pregnancy and Birth in the Art of Otto Dix

Marcia Lagerwey, PhD, Lynda Young, MD, Chair, Women's Caucus

(L-R) Annie Abraham, MD, Manjul Shukla, MD, Phyllis Pollack, MD, Lynda Young, MD, Marcia Lagerwey, PhD, Janet Abrahamian, MD, Jane Lochrie, MD, Martha Wright, Hari Kirin Khalsa

This event was co-sponsored by Physicians Insurance Agency

The Worcester District Medical Society

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Dr. Daniel Wilson and Lori Wilson
Dr. Lynda Young and Robert Sorrenti

WDMS is most grateful to all who have made contributions to the Scholarship Fund. We regret the omission of any names due to the printer's deadline.

The Gala Planning Committee would like to extend a very warm thank you for all of the items which were donated to our Raffle and Silent Auction. Thanks to you and your fellow donors and auction sponsors, your generous contributions will help provide debt relief to our medical students. We are pleased to say that 100% of the proceeds will go directly to our scholarship fund.

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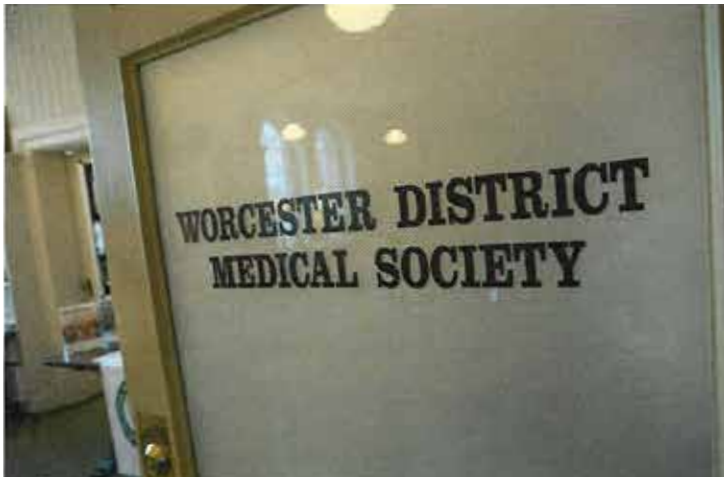
225th Anniversary Gala
Friday, September 27, 2019
Mechanics Hall, Worcester MA



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