Making the Case for Lifestyle Medicine

Susan Benigas, BS; Dexter Shurney, MD, MBA, MPH, FACLM, DipABLM; Ron Stout, MD, MPH, FACLM, FAAFP

doi:10.12788/jfp.0296

wo global pandemics—SARS-CoV2 infection and obesity—recently intersected; this convergence exacerbated the virus' most harmful effects¹ and disproportionately affected underserved communities.^{2,3} To a large extent, the underlying health conditions—reported by the US Centers for Disease Control and Prevention (CDC)—that heightened vulnerability to the virus are lifestyle-related and directly impacted by social determinants of health (SDoH) that, all too often, prevent the healthy choice from being the easy choice.⁴ These unhealthy lifestyle behaviors increasingly affect healthcare expenditure, driving as much as 90% of healthcare dollars spent.⁵ This has made the precepts of lifestyle medicine (LM) more relevant and more urgently needed than ever.⁶

LM, as defined by the American College of Lifestyle Medicine (ACLM), is the use of evidence-based, lifestyle, therapeutic intervention—including a whole-food, plantpredominant eating pattern, regular physical activity, restorative sleep, stress management, avoidance of risky substances, and positive social connection—as a primary modality, delivered by clinicians trained in these modalities, to prevent, treat, and often reverse disease. ACLM's vision is to have lifestyle medicine be the foundation of all healthcare, fully integrated into family medicine and primary care.

Susan Benigas, BS¹

Dexter Shurney, MD, MBA, MPH, FACLM, DipABLM²

Ron Stout, MD, MPH, FACLM, FAAFP³

AUTHOR AFFILIATIONS

¹ Executive Director, American College of Lifestyle Medicine, Chesterfield, MO

² Senior Vice President, Chief Medical Officer Well-Being Division, Adventist Health and President, Blue Zones Well-Being Institute; Past-President, American College of Lifestyle Medicine, Roseville, CA

³ President & CEO, Ardmore Institute of Health, Ardmore, OK

DISCLOSURES

The authors have no conflicts of interest to disclose.

Regarded by some as a new and emerging field, history indicates that components of lifestyle medicine were first documented as early as 2500 years ago. Hippocrates, the Greek physician regarded as the father of medicine, often used lifestyle modifications, such as diet and exercise, to treat disease. He is quoted as saying, "Illnesses do not come upon us out of the blue. They are developed from small daily sins against Nature. When enough sins have accumulated, illnesses will suddenly appear." He is also reported to have said, "Just as food causes chronic disease, it can be the most powerful cure."

Today, 60% of American adults—and, sadly, too many children—now live with at least 1 chronic disease, and more than 40% have been diagnosed with 2 or more.⁷ Too many physicians and patients alike may believe they are victims of their genes and they are destined to become chronically ill and dependent on pharmaceuticals. It should be alarming that type 2 diabetes (T2D) can no longer be referred to as "adult-onset diabetes" as many children⁸ are now being diagnosed with this lifestyle-related chronic condition. The occurrence of Alzheimer's disease, linked to T2D,⁹ is also rising at startling levels.

Early detection of chronic disease has too often been defined as prevention; despite early detection, trends of obesity, T2D, hypertension, and cardiovascular disease continue their upward trajectory.^{10,11}

Mounting evidence indicates that modifiable behavioral risk factors drive the leading causes of mortality in the United States.¹² The Institute of Health Metrics and Evaluation, in its 2019 Global Burden of Disease Report,¹³ analyzed data from more than 190 countries and found that what people eat, and fail to eat, is the leading cause of disease and death.

Addressing lifestyle is recommended as a first-line treatment option in many chronic disease guidelines.¹⁴ However, when surveyed, physicians indicate having received little training in clinical nutrition and LM therapeutic modalities.¹⁵

Promising change, though, is underway: Patient demand is mounting, and provider awareness is growing about the

need for and value of LM. Increasingly, there is a recognition that medications and procedures have been insufficient to significantly alter the negative trajectory of our collective health. This is awakening the medical community and generating interest in the field of LM. The ACLM's goal is to educate, equip, and empower all providers, especially primary care providers (PCPs), to identify and facilitate the eradication of the root causes of disease with health restoration and whole-person health as the clinical outcome goal. This should be followed, when necessary, by disease management with the aim of medication de-escalation and halting disease progression.

Thus, an imperative should be to help fill the void of LM in medical education with a robust offering of resources across the education continuum. Organizations like the American Academy of Family Physicians (AAFP) and the ACLM are proactively taking steps to meet this demand, with AAFP's recent debut of its new resource entitled *Incorporating Lifestyle Medicine into Everyday Practice*¹⁶ and ACLM's robust offering of LM resources that span the education continuum. These resources, coupled with the opportunity for certification through the American Board of Lifestyle Medicine, are helping to fuel the field's rapid growth.

While LM is not new, large-scale implementation of these evidence-based modalities into health systems is one of the greatest pioneering initiatives in the healthcare industry today. LM represents a physician-led, interdisciplinary, team-based model, often leveraging shared medical appointments (SMAs),¹⁷ delivered either in person or virtually, to effectively treat groups of patients with chronic conditions. This scalable model supports the necessary behavior change that is central to LM intervention, while also capitalizing on the shared sense of community that is facilitated by group participation.

Deeply rooted in scientific evidence, LM is delivered through a variety of practice formats, including

- Private primary care
- Direct primary care
- · Concierge medicine
- Hybrid (concierge/family practice)
- Health systems integration
- Specialist care (eg, cardiology, endocrinology, oncology)
- · Community-based care

To date, challenges to system-wide healthcare adoption of LM include reimbursement models, misaligned quality measures, research gaps, health disparities, and challenges associated with unequal distribution of SDoH.¹⁸

Even so, the healthcare system shift from fee-for-service to value-based care will elevate the importance of eliminat-

ing, to the extent possible, the root causes of disease, rather than medicating and managing the symptoms. LM is synonymous with value-based care. As with all LM treatment, the objective is to rein in costs while producing superior patient outcomes and patient satisfaction through sustained behavior change. LM is also vital to achieving the Quadruple Aim: to enhance patient experience, improve population health, reduce costs, and improve the work life of healthcare providers.¹⁹ LM reignites the passion for why most went into medicine—to become true healers—as a potential antidote to epidemic levels of provider burnout.

As physician practice of LM increases, research in the field has also expanded in recent years, within ACLM and externally. In 2020, the Ardmore Institute of Health convened the Lifestyle Medicine Research Summit²⁰ to (1) review the current state of knowledge in the core domains of healthy living and LM-nutrition, physical activity, stress, sleep, addictions, and positive psychology/social connections-and how they can be deployed clinically to not only prevent but also treat and actually reverse chronic disease; (2) prioritize research questions in each domain; and (3) apply new basic science knowledge (eg, epigenetics, microbiome, neuroplasticity) and research methods (modeling, artificial intelligence, existing national cohort studies using new methods, and hierarchies of evidence). Since the Summit, the COVID-19 pandemic has made this effort timelier and more meaningful. The Summit was unique in its breadth, cross-disciplinary attendance, and resulting dialog and output.

Analysis of LM reminds us that effective care requires not simply calls to education but resources where they are needed most, assessment of opportunity cost, and critical evaluation of interventions.²¹ If LM's only focus is on the individual as the change agent, the result will likely be that people at lowest risk will have the greatest amount of intervention, while people carrying the greatest risk will not receive the support they need. Understanding the environmental drivers of unhealthy behaviors requires PCPs to work more closely with community and public health colleagues to develop neighborhood and regional approaches, particularly in disadvantaged areas.²¹

We must collectively shift from a system of disease and disability care to one of true "health" care, enabled by an LM-first approach that strives to identify and eradicate root causes with health restoration—whole-person health—as the clinical outcome goal.

In caring for chronically ill patients across all socioeconomic levels, family medicine physicians and other PCPs are on the front lines of addressing these ravaging, costly diseases that impact quality of life; yet many clinicians are only familiar with disease and symptom management through

EATING FOR HUMAN AND PLANETARY HEALTH

Further reinforcing the importance of dietary pattern advocated as one of the pillars of LM—is its effect not only on our personal health but also on the health of the planet. ACLM and many others note that the leading cause of chronic disease and the leading cause of many global sustainability issues is one and the same: our Western dietary pattern.²²⁻²⁴ Shifting to a whole-food, plant-predominant dietary lifestyle protects human health^{25,26} and reduces commercial agriculture's carbon footprint, enabling the preservation of natural resources while also decreasing greenhouse gas emissions.²⁷⁻²⁹

pills and procedures. The urgent need to treat the root cause of lifestyle-related chronic disease led to the creation of this supplement. The goal is to provide family physicians with information on all aspects of LM. Rather than a comprehensive dive, the pages to follow offer introductory information on the definition of LM's 6 pillars; and how LM delivery is influenced by key determinants of health; how LM is being used to prevent, treat, and sometimes reverse multiple types of chronic disease; a peek into the current practice of LM; and what the future holds in education and policy. We hope readers will want to learn more.

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