Lifestyle Medicine is Transforming My Patients and My Practice

Michelle McMacken, MD
Assistant Professor of Medicine, NYU School of Medicine
Director, Bellevue Hospital Weight Management Clinic
Twitter: @Veg_MD

As an internal medicine physician at a large academic practice in New York City, I face challenges all too familiar to most primary care doctors. I struggle to meet my patients' many needs in the context of ever-growing time constraints and documentation requirements. My patients endure a tremendous burden of chronic disease, from diabetes, heart disease, and obesity to depression and cancer. Literacy, language, and socioeconomic barriers add yet another dimension to the health care puzzle.

For years, I have managed disease the way I was taught – primarily with medications and referrals for stents and surgeries. But in October 2013, I had an eye-opening experience. Through a fortuitous Internet search, I found the American College of Lifestyle Medicine (ACLM) and decided to attend its annual meeting.

It turned out to be a game changer. Despite my years as director of a lifestyle-oriented obesity clinic, I did not think it was possible to prioritize lifestyle medicine in my primary care practice. The ACLM meeting awakened me to a world I had only dreamed possible: doctors helping patients get to the root of their disease, not just managing symptoms.

Since that meeting, I have moved lifestyle medicine to front and center in my practice. Of course I still prescribe medications, offer screening tests, and use other traditional strategies. But nearly every single visit now includes lifestyle counseling. By making time for a conversation about food, exercise, sleep, or stress -- and often starting the visit with this – I send a message to my patients about how critical these issues are to their health.

It's not always easy to shift away from the traditional drug-, surgery-, and symptom-based model. I've found, however, that the more I practice lifestyle counseling, the faster and more effective I've become, and the easier it is to work it into an office visit. I am exploring ways to individualize the message across a variety of cultures, social situations, and literacy levels. And I've seen that many of my patients are hungry for the information I share.

I can honestly say that lifestyle medicine has reignited my passion for being a physician. I've gotten to know my patients – some of whom have been seeing me for a decade -- in ways that I never did before. And watching my patients make changes in their lifestyle habits, whether small improvements or big ones, has filled me with optimism and pride. It is humbling how much our patients can change when we give them the support and framework to do so.

I'd like to share a few examples of how my patients have used lifestyle medicine to optimize their health.

CASE STUDY 1

I met Ms. C, a 60-year-old Filipina woman, in January 2015. She had seen a different provider for an initial evaluation two months prior, at which time her fasting laboratory evaluation revealed these results:

Total cholesterol	269 mg/dL
High-density lipoprotein (HDL)	62 mg/dL
Triglycerides (TG)	93 mg/dL
Low-density lipoprotein (LDL, calculated)	188 mg/dL
Hemoglobin A1c	5.7%

We spent the majority of our encounter discussing her markedly elevated lipids. She had a strong family history of hypertension and diabetes. She reported eating a diet high in white rice, beef, and white-flour noodles. She was somewhat active in her job as a home health aide, but had no specific physical activity regimen.

I explained to Ms. C that she had a very high 10-year and lifetime risk of cardiovascular events, and that she would require statin drug therapy if she were not able to lower her cholesterol through lifestyle change. We also discussed her elevated risk of type 2 diabetes. She expressed a strong desire to avoid medication.

I counseled her on starting to 'crowd out' processed and refined foods and animal products by focusing more on nutrient-dense, high-fiber, low-fat foods, such as beans, lentils, vegetables, fruits, and whole grains. From a 'master list' of whole plant foods, and via internet image searches, I asked her to identify whole plant foods she already liked and knew how to prepare. I suggested that she start by adding these to her plate, and reducing less healthful foods accordingly. We briefly went over specific ideas and substitutions for each meal of the day. I asked her to walk for 30 minutes a day, either continuously or divided into 2-3 sessions. I provided educational handouts on elevated cholesterol from Physicians Committee for Responsible Medicine (PCRM.org) and asked her to repeat her blood tests in several months.

Three months later, in April 2015, her fasting lipid results were as follows:

		Change vs baseline
Total cholesterol	218 mg/dL	-19%
HDL	59 mg/dL	-5%
TG	60 mg/dL	-35%
LDL (calculated)	147 mg/dL	-22%

I called Ms. C and reviewed these results with her for 10 minutes over the phone. She reported that she was eating more vegetables, fruits, whole grains, and beans. She also began trying to walk 30 minutes most days of the week. I encouraged her to continue these habits, especially limiting saturated fat, refined carbohydrates, and added sugars. I suggested she consider fully transitioning to a whole-food plant-based diet and mailed her educational materials and website resources about plant-based diets, including

--*Vegetarian Starter Kit* from Physicians Committee for Responsible Medicine (PCRM), downloadable at http://www.pcrm.org/sites/default/files/pdfs/health/vsk.pdf
--*The Plant-Based Diet* brochure from Kaiser Permanente (available at https://mydoctor.kaiserpermanente.org/ncal/Images/New%20Plant%20Based%20Booklet%201214_tcm28-781815.pdf)
--ForksOverKnives.com (recipes, testimonials, expert wellness columns)
--4leafprogram.com (survey to rate one's diet, explanation of score and how to improve)

Ms. C came to see me again in July 2015, six months after our initial visit. She had lost 10 lbs. She reported that she was following a nearly 100% plant-based diet, rarely eating animal products, highly processed foods, or added sugars. She continued to walk 30 minutes or more on most days. A repeat fasting laboratory panel showed the following:

		Change vs baseline
Total cholesterol	203 mg/dL	-25%
HDL	63 mg/dL	+2%
TG	71 mg/dL	-24%
LDL (calculated)	126 mg/dL	-33%
Hemoglobin A1c	5.6%	-2%

Again via phone, I delivered these results to Ms. C and congratulated her on her success in significantly lowering her serum cholesterol and her overall cardiovascular risk. I encouraged her to continue the whole-food plant-based lifestyle as a way of maintaining a reduced cardiovascular and diabetes risk. She expressed enthusiasm and gratitude for the information.

CASE STUDY 2

I met Mr. R., a 54-year-old man originally from Mexico, for an initial visit in December 2014. Though he had a history of hypertension and low back pain, he had not seen a physician for several years. His blood pressure was 190/100, his body mass index was 27 (weight 166 lbs), and the remainder of his physical exam was unremarkable.

We discussed his typical food choices and physical activity habits. Mr. R. reported a diet heavy in red meat and cheese, with few fruits, vegetables, or legumes. He worked in a restaurant and was on his feet much of the day, but had no dedicated exercise regimen.

Mr. R expressed that he was opening to learning more about healthful eating habits and exercise, and that he was motivated to make some changes. I offered brief (5 minute) counseling on reducing animal products and added sodium, and increasing whole plant foods. I also suggested getting off of the subway a stop earlier on his way to work, as to add another 10-15 minutes of walking to his day. I provided educational handouts ('master' list of whole plant foods in Spanish that I designed, educational materials on hypertension in Spanish, and *4 Leaf Survey* in Spanish, at 4leafprogram.com).

I started amlodipine 5mg daily and ordered blood and urine tests, an electrocardiogram, and a return visit for a nurse blood pressure check in two weeks. Laboratory tests showed

Total cholesterol	218 mg/dL
HDL	60 mg/dL
TG	108 mg/dL
LDL (calculated)	137 mg/dL
Non-HDL cholesterol	158 mg/dL

I called the patient to review his results over the phone. I explained that his lipids were elevated, conferring a significant cardiovascular risk over the next 10 years. I reinforced the lifestyle counseling I had provided during the office visit, and explained that significant lifestyle changes may reduce his need for drug therapy. I further emphasized the importance of incorporating more vegetables, fruits, legumes, and whole grains (such as oats and brown rice) into his diet, at the expense of meat, cheese, and refined carbohydrates. We reviewed specific suggestions for each meal. The phone conversation lasted approximately 10 minutes.

At Mr. R's two-month follow-up visit, his blood pressure was 132/80 on amlodipine 10mg (titrated up at the nursing blood pressure check), and he was feeling well. He reported he was eating more vegetables, and had drastically reduced his cheese, meat, and sodium intake. His weight was 158 lbs, down 8 lbs from two months prior.

A repeat nonfasting lipid panel revealed:

		Change vs baseline
Total cholesterol	167 mg/dL	-23%
HDL	44 mg/dL	-27%
TG	196 mg/dL	+81%
LDL (calculated)	84 mg/dL	-39%
Non-HDL cholesterol	123 mg/dL	-22%

Via a brief (10 minute) follow-up phone conversation, I congratulated Mr. R on lowering his total cholesterol 23% and non-HDL cholesterol 22%, decreases which could be expected to significantly reduce his risk of cardiovascular events. We discussed barriers to continued lifestyle changes and brainstormed some potential solutions. We then set a goal of lowering his blood pressure medication in the future and avoiding additional medications.

CASE STUDY 3

Mr. W, a 60-year-old man, has a history of hypertension, osteoarthritis, heart failure with a preserved ejection fraction, and severe obesity. When we first met in December 2011, he weighed 338 pounds and had a body mass index of 44. It was a struggle for him even to walk the distance from the waiting room to my exam room.

He had a very limited budget and thought that it would be financially difficult for him to move away from the cheap convenience foods and fast foods he'd been eating for years. He hadn't eaten a vegetable in months. So we started with a simple goal – adding one serving of vegetables a day to his diet. He could buy them fresh or frozen, whatever was the least expensive.

He came back to me a month later with a vegetable diary. He was exploring the taste of vegetables. Gradually he progressed to trying out beans and whole grains, and he learned some simple recipes and got into a routine. He lost the taste for red meat and poultry, and as he started losing weight, he felt so much better and had so much more energy that he began to relish this new way of eating.

Mr. W then began exercising every morning – just walking – and that helped keep the weight off and give him even more energy. After two months he added simple strength training with light weights and riding a stationary bike at a low-cost gym. He kept an exercise diary that he brought to each visit, showing he worked out 6 mornings a week for 60-90 minutes. His osteoarthritis pain was significantly improved.

By December 2014, he had lost more than 60 pounds. He has completely overhauled his lifestyle. He now shops at farmers markets and eats a largely plant-based diet. Two of his three blood pressure medicines have been stopped. He is feeling great and would like to try to lose more weight. I recommended that he watch the *Forks Over Knives* documentary to stay motivated and inspired.

**Notes on Billing/Coding and Referrals

Most office visits were coded at 99213 or 99214 in accordance with the amount of time spent face-to-face with the patient, the amount of time spent on counseling, and/or the medical complexity and level of decision making. Time spent face-to-face and counseling, as well as the general content of the counseling, were documented

in each case. ICD codes were used for hypertension, hyperlipidemia, abnormal glucose, obesity, and other comorbidities as indicated.

In each of these cases, I as the physician provided the lifestyle counseling services. Ideally, I would have also referred to a dietitian specializing in a whole-food plant-based diet, provided that these services were available locally and that the cost of the services were affordable out-of-pocket to my patients or reimbursable by insurance. Many patients could also benefit from health coaches, fitness professionals, and stress-reduction services, but these were not available to my patients. In the future, it would be optimal to use a team-based approach to offer lifestyle counseling, especially one that includes primary care staff such as nurses, care managers, and medical assistants.