ORIGINAL
Research

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The Lifestyle Medicine Outpatient Clinic at Loma Linda University Health

Abstract: *Medical management of chronic health concerns relies heavily on behavioral change, most specifically medication adherence. Yet approximately 50% of patients with chronic illnesses are not thought to take their medications as prescribed. Moreover, it is recognized that lifestyle and behavioral changes can reduce the need for medication. It is well documented that patient outcomes and their success in achieving behavioral change is improved with engagement and support from a medical care team. As the inpatient lifestyle medicine service was being conceptualized at Loma Linda University Health (LLUH), it became apparent that an outpatient service would be necessary for follow-up care of the patients and support the lifestyle medicine treatments initiated in the hospital. Additionally, an outpatient clinic would be available to the patient population at Loma Linda and potentially prevent hospitalizations, morbidity, and mortality with proactive lifestyle medicine treatment. The initial outpatient clinic opened in February 2017 and was soon expanded to meet patient demand. Currently, the LLUH Lifestyle Medicine Outpatient Clinic is available 5 days a week, utilizing 5 physicians.*

Keywords: outpatient; consultation; consult; tertiary care; RVUs; lifestyle medicine consultation

Medical management of chronic health concerns relies heavily on behavioral change, specifically medication adherence. Approximately 50% of patients with

lifestyle medicine behavioral changes are uniquely identified as having the potential to decrease medication costs and reduce overall health care costs through reduced morbidity and mortality.⁴⁻⁷ Additionally, given that 80% to 90% of chronic disease is related to lifestyle and behavioral factors, addressing the underlying cause of disease is the best intervention.⁸ In order to address the chronic medical concerns

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chronic illnesses do not seem to take their medications as prescribed.^{1,2} It is well documented that successful patient behavioral change is improved by engaged and supportive medical care teams, although increasing medication adherence from the current level could increase medication expenses by billions of dollars.^{2,3} However, unlike the long-term changes that are required for adoption of long-term medication usage,

of the patient population at Loma Linda University Health (LLUH) above and beyond traditional medical management involving medication adherence, a lifestyle medicine outpatient clinic was conceptualized and opened.

The practice of lifestyle and preventive medicine services has been core to the mission and vision of LLUH since its inception. Ongoing needs regarding the operationalization of this vision were

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most recently highlighted by the physical medicine and rehabilitation physicians in relation to a specific focus on those patients recovering from stroke in an inpatient setting. The obvious need to create a comprehensive lifestyle management approach that bridged both inpatient and outpatient services for stroke patients was clear. However, as the idea expanded, the need for chronic disease management through lifestyle and behavioral changes was as significant in the LLUH outpatient population as it was nationally. Thus, the outpatient lifestyle medicine consultation service was designed with the dual intention of providing follow-up for continuity of care for our inpatient consultations and the opportunity for primary care referrals into the service to prevent sequelae from and even reverse chronic disease.

On successful completion of the inpatient trial at LLUH, a process that was reported in a previous article, the coordinated trial and launch of our first outpatient lifestyle medicine consultation service was initiated in the winter of 2017. The outpatient service was embedded in a primary care clinic with services provided by physicians from a variety of backgrounds including Preventive Medicine, Internal Medicine, and combined Family and Preventive Medicine. Of note, 3 of the 5 physicians currently working in the lifestyle medicine outpatient clinic also completed the inaugural board certification in lifestyle medicine in October 2017 through the American Board of Lifestyle Medicine.⁹ In addition to these 3 physicians, 4 other physicians and health care professionals at LLUH received board certification and support the lifestyle medicine outpatient clinic administratively and through referrals.

In February 2017, the outpatient service was initiated with one physician for a half day per week (10% FTE [full-time equivalent]). The pilot included the use of a lifestyle medicine intake evaluation form co-developed by LLUH and American College of Lifestyle Medicine specifically for such a service.¹⁰ Within 2 months of the service initiation, the

schedule was booked out at least 2 months and, by necessity, a waiting list was created. Shortly thereafter, evaluation of the financial viability of the outpatient service demonstrated high potential for long-term sustainability and justified the addition of a second physician for another half day per week (added 10% FTE). Within 6 months of initiation, 2 additional physicians were added to the service for a total of 4 half days per week (40% FTE) with the service being available 4 days a week. However, even with this level of service availability, there continued to be a significant waiting list with new patient appointments pushed out over 2 months for each provider. New patients were unable to be seen and follow-up appointments were difficult to schedule. Ten months into the service, a fifth physician was added to total 6 half days per week (60% FTE), which is our current state of functioning. We are still unable to meet the patient demand for these visits with ever expanding interest and awareness. The 2 most significant limiting factors for growth are limited space on campus for the clinic expansion and limited lifestyle medicine providers.

Working with billing experts, it was determined that the RVUs (relative value units) needed per half day for feasibility would be 15.4 (based on 50% of Medical Group Management Association) and included 4 consult or new patient visits and 4 follow-up patients visits. Consult or new patient visits receive a 40-minute time allocation, and follow-up patient visits receive a 20-minute time allocation. After reviewing the visit type for the first 9 months of the service, it was estimated that 47% of patient visits were follow-up appointments, 31% consultations, and 22% new patient appointments. Patients seen for the first time are either classified as a consultation visit (preferred provider organization [PPO] payors or physician referral) or a new patient visit (Medicare or self-referral). The same care is provided for consultation and new patient visits but compensation is more robust for a consultation (3 RVUs for 40 minutes) compared to new patient visits (2.4 RVUs for 40 minutes). Financial

analysis at 9 months found that 73% of the patient population was composed of PPO payors, 13% from HMO and Medicare Advantage payors and 14% from Medicare. Overall, our reimbursement was 120% of Medicare allowable rates.

Considering the number of unique patients seen only once compared to those who were seen for a return visit, the number of patients with 1 follow-up is nearly equal to those with 2 to 4 follow-up appointments. Given the recent availability of the service, these numbers are encouraging and suggest that patients who create a follow-up appointment will generally continue to return to the lifestyle clinic for behavioral change support and lifestyle interventions.

One of the first patients seen in the outpatient clinic was an individual who had struggled with weight issues and gradual weight gain and was referred to the outpatient lifestyle medicine clinic by his primary care provider. Uncertain of what to expect and concerned that this would be another disappointing diet, the patient filled out the intake form and presented it to the physician. During the 40-minute patient-centered appointment, the fears, concerns, and trepidation poured out leaving space for the new idea of a “diet-free” lifestyle behavioral change. Informational resources were provided and the SMART goal of incorporating 3 plant-based meals per week into his diet was created. Returning for a follow-up visit after a vacation, he had lost 2 inches around his waist and 13 lbs overall. He reported that not only he but also his family and children were eating more plant-based meals and an overall increase in his energy and elevation of his mood. After creating new SMART goals, he left the clinic excited to continue with his lifestyle changes and looking forward to the next visit.

Since inception, we have been working on improving flow and standardization within the clinic. Through EPIC, we continue to standardize templates as well as patient instructions, resources, and goal setting in an attempt to ease documentation constraints for physicians

and enable patient outcome tracking. We also have a psychologist and psychology students imbedded in the clinic as a source of support for mental and behavioral health. They facilitate development and adoption of coping strategies and goal setting that are essential to patient self-care.

For LLUH employees, D. Olivia Moses, Director of Corporate Health and Wellness, has developed multiple employee wellness programs that encompass weight management and diabetes as well as other topics. These programs provide additional structure and resources for the outpatient lifestyle medicine patients who are LLUH employees. For patients seen in the lifestyle medicine clinic that are not covered by the LLUH self-insured system, additional behavior change support is difficult to create and fund. This is one of the ongoing challenges that we continue to consider as we develop the outpatient clinic. Additionally, there are services that we would like to offer all our patients, including (1) nutrition services embedded within the clinic and (2) an intensive therapeutic lifestyle intervention program available on campus. Both these services would ultimately help extend our physician services and result in more sustainable health behavior change.

We are hopeful that the successful development of a feasible outpatient lifestyle medicine clinic will be reproducible in other institutions and the lessons learned will enable a more streamlined approach when created elsewhere. In the future, we hope to expand the clinic space and physician providers sufficient to meet patient demand. We are actively working toward training lifestyle medicine competent physicians through medical education, residency training (Preventive Medicine and Family and Preventive Medicine Residency programs),^{11,12} and Fellowship training¹³ in order to meet the need for

this type of physician provider both at LLUH and around the nation as the demand expands exponentially.

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Not applicable, because this article does not contain any studies with human or animal subjects.

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Trial Registration

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