Lifestyle Medicine Education Collaborative (LMEd): “Champions of Change” Medical School Leaders Workshop

Abstract: *The Lifestyle Medicine Education Collaborative (LMEd) hosted the “Champions of Change” Medical School Leaders workshop at the 2017 American College of Lifestyle Medicine annual conference. Presentations focused on the following: (1) accelerating adoption and implementation of lifestyle medicine (LM) education in medical schools through collaboration and action networks that produce positive results, (2) showcasing medical school champions and their work in LM education leadership, and (3) helping participants create a roadmap for how to engage with LMEd and implement LM education in their own medical school.*

Keywords: lifestyle medicine; curriculum; medical education; action networks; collaboration

The Lifestyle Medicine Education Collaborative (LMEd)¹ offers leadership, guidance, and curricular resources to advance the adoption and implementation of

evidence-based lifestyle medicine (LM) curricula (nutrition, exercise/physical activity, behavior change, and student self-care that includes stress resiliency) throughout medical education.

On October 22, 2017, LMEd hosted the “Champions of Change” Medical School Leaders workshop at the American College of Lifestyle Medicine (ACLM) annual conference. This workshop was a follow-up to LMEd’s 2016 inaugural summit at the University

school champions and their work in LM education leadership, and (3) helping participants create a roadmap for how to engage with LMEd and implement LM education in their own medical school.

This article highlights the format of the workshop led by facilitator Zach Anderson at Converge for Impact,² as well as gives an update of challenges and successes of participant faculty champions in their endeavor to implement LM in their medical school.

LMEd “Champions of Change” Medical School Leaders Workshop

of South Carolina School of Medicine Greenville in Greenville, SC. “Champions of Change” stakeholder engagement and presentations focused on (1) accelerating adoption and implementation of LM education in medical schools through collaboration and action networks that produce positive results, (2) showcasing medical

Zach Anderson

Converge for Impact

Converge for Impact is a team of strategists and designers who partnered with LMEd in the workshop to answer “How do we best support the efforts of people committed to implementing LM into medical school curricula?” Converge

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successfully led and facilitated the participants through a series of small and large group discussions that produced positive results. The discussions included the following:

- Participant introductions highlighting implementation of LM at their medical school
- How to make a complex, large collaborations such as LMEd fully productive
- Understanding the LMEd collaborative and use of its services
- Creating a personal roadmap for change at their medical school and the LMEd collaborative

Additionally, strategically integrated throughout the workshop, participant faculty champions gave 10-minute presentations to update the group on their own challenges and successes in their endeavor to implement LM in their medical school.

David Drozek, DO

Ohio University
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Our local groundwork for LM in Athens, Ohio, was already developed by Live Healthy Appalachia (LHA), a local nonprofit promoting the Complete Health Improvement Program (CHIP). Seeing the success of LM at LHA, I fostered LM in our school by

- Introducing a noontime CHIP video session to our medical students
- Inserting 2 hours of plant-based nutrition into the curriculum
- Emailing LM articles/video links to the students
- Inviting them to attend CHIP classes to give short informative presentations such as “Where do I get my protein?”

I also transformed my surgical practice into a LM practice, developing my own curriculum for shared medical appointments. Students “shadow” and participate in the appointments by presenting cooking demos, teaching

short segments, and leading the classes in exercise and relaxation techniques. These experiences present students research opportunities to evaluate LM effectiveness in our community and in our Global Health Program in Peru. Their posters were displayed at the ACLM annual conference, immersing them in LM and meeting the leaders.

Students also developed a LM interest group that continues to grow and schedule speakers and events to further knowledge and practice of LM. Our administration positively responded to our student interest by inviting me to develop and teach a LM elective curriculum in 2018.

Dalynn T. Badenhop, PhD

University of Toledo
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Spring semester of 2015, we began offering a LM Elective for M1 and M2 students focused on medical students adopting *Therapeutic Lifestyle Changes* (TLC) in 1 of 3 areas (physical activity, eating habits, or stress management). At the first group session, we introduced the concepts of LM. A second group session was devoted to goal setting for the TLC chosen by the student. Subsequently, the students met 1:1 or in small groups with the content expert for their chosen TLC for 2 or 3 sessions. At the end of the semester, the entire group met 2 more times to discuss their individual progress toward TLC goals and review 3 patient case studies on eating habits, physical activity, and stress management with 2 primary care physicians on faculty at University of Toledo College of Medicine (UT COM). Enrollment for this elective grew from 4 students in 2015 to 27 students in spring semester of 2017.

A lecture on the role of physicians in prescribing physical activity for patients was incorporated into the Family Medicine clerkship. This lecture included case studies on prescribing physical activity, use of a tool to easily assess a patient's current level of physical activity, and evidence-based research and guidelines for prescribing physical activity.

As a result of the success of these activities, we were invited to meet with the UT COM curriculum committee to make recommendations on incorporating more components of LM into a newly revised curriculum. The UT COM curriculum committee was receptive to adopting LM into the revised curriculum. The COM curriculum committee plans on incorporating LM components across all 4 years of medical school training. These plans will be initiated in January of 2018.

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We performed a study, “Improving Medical Students’ Obesity Care Perceptions and Competencies by Teaching Lifestyle Medicine During Clerkship Blocks,” at our school to assess the efficacy of integrating the ACLM competencies into a third-year (M3) Family Medicine Clerkship as a strategy to improve students’ obesity care perceptions and competencies. A clerkship half-day of observation with a registered dietitian was replaced with a 3-hour, didactic/experiential, interactive LM workshop delivered by an interprofessional faculty team consisting of a family medicine physician, exercise physiologist, and community public health educator. The students track their own behaviors around diet, exercise, and sleep prior to the workshop for 7 days. A patient case study applies the science of lifestyle prescriptions with a 7-day self-monitoring of personal health behaviors.

Significant improvements occurred in medical students’ perceptions of confidence interacting with patients with obesity ($P = .008$), feelings of competency with prescribing weight loss programs ($P = .002$), and reported levels of agreement with physicians being more credible and effective at obesity counseling when they personally have a

normal weight ($P = .026$), eat healthy ($P = .028$), and stay fit ($P = .006$). Patient case role plays, a Mediterranean diet taste test, a sugar-sweetened beverage demonstration, and fitness challenge were noted as positive curriculum elements. Additional time and advice for each focus area was requested.

We found that teaching LM in a Family Medicine clerkship improved medical students' obesity care perceptions and competencies and offered a more comprehensive presentation of lifestyle prescribing than previous clerkship activities. Additional curriculum design and assessment is needed to fully integrate ACLM competencies into clerkship blocks. We are adding a culinary medicine piece to complement the workshop and adding a standardized patient case as an assessment tool.

**Terri Edwards,
MEd, MA, NBCT**

**Brody School of Medicine
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The student Practice of Wellness Committee vision is to make our school "The place where they take care of themselves." In 2015, 3 faculty members discussed strategies to raise student awareness on maintaining mental and physical health, and the importance of actively engaging in support and help learn from difficulties and challenges that contributes to the development of resilience skills throughout medical school. Training for developing resilience skills includes (1) workshops led by medical students regarding their academic challenges, (2) strategies they used to persevere until successful, (3) presentations from mental health professions describing typical anxiety and stress, and (4) behavior change strategies along with descriptions of anxiety and stress levels indicating a need for professions counseling. The plan was to provide a para-curriculum on wellness during preclinical courses and discussions in small group sessions. After barriers to the original plan of providing preclinical courses in Problem-Based Learning were identified, a

committee of students, faculty, and staff formed to identify strategies to increase awareness on well-being and healthy living. The committee's first action was setting up wellness trainings for students and residents at Lunch and Learn sessions, which included biofeedback, self-compassion, yoga, appetite awareness, work-life juggle, and standing desk ergonomics.

The Practice of Wellness Committee supported development of student-led activities focused on healthy living. These included a standing desk check-out program; training modules on healthy lifestyle choices for the students' Big/Little mentoring program, and an M1 Orientation social event held at a 6-acre campus recreation complex introducing the students to the lake for kayaking and paddle boarding or playing beach volleyball; using the 18-hole disc golf course, and Odyssey High Challenge 8-element ropes course. The Practice of Wellness Committee became more integrated into the medical school's institutional structure when the Medical Student Council (MSC) voted to expand the responsibilities of an elected position to be a liaison between the MSC and the Practice of Wellness Committee.

Training in LM at Brody School of Medicine will enhance students' future impact on patient health, but for now, educating the students on the importance caring for themselves is working toward the Practice of Wellness Committee vision for students to take care of themselves.

Robert Fernandez, MS

**Kaiser Permanente
School of Medicine**

Beginning a new medical school brings both challenges and opportunities. The Kaiser Permanente School of Medicine is uniquely poised to meet the challenges and leverage the opportunities to innovatively change the way undergraduate medical education is delivered. Kaiser Permanente is a leader in building health among its patient population through delivery of evidence-based preventive, acute, and chronic care

and recognized nationally (California Medical Association (CMA) Gary S. Nye, M.D., Award for Physician Health and Well-Being³) for work in addressing physician burnout. It is intuitive that a medical school born in the Kaiser Permanente total health model would adopt LM as 1 of 4 "threads" weaving throughout the curriculum.

The curriculum is carefully designed to allow many opportunities for delving into LM principles, and the longitudinal, spiral didactic model allows for LM to be a recurrent and progressive theme throughout the instructional cases. Content will be delivered in 3 phases:

- Provide the evidence that illustrates the relationship between lifestyle risk factors and health outcomes
- Highlight the relationship between a physician's own health habits and patient outcomes
- Focus on assessment of lifestyle risk factors and intervention techniques (clinical and nonclinical) that will include nutrition, physical activity, sleep, tobacco, alcohol/drugs, stress/emotional well-being, and behavior change

Most important, as medical student well-being is an important theme in the mission, vision, and values of the Kaiser Permanente School of Medicine, LM will be a part of the culture, conveyed and reinforced within and outside the curriculum in all areas, from the approach to student assessment to the building design.

Louise Muscato, PhD

**Western University
of Health Sciences
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From 2011 to 2013, 8 hours of LM was included in the general curriculum module, "Physician and Society I and II," a required course for all osteopathic medical students. To advance LM for students, a Lifestyle Medicine Longitudinal Track (LM) elective was implemented.

The first year, 10 COMP-Northwest students were accepted out of 30 applicants who applied to the track. The LM is now in its fourth year, graduating its first cohort in 2018. The curriculum includes experiential culinary sessions (based on the Tulane Culinary Medicine curriculum), motivational interviewing, CHIP (Complete Health Improvement Program), education in exercise, weight loss, smoking cessation, stress management, self-care, mindfulness, and a capstone project. All students are required to complete 30 hours of community service, which can be merged with LM capstone projects to provide capstone with a community service focus.

Over the past 4 years, students have delivered cooking and nutrition classes for the Greater Santiam Boys and Girls Club, Mennonite Village Long Term Care, and Lebanon Soup Kitchen; healthy lifestyle education modules for Lebanon School District; and a “Team Wellness” curriculum for local Oregon Special Olympics participants. Capstone projects also included academic journal articles, research, and poster presentations. Community service capstone projects give LM students the opportunity to promote healthy lifestyles working with populations representing their future patients. To date, 53 COMP-Northwest students have participated in the LM program.

Statistically, if each of these future doctors treats 40 000 patients over their lifetime, approximately 2.1 million patients will have been treated by a physician with a LM focus (40 000 patient visits × 53 LM Physicians = 2.1 million patients treated), demonstrating great success of our program.

**Jennifer Trilk, PhD,
FACSM, and Elizabeth
Morris, MD**

University of South Carolina
School of Medicine Greenville
(USC SOM Greenville)

The University of South Carolina School of Medicine Greenville requires all matriculating medical students to

become educated in LM (called the “Core Program”) to improve patient care for prevention and treatment of lifestyle-related noncommunicable chronic diseases (NCDs).⁴

The M1-M2 years begin by learning the underlying basic science concepts, mechanisms, and root causes of NCDs and their association with lifestyle behaviors. Training is further emphasized in the M3-M4 years through clinical clerkships and fourth-year case sessions. To encourage future teamwork in interdisciplinary, patient-centered care, students are introduced to and educated by registered dietitians, clinical exercise physiologists, and wellness coaches. LM assessment is included in summative exams, reflections, clinical reasoning cases, skills acquisition assessment through Objective Standardized Clinical Examinations, and documentation in the electronic health record. The core program is delivered and mapped across all disciplines (longitudinal integration) and all years (vertical integration).

USC SOM Greenville also offers the “Lifestyle Medicine Distinction Track (LMDT)”: Competitive students who enter the LMDT train beyond the core program to become LM frontline advocates for healthy lifestyle behaviors in their patients and communities. Successful completion of the LMDT is noted in the student’s Dean’s Letter with a completion certificate awarded at graduation. Finally, the importance of student health is modeled through faculty-supported extracurricular activities including running, cycling, yoga, soccer games, and year-round cultivation of the organic garden. This fosters a culture that encourages the physicians-in-training to maintain self-care and avoid burnout.

Mark D. Faries, PhD

Texas A&M College
of Medicine

At Texas A&M, we began the development of a 12 to 15-hour certificate program for fourth-year students. The certificate is “in-house”

and provides an additional specialty. The beginning steps is to offer 2 elective courses: (1) Introduction to LM and (2) Understanding Patient Behavior. We have also discussed a practicum set up to collaborate with St. Joseph’s Hospital to provide experience around medical fitness and LM in older adults. A key success factor in implementing LM Curricula at Texas A&M College of Medicine is to be prepared to communicate the evidence basis of LM, being open to compromise, focusing on interests of students, and conducting research in LM. These are key steps, since not everyone has heard of nor understands the term “lifestyle medicine.”

**Brenda Rea, MD,
DrPH, PT, RD**

Loma Linda University

In keeping with our mission to train and develop medical leaders in the practice of LM, Loma Linda University Health has been growing curricular and application opportunities at 3 levels: medical, residency, and fellowship education. Some of the challenges that have been encountered during this growth process include the following: (1) time allocated to LM training opportunities within medical school and residency didactics, (2) funding and time allocated for faculty to develop and implement LM training opportunities, (3) space available for practicing LM on campus, (4) reimbursable models for practicing LM with trainees, and (5) buy-in of key stakeholders such as deans, department chairs, residency and fellowship program directors, and clerkship directors. Several areas of strength have enabled us to navigate the challenges:

- Strong heritage of LM inculcated at our institution and closely aligned with our mission to make man whole through the teaching and healing ministry of Christ
- Core group of faculty who are passionate and dedicated to the

growth of LM within our institution both academically and clinically

- Identified reimbursable mechanisms for practicing LM in both the outpatient and inpatient settings with opportunities to train medical students and residents
- Sustainable mechanism for training board certified/board eligible physicians in a non-ACGME approved LM fellowship
- Persistence in sharing our passion with key stakeholders on campus, willingness to put in voluntary work when funding was not available, and belief that change was possible all led to incremental growth over time.

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Trial Registration

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