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# Lifestyle Medicine Intensivist Competencies: 2023 Expert Consensus Update

**Abstract:** *Objective:* The objective of this expert consensus process was to identify the competencies that lifestyle medicine (LM) Intensivists should be expected to have within their skill set. *Methods:* Expert panel members with experience in intensive, therapeutic lifestyle change (ITLC) updated and expanded a previously published set of competencies for this intensive LM practice, using an established process for developing consensus statements adapted for the topic. The previously published set of competencies was discussed for possible revision and expansion. Proposed changes were assessed for consensus using a modified Delphi process. *Results:* The expert panel revised the original list of 34 competencies, maintaining the 6 initial proposed topics that were

previously published as *Specialist Competencies: (1) Practice-Based Learning and Improvement, (2) Patient Care and Procedural*

*achieved consensus. Conclusion:* These competencies define the scope of practice and desired skill set for LM Intensivists. Further,

 “In addition to medical knowledge and other foundational skills of medical practice, a core element of all LM intervention is supporting health behavior changes in patients.” 

*Skills (3) Systems-Based Practice, (4) Medical Knowledge, (5) Interpersonal and Communication Skills, and (6) Professionalism. After a series of meetings and an iterative Delphi process of voting and revision, a final set of 46 competency statements for LM Intensivists*

*these competencies establish a standard for certification of LM Intensivists.*

**Keywords:** lifestyle medicine; competencies; intensivist; intensive therapeutic lifestyle change; specialist; modified Delphi process

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## Introduction

The practice of lifestyle medicine (LM) continues to grow as the number of certified practitioners increases<sup>1</sup> and the implementation of LM within both private practices and health systems gains traction.<sup>2</sup> As the reach of LM broadens, there is a need to provide guidance to maintain a clear definition of the expected scope of knowledge and skill set for qualified LM practitioners.

The clinical competencies required for LM Intensivists (then-called “Specialists”) were first formulated and published in 2020 by an expert panel commissioned by the American College of Lifestyle Medicine (ACLM).<sup>3</sup> Just as the core competencies for primary care LM<sup>4</sup> served to formalize the practice of LM in primary care and promote its development and use, extended competencies for those who specialize in intensive therapeutic lifestyle change (ITLC) were needed. The recognition and use of ITLC since this first publication has grown. The American Board of Lifestyle Medicine (ABLM) offers an advanced LM certification for physicians who specialize in intensive treatment, now known as “Intensivists.” (<https://ablm.org/eligibility-scheduling/>).

In lifestyle medicine, the clinical goal is health with no evidence of disease. *Remission* is the return to a state of non-disease as determined by the failure to meet the recognized criteria for diagnosing the disease. *Remission* does not necessarily equate to a state of no evidence of disease. For example, a return to glucose levels in the range of “prediabetes” are consistent with various definitions<sup>5,6</sup> of remission of type 2 diabetes, but are not adequate to meet criteria for no evidence of disease. *Reversal* is the process of disease treatment with the clinical goal of health with no evidence of the disease. LM Intensivists are best

poised to support patients in achieving optimal health and remission of disease, by engaging in reversal in the context of ITLC treatment. The rise of ITLC combined with rapid growth in the evidence base for LM suggests a need to reassess and update the existing competencies for physicians using a more formal expert consensus process with input from an international panel of experts.

The evidence-based practice of LM includes both therapeutic lifestyle change (TLC) and ITLC methods of treatment. ITLC can be defined as an intensive, total-immersion approach to change providing maximum therapeutic dosing, while more gradual, incremental change is typically utilized with lower dose TLC interventions.<sup>7</sup> TLC interventions are appropriate and adequate for many lifestyle-related conditions, especially for early treatment when symptoms are milder and less acute.<sup>7</sup> However, the more intensive dosing<sup>8</sup> that is used in ITLC is needed as lifestyle-related conditions progress and more serious symptoms develop. As in certain specific contexts such as weight loss,<sup>9</sup> it is important that active ITLC interventions be followed by appropriate ongoing TLC treatment and monitoring to maintain adequate dosing of lifestyle interventions. In some cases, just as with addiction medicine where “refresher” treatment is sometimes needed to address relapse, a course of ITLC dosing may need to be repeated.

The objective of this consensus statement is to identify and describe the set of competencies that encompass the expertise required of physicians to provide effective, evidence-based intensive LM treatment (ITLC), and to organize them into the 6 Accreditation Council for Graduate Medical Education and American Board of Medical Specialties (ACGME/ABMS) categories.<sup>10</sup> The goal was to use the

existing competencies as a starting point for a more formal, expert consensus process that would validate, update, and bolster the ITLC competencies to best serve development of standards for Intensivists.

## Methods

This consensus update of the competencies was based on an a priori protocol (previously developed by AAO-HNSF<sup>11</sup> and also used by ACLM<sup>5</sup> to develop expert consensus statements), modified to streamline the process. In this project, the following steps were completed (1) define the scope of updating these competencies (2) recruit the expert panel, (3) vet potential conflicts of interest among proposed development group members, (4) perform a systematic literature search (5) discuss edits to the previous competencies statements to develop new competencies for voting, (6) develop and implement modified Delphi Method surveys, (7) revise the competencies based on survey results, and (8) assemble final statements for presentation.

### Choice of Lifestyle Medicine Intensivist Competencies and Expert Panel Recruitment and Vetting

Competencies for LM Intensivists was proposed for a consensus statement by the Founding President of ACLM and approved by the ACLM Board of Directors. Expert panel membership was strategically developed to ensure appropriate representation of physicians from within the field of lifestyle medicine who have experience in delivering ITLC interventions, who come from a geographically diverse set of countries and continents, and who have unique perspectives on implementing ITLC interventions in a variety of practice settings. The ECS expert panel included

representatives selected by the American College of Lifestyle Medicine (ACLM) and the American Board of Lifestyle Medicine (ABLM). [Supplementary Table S1](#) presents a summary of panelist qualifications.

Once the expert panel was assembled, complete disclosure of potential conflicts of interest were reported and vetted. No direct conflicts of interest<sup>12</sup> existed for the chair or the majority of the participants. The project chair led the development of the consensus statements and the Delphi process with administrative support from an ACLM staff liaison, who also served as a non-clinician expert panel member.

#### Literature Review and Scope of the Consensus Statement

A literature review was performed in PubMed by ACLM staff, using keywords selected to identify current evidence on lifestyle medicine intervention and ITLC. The search was run through 9/28/21 and updated 9/6/22 and included publications in English. The following terms were used in the search:

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((intens*[Title/Abstract] OR therapeutic[Title/Abstract]) AND (lifestyle[Title])) AND (change [Title/Abstract] OR program[Title/Abstract] OR intervention[Title/Abstract] OR treatment[Title/Abstract])
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*Filters applied:* Case Reports, Clinical Trial, Guideline, Meta-Analysis, Observational Study, Practice Guideline, Randomized Controlled Trial, Systematic Review. (no reviews)

The primary target audience of this consensus statement was defined as physicians practicing lifestyle medicine, either already practicing ITLC interventions or interested in doing so. The secondary target audience was defined as the

professional entities organizing and advancing the field of lifestyle medicine. The target population was defined as all patients of LM physicians. Search results were screened by the chair and used to inform the discussions and refinement of edits to the competencies.

#### Discussion and Competencies Editing for Delphi Voting

Once the target population and scope of practice were determined, the expert panel used the results of the literature reviews, combined with their expert opinion and stakeholder needs, to propose edits to updating the competencies in 6 topic areas, which were previously published as Specialist Competencies in 2020.<sup>3</sup>

Each statement from the previously published document was discussed in meetings. Edits to improve and refine them were proposed for voting. As needed, competencies were edited, combined, deleted, or new statements were created. Competencies were developed or modified to follow best educational practices in developing learning objectives, using a strong action verb to begin each statement. A modified Delphi survey method<sup>13</sup> was implemented to assess consensus for the edited competencies,<sup>11</sup> with multiple surveys completed to address proposed edits that arose through further discussion. Prior to dissemination to the expert panel, the Delphi surveys were created by the chair, reviewed, and revised by ACLM staff liaison as needed with oversight from the chair. An online survey platform ([www.QuestionPro.com](http://www.QuestionPro.com)) was used to administer the surveys to expert panel members.

Questions in the survey were answered with a 9-point Likert scale,

with anchors of 1 = strongly disagree, 3 = disagree, 5 = neutral, 7 = agree, and 9 = strongly agree. The surveys were distributed, and responses were analyzed and presented in the next expert panel meeting. Statements or edits that achieved near consensus were discussed further and revised for re-voting.

The final draft of the expanded competencies was reviewed for completeness by the expert panel, with further editing by the chair and 1 panel member. These additional, final edits to the competencies were approved with 2 last rounds of Delphi voting. The expanded competencies were then reviewed and approved by the ACLM and ABLM Board of Directors.

#### Criteria for Consensus Were Established a Priori as Follows

- **Consensus:** statements achieving a mean score of 7.00 or higher and having no more than 1 outlier, defined as any rating 2 or more Likert points from the mean in either direction.<sup>11</sup>
- **Near consensus:** statements achieving a mean score of 6.50 or higher and having no more than 2 outliers.
- **No consensus:** statements that did not meet the criteria for consensus or near consensus.

Each survey focused on 1 or more topic areas. All expert panelists present completed the survey items, and absentee panelists were encouraged to review the minutes and recorded meetings and complete the survey. The competency statements that did not meet consensus were discussed to determine if wording or specific language was pivotal in the item not reaching consensus. Each topic area was addressed with 1-3 Delphi rounds. The factors leading to the

**Table 1.**

## Practice-Based Learning and Improvement.

Refers to the Candidate's Ability to Investigate and Evaluate Patient Care Practices, Appraise and Assimilate Scientific Evidence, and Improve the Candidate's Own Practice of Medicine, the Collaborative Practice of Medicine, or Both.	
a. Monitor treatment processes and outcomes to improve the quality of lifestyle interventions in individuals and groups of patients with a focus on	
1) LM-specific models of care, policies and procedures	
2) Patient behavior change (activation) measures	
3) Person-centered care utilizing validated lifestyle vital signs relevant to each pillar	
b. Utilize data technology to maximize the treatment effects of lifestyle interventions while tracking changes of individuals and patient populations over time, including:	
1) LM patient assessment	
2) Chronic disease risk profile assessments	
3) Bio-psycho-social barriers	
4) Lifestyle behavior change (activation), and patient experience measures <sup>a</sup>	
5) Follow-up systems/methods for supporting lifestyle changes	
c. Establish continuous quality improvement processes	
d. Demonstrate the ability to collaborate with clinical research related to the key components of LM	
e. Demonstrate the ability to design, utilize, and advocate for financially viable health delivery models by:	
1) Implementing disease-specific shared medical appointment programs (general, programmed, or drop-in)	
2) Deploying Intensive Therapeutic Lifestyle Change interventions (ITLC)	
3) Utilizing in-person and virtual telehealth platforms	
f. Manage a LM practice or program, including human, financial, and material resources	
g. Establish and lead interdisciplinary teams conducting multifactorial lifestyle change treatment programs to arrest and reverse disease, with attention to:	
1) Team culture	
2) Quality improvement (QI)	
3) Interdisciplinary patient-centered whole person care, either with onsite practice or external health care providers	

Abbreviations: LM = lifestyle medicine; QI = quality improvement.

<sup>a</sup>PROMs, PRAMs, PREMs, PROPMs—patient-reported {outcome/activation/experience/outcome performance} measures.

remaining items not reaching consensus were not attributed to wording or other modifiable factors, but rather a genuine lack of consensus. However, the group discussions allowed ample opportunity to engage in the iterative nature of the voting process and propose revisions for

revote. For methodological transparency, results from each specific round of voting with mean agreement and number of outliers are presented in [Supplementary Tables S2-S8](#).

The final manuscript was drafted with participation and final review from each panelist, and reviewed

and approved by ACLM and ABLM.

## Results

After seven iterations of the Delphi surveys, 46 competency statements achieved consensus, including those unchanged from

**Table 2.**

## Patient Care and Procedural Skills.

Refers to the Candidate's Use of Clinical Skills and Ability to Provide Care and Promote Health in an Appropriate Manner that Incorporates Evidence-Based Medical Practice, Demonstrates Good Clinical Judgment, and Fosters Patient-Centered Decision-Making.
a. Demonstrate expertise in the treatment settings in which LM intensivists commonly practice (e.g., a psychologically safe, ethical environment for inpatient, residential, outpatient, or group visits)
b. Apply evidence-based LM guidelines (such as those published by the expert LM panel and other expert panels) to treat lifestyle-related disease to achieve maximal remission and functionality
c. Implement LM protocols that match the appropriate intervention to pathophysiology severity for treatment, "reversal" (ITLC), and disease prevention
d. Manage medication adjustments safely and appropriately as a patient adopts a healthier lifestyle, in collaboration with the primary attending clinician as necessary
1) Appropriately manage de-escalation of medications and deprescribing.
e. Evaluate the function of relevant body systems and implement LM protocols that appropriately match the intensity of lifestyle treatment dosing needed to arrest and/or reverse disease pathophysiology and mitigate sequelae
f. Conduct a health history and physical examination specific to lifestyle-related health status, including lifestyle vital signs
g. Obtain and interpret appropriate tests to screen, diagnose, and guide the arrest and/or reversal of lifestyle-related disease
1) Interpret lab values that may be abnormal for those with a typical diet and lifestyle but are appropriate for those on an optimal lifestyle and diet regimen (e.g., low HDL-C [high-density lipoprotein cholesterol] when total cholesterol is low, etc.)
h. Assess the biological, psychological, social, cultural, and spiritual effects of patients' behaviors on associated health outcomes
i. Evaluate patient and family readiness and ability to make healthful behavioral changes to inform practice decisions, by:
1) Identifying the bio-psycho-social barriers to change as part of the risk assessment workup, subsequent action plan
2) Aligning recovery and relapse prevention expectations
j. Compare and contrast LM guidelines and nationally recognized practice guidelines (such as hypertension and smoking cessation) in order to facilitate informed patient decision-making for self-management of patient health behavior and lifestyle
k. Collaborate with patients and their families to develop evidence-based, achievable, specific, written action plans such as lifestyle prescriptions

Abbreviations: LM = lifestyle medicine.

the 34 competencies in the first publication. These competencies were organized into the same 6 topic areas defined by ABMS and ACGME, as in the previously published competencies: (1) Practice-Based Learning and Improvement, (2) Patient Care and Procedural Skills, (3) Systems-Based Practice, (4) Medical Knowledge, (5) Interpersonal and Communication Skills, and (6) Professionalism (Tables 1-6). Substantial changes from the 2020

competencies for LM Specialists<sup>3</sup> were made to all topics areas except (4) Medical Knowledge. This included newly developed competencies or substantial re-writes of previous competencies, as well as the addition of sub-items under certain competencies.

### Discussion

We successfully used an expert consensus process to build upon, and validate, guidance for

physicians seeking to develop expertise in the core ITLC competencies. Having achieved consensus on all recommendations with a diverse expert panel adds credence to the depth and validity of the competencies, beyond the original work in this field published in 2020 to first define competencies for then-called "Specialists."<sup>3</sup>

Therapeutic lifestyle *change* outcomes are considered "intensive" when large changes are made that dramatically improve biometric

**Table 3.**

## Systems-Based Practice.

Refers to the Candidate's Awareness of, and Responsibility to, Population Health and Systems of Health Care. The Candidate Should be Able to Use System Resources Responsibly in Providing Patient Care (e.g., Good Resource Stewardship, Coordination of Care).
a. Describe the structure and function of the health care system as it relates to LM and identify the roles of LM intensivists therein
b. Advocate for medical system and public health reforms that support and empower evidence-based LM integration into employee health, patient care, and community benefit across the care continuum
c. Implement business systems and practices to support lifestyle medical care, including decision support technology (computer-based information system that supports clinical decision-making) and appropriate payment mechanisms. (e.g., value-based payment, billing for shared medical appointments, etc.)
d. Demonstrate familiarity with appropriate community and professional resources to refer patients for ongoing support of lifestyle changes to support and sustain positive lifestyle changes, particularly in the transition from intensive interventions to less-intensive levels of care
e. Coordinate and communicate with referring providers
f. Make appropriate choices to refer patients to other health care resources
g. Collaborate with key stakeholders and community leaders to reduce health care disparities using LM
h. Advocate for LM as a solution to achieve the quintuple aim <sup>a</sup> of health care
i. Articulate and demonstrate the role of LM-based programs in value-based payment systems

Abbreviations: LM = lifestyle medicine.

<sup>a</sup>Quintuple Aim, a term coined by Nundy et al in JAMA<sup>14</sup> to include health equity in the quadruple aim identified by Thomas Bodenheimer in the Annals of Family Medicine<sup>15</sup> that the 3 dimensions of Institute for Health care Improvement's Triple Aim by Donald M. Berwick—improving the care of individual patients, promoting the health of populations and lowering health care costs—must also take into account the wellbeing of health care providers in order to be effective.

**Table 4.**

## Medical Knowledge.

Refers to the Candidate's Demonstration of Knowledge About Established and Evolving Biomedical, Clinical, and Cognate Sciences, as Well as the Application of These Sciences in Patient Care.
a. Evaluate and discuss the scientific evidence that specific intensive lifestyle changes can arrest or reverse chronic disease
b. Interpret how lifestyle medicine plays a role within basic medical science
c. Discuss and apply the major components of LM that have determining effects on patients' health outcomes
d. Describe the benefits of physician engagement with patients and families regarding its effect on patients' health behaviors
e. Evaluate best applications of prominent conventional, complementary and/or alternative therapies that may influence the application of LM interventions, including when and how to start, stop, and/or titrate medications, herbs, or other supplements

Abbreviations: LM = lifestyle medicine.

measures of health and disease. Therapeutic lifestyle change *interventions* are considered “intensive” when increased frequency and/or duration of patient

encounters can be used to help patients make substantial changes rapidly with the intent of dramatically improving biometric measures of health and disease.<sup>7</sup>

This type of LM treatment requires close supervision and oversight by a qualified LM physician, ideally a physician certified in LM and also appropriately trained to deprescribe



**Table 5.**

## Interpersonal and Communication Skills.

<b>Refers to the Candidate's Demonstration of Skills that Result in Effective Information Exchange and Partnering With Patients, Their Families, and Professional Associates (e.g., Fostering a Therapeutic and Ethically Sound Relationship; Using Effective Listening Skills With Nonverbal and Verbal Communication; Being Mindful of Health Literacy, and Working Effectively in a Team Both as a Team Member and Leader).</b>
A. Establish effective relationships across culturally and linguistically diverse patient populations to initiate and sustain behavioral change using evidence-based counseling, education tools, and appropriate follow-up
b. Collaborate with patients and their families to develop evidence-based, achievable, specific, written action plans such as lifestyle prescriptions
c. Collaborate with community, insurance, hospital, and clinical leadership in the integration of LM as a foundation of primary care and key component of specialty care
d. Advocate for lifestyle medicine as a unique specialty
e. Discuss the role of intensive inductive LM interventions in initiating and maintaining remission of lifestyle-related diseases and conditions
f. Engage with patients and families as a “coach” as well as an “expert,” by applying empathy, understanding, and motivational interviewing techniques through a compassionate but firm approach
g. Display leadership, passion, vitality, and positivity through all channels of communication.
h. Develop positivity resonance in interactions with the health care team and patients to broaden their problem-solving capacity in behavior change and self-management

Abbreviations: LM = lifestyle medicine.

**Table 6.**

## Professionalism.

<b>Refers to the Candidate's Demonstration of a Commitment to Carrying Out Professional Responsibilities, Adhering to Ethical Principles, Applying the Skills and Values to Deliver Compassionate, Patient-Centered Care, Demonstrating Humanism, Being Sensitive to Diverse Patient Populations and Workforce, and Practicing Wellness and Self-Care.</b>
a. Promote healthful lifestyle choices as foundational to medical care, disease prevention, and health promotion
b. Educate, inspire and advance the field of LM as an expert by facilitating opportunities such as seminars, workshops, presentations, and conferences
c. Model personal healthful lifestyle choices as an individual and as a clinical team.
d. Foster educational, occupational, community, and domestic environments that support healthful lifestyle choices in society
e. Exhibit cultural proficiency in patient interactions and embrace diversity-based needs of health care colleagues and patients
f. Engage in lifelong learning and continuous professional development in lifestyle medicine

Abbreviations: LM = lifestyle medicine.

medications as needed.<sup>7</sup> Intensive Cardiac Rehab (ICR) LM programs, for example, are “intensive” therapeutic lifestyle change interventions, which produce

dramatic improvement in multiple biometric measures of health and disease status, as well as supervision and oversight by a qualified physician.

In addition to medical knowledge and other foundational skills of medical practice, a core element of all LM intervention is supporting health behavior changes in patients.

Effectively motivating patients to change behavior poses significant challenges for health care practitioners.<sup>16</sup> Merely encouraging patients at the conclusion of a brief office visit to attempt such changes yields limited results.<sup>17</sup> Examples of successful dietary interventions are high-intensity, with multiple follow-up visits and points of contact.<sup>17</sup> A systematic review of 9 studies, with participant groups ranging from N = 38 to N = 1065, on behavioral strategies used to increase adherence to lifestyle interventions among adults with obesity found that the inclusion of behavioral strategies supported more physical activity and better attendance in sessions, highlighting the relationship between provider-patient contact and the ability to support optimal adherence to treatment.<sup>18</sup>

These competencies define the expected scope of skill for LM Intensivists, the physicians focused on delivering such ITLC treatment. They were organized around the 6 competency categories defined by ABMS and ACGME. This facilitates their use in developing medical education and training programs, including fellowships for LM Intensivists who can specialize in providing the most intensively-dosed therapeutic lifestyle interventions. Such interventions are typically needed for the more acute and/or severe cases of chronic disease, necessitating a higher level of expertise and clinical knowledge and skill than is typically available in the primary care setting. Ideally, these intensive LM interventions are requested and followed up after referral by primary care clinicians who desire to optimize LM dosing for maximal treatment effect.

These competencies will set a consistent standard for certification, allowing LM Intensivists to demonstrate mastery of the skills, ability, and knowledge to practice ITLC effectively. Preparation for certification will be supported by

clinical training residencies and/or fellowships that are able to embrace these competencies in their curricula and track patient outcomes to demonstrate clinical expertise. Certification of LM Intensivists is intended to include a demonstration of mastery of these competencies, ideally by written exam and evidence of appropriate clinical outcomes.

### Strengths and Limitations

These competencies have a number of strengths. They were developed using a systematic consensus process that produced robust discussion and solid consensus. The panel included LM experts from multiple continents with a wide scope of expertise and clinical experience in ITLC. They built upon the previous competencies for LM Specialists published in 2020.<sup>3</sup> They were also able to benefit from the updated competencies for primary care LM published in 2022.<sup>4</sup>

There were limitations in developing this set of intensivist competencies. The number of practicing LM Intensivists and relevant experts is relatively small, in large part because LM is a nascent medical discipline with limited reimbursement by third-party payers. This tended to limit the number of experts available to serve on the panel. However, this was ameliorated to some extent by including international panelists, and the panel was of sufficient size to have diversity of opinion, with 12 experts serving on it.

### Conclusions

These competencies will serve to guide the practice, education, clinical training and ideally certification of an intensivist category of physicians who specialize in LM vs the more generalist category of primary care LM practice.

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### Supplemental Material

Supplemental material for this article is available online.



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