INTEGRATIVE MEDICINE IN MEDICAL SCHOOL:
LESSONS LEARNED FROM THE ACADEMIC CONSORTIUM OF INTEGRATIVE MEDICINE AND HEALTH

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I have no outside relationships or conflicts of interest to disclose.
Why Educate Medical Students on Integrative Health and Medicine?

• Almost 40% of the population routinely uses complementary and integrative approaches; over 60% if prayer is included.

• Institute of Medicine recommends medical schools incorporate sufficient evidence-based information to allow physicians to “competently advise” patients on integrative health approaches.

• Physicians must also be aware of potential interactions, between natural medicine approaches and pharmaceuticals.

Our Mission

Advance integrative medicine and health through academic institutions and health systems

Integrative medicine “makes use of all appropriate therapeutic and lifestyle approaches, healthcare professionals and disciplines to achieve optimal health and healing.”

How We Achieve our Mission

• Support and mentor academic leaders, faculty, and students to advance integrative healthcare education, research, and clinical care

• Disseminate information on rigorous scientific research, educational curricula in integrative health and sustainable models of clinical care

• Inform health care policy
1999: Eight Founding Centers

- University of California, San Francisco
- Stanford University
- University of Arizona
- University of Minnesota
- UMASS
- Harvard University
- University of Maryland
- Duke University
Consortium Growth
Current Members

Albert Einstein/Yeshiva University
Allina Health Systems
Aurora Health Care
Beaumont Health
Boston University
Central Maine Healthcare
Cleveland Clinic
Columbia University
Duke University
Georgetown University
George Washington University
Harvard Medical School
Icahn School of Medicine at Mt. Sinai
Johns Hopkins University
Mayo Clinic
McMaster University, Ontario
MD Anderson
Memorial Sloan Kettering
Meridian Health
Milton S. Hersey Medical Center
Northwestern University
Ohio State University
Oregon Health & Science University
Rutgers New Jersey Medical School
Scripps Health
Stanford University
Sutter Health Systems
Tecnologico de Monterrey
Temple University
Texas Tech University
Thomas Jefferson University
Tufts University
UH Connor Integrative Health Network
Universidad Autónoma de Guadalajara
University of Alberta
University of Arizona
University of Calgary
University of California, Irvine
University of California, Los Angeles
University of California, San Diego
University of California, San Francisco
University of Chicago
University of Cincinnati College of Medicine
University of Colorado at Denver
University of Connecticut
Univ. of Hawaii at Manoa
University of Kansas
University of Kentucky
University of Maryland
University of Massachusetts
University of Miami
University of Michigan
University of Minnesota
University of New Mexico
University of North Carolina, Chapel Hill
University of Pennsylvania
University of PA, Hershey
University of Pittsburgh
University of Saskatchewan
University of Southern California
University of Texas, MB
University of Utah
University of Vermont
University of Washington
University of Wisconsin, Madison
Vanderbilt University
Veterans Health Administration
Wake Forest University
Yale University
The authors present a set of curriculum guidelines in integrative medicine for medical schools developed during 2002 and 2003 by the Education Working Group of the Consortium of Academic Health Centers for Integrative Medicine (CAHCIM) and endorsed by the CAHCIM Steering Committee in May 2003. CAHCIM is a consortium of 23 academic health centers working together to help transform health care through rigorous scientific studies, new models of clinical care, and innovative educational programs that integrate biomedicine, the complexity of human beings, the intrinsic nature of healing, and the rich diversity of therapeutic systems.

Integrative medicine can be defined as an approach to the practice of medicine that makes use of the best-available evidence taking into account the whole person (body, mind, and spirit), including all aspects of lifestyle. It emphasizes the therapeutic relationship and makes use of both conventional and complementary/alternative approaches.

The competencies described in this article delineate the values, knowledge, attitudes, and skills that CAHCIM believes are fundamental to the field of integrative medicine. Many of these competencies reaffirm humanistic values inherent to the practice of all medical specialties, while others are more specifically relevant to the delivery of the integrative approach to medical care, including the most commonly used complementary/alternative medicine modalities, and the legal, ethical, regulatory, and political influences on the practice of integrative medicine. The authors also discuss the specific challenges likely to face medical educators in implementing and evaluating these competencies, and provide specific examples of implementation and evaluation strategies that have been found to be successful at a variety of CAHCIM schools.

INTEGRATIVE MEDICINE

PHYSICIAN VALUES

• A physician is defined by a philosophy and perspective on health and illness as well as by a set of skills and techniques. This broad perspective will improve outcomes for patients, deepen fulfillment in collegial relationships, and enable the physician to find continuing meaning in his or her work.

• A physician has a broad definition of professionalism, which allows the health care team to become a healing community that supports and develops wholeness in all relationships, those between colleagues as well as those between physician and patient.

• A physician recognizes the relevance of feelings, beliefs, life experiences, meaning, and faith to his/her professional behavior. This broadens the nature of physician–patient interaction and shifts the conventional boundaries of physician–patient relationship.

• A physician is able to recognize the value of his or her own full human experience and to focus and dedicate it to the benefit of patients. Who the physician is as a person is transmitted through his or her work and “presence” and has a substantive impact on the outcome of the doctor–patient relationship.
INTEGRATIVE MEDICINE
PHYSICIAN VALUES

• A physician believes that an ongoing commitment to personal growth is fundamental to the practice of medicine.

• A physician is able to create a relationship of harmlessness, safety, nonjudgment, and acceptance that enables patients to access their own strengths and direct their own lives.

• A physician recognizes the pursuit of meaning as fundamental to the process of healing and has the capacity to find meaning in daily work and daily relationships. This capacity allows him/her to accompany patients as they seek and find meaning in the events of their lives.

• A physician recognizes the multivariate and sometimes unknown factors that influence health and healing.

• A physician views health and illness as a part of human development that can evoke the potential for personal and social wholeness through the experience of illness and suffering.
Graduating physicians will be prepared to effectively counsel patients on the evidence-based use of integrative therapies, facilitating benefit from these approaches where possible and preventing negative consequences from their ill-advised use.
EINSTEIN INTEGRATIVE MEDICINE COMPETENCIES (2011)

1. Describe the basic concepts of the most commonly used CAM modalities including chiropractic, acupuncture, herbal medicine, and mind–body therapies, including:
   a. basic definitions/theory/philosophy/history
   b. common clinical applications
   c. potential for adverse effects
   d. current research evidence for efficacy
   e. reputable resources for in-depth information
   f. training/credentialing standards for practitioners

2. Design a personal self-care program that includes:
   a. Learning to assess one’s level of stress
   b. Implementing a self-care strategy (may include nutrition awareness, self-regulatory techniques, exercise, journaling, creative arts, spirituality, mind–body skills)

3. Demonstrate skills to communicate effectively:
   a. with patients about their use of CAM in a respectful and culturally appropriate manner
   b. with patients and all members of the interdisciplinary health care team, including practitioners of CAM disciplines, in a collaborative manner to facilitate quality patient care.
   c. using strategies such as motivational interviewing to help facilitate healthy behavior change for their patients
WORKING WITH EXISTING EDUCATIONAL COMPETENCIES

• Physician as Healer
  ❖ Recognize the individuality of each patient, including the impact of culture, faith and spirituality on patient understanding of health and disease
  ❖ Offer comfort, reassurance and hope to patients and families

• Physician as Scientist
  ❖ Appreciate the impact of psychosocial factors, nutrition, and behavior on health and disease.

• Physician as Role Model
  ❖ Learn and regularly practice self-reflection to promote personal growth and development.
  ❖ While maintaining the primacy of the patient, recognize that self-care and wellness are mandatory in order to best serve others.
Current (required) curriculum activities

• ICM session: Stress Reduction: The Practice of Integrative Medicine, workshop-style session with emphasis on impact of stress and mind-body treatment strategies. Students can sign up for one of several workshops on Hypnosis, Yoga, Chinese medicine, etc.

• Nervous System and Health Behavior session: “Non-pharmacological Approaches to Pain.” EBM session focusing on skills for interpreting integrative medicine studies using tai chi for fibromyalgia as a case study.

• Family Medicine clerkship: Low Back Pain. Required 60 minute case-oriented presentation on evaluation and treatment of low back pain with an emphasis on the potential role of chiropractic and acupuncture.
Current (elective) curriculum activities

- **Exchange program with Pacific College of Oriental Medicine.** As part of ICM, a group of students goes to visit the student clinic at PCOM and observe the practice of acupuncture/Chinese medicine. Later in the year, this group of students (approximately 20) hosts a group of 20 PCOM students for an afternoon in the anatomy lab, assisting them in dissection.

- **Healer’s Art:** four session elective using reflection and “self-discovery” to explore the meaning and purpose of being a physician. Taught in small groups, attendance ranges from 40-80 students per year.

- **WellMed-sponsored workshops:** mini-course in meditation, Reiki, acupressure massage, and other integrative approaches are offered through the WellMed Program.

- **Complementary/Integrative Medicine Elective:** MS-4 elective for students wanting more experience, offering opportunities to shadow practitioners and do a focused reading/research project.
Why Wellness: The Hard Facts

- Burnout is more common among physicians than other workers.\(^1\)
- There is an association between burnout and suicidal ideation amongst medical students.\(^2\)
- Prevalence of depression or depressive symptoms among residents is between 20.9%-43.2%.\(^3\)
- Physician suicide rates are higher than the general population.\(^4\)

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\(^1\) Shanafelt TD, et. al. (2012) *Arch Int Med*; 172:1377-1385
\(^3\) Mata, et. al. (2015). *JAMA* 314(22):2373-2383
Why Wellness: The Impact on Our Patients

• Demands placed on medical trainees pose challenges to personal well-being, leading to burnout and erosion of empathy.\(^5\)

• Increased personal well-being is associated with enhanced empathy among trainees.\(^6,7\)

Becoming a Doctor: A Qualitative Evaluation of Challenges and Opportunities in Medical Student Wellness During the Third Year
Benjamin Kligler, MD, MPH, Brian Linde, MD, and Nadine T. Katz, MD

Abstract

Purpose
To improve understanding of the impact of the third year on medical student wellness and help educators improve approaches to promoting wellness.

Method
The authors used an interpretive description approach to conduct a qualitative analysis of required essays written by 173 third-year medical students as part of a May 2011 final exam at the Albert Einstein College of Medicine of Yeshiva University. In these essays, students reflected on how the transition to clinical responsibilities during the third year of medical school had affected their own health and wellness behaviors.

Results
Four themes emerged. Students described the difficulty of making healthy choices in the face of time challenges, the effect of becoming a role model for patients, and the impact of information on their view of their own health and wellness. A subset reflected on the tension between self-care and dedication to work that is inherent in developing a professional identity as a physician. Some students characterized these as challenges that encouraged them to be more active and effective in managing their own health; others viewed them as insurmountable obstacles that prevented them from making healthy choices.

Conclusions
The new responsibilities in the third year of medical school comprise a unique set of opportunities and challenges that affect how students make choices regarding health and wellness. Educators should develop strategies for identifying and supporting students who are likely to experience the transition as difficult, and for capitalizing on learning opportunities by framing these challenges as part of students’ professional development.
Why Wellness: The Impact on Students

• “Describe one example in which you think your approach to your own health and wellness has changed since starting medical school?”

♦ Major themes:
  • Time management.
  • Becoming a role model.
  • The impact of newly acquired medical knowledge and the experience of patients’ illness on the students’ perspective on their own health.
  • The relationship between wellness and professional identity.

Program Development:

EINSTEIN
Albert Einstein College of Medicine

Science at the heart of medicine

Overview  Career Advisory Program  WellMed Student Wellness Program  Student Government  Student Activities  Registrar  Academic Support and Counseling

WellMed Student Wellness Program
Physicians deliver the best patient care when they are healthy and balanced.

WellMed’s goal is to provide opportunities for students to adopt habits and attitudes that will contribute to their balance and well-being. By focusing on wellness during the formative years of medical school, students can become better healers and role models for their patients.

Follow us on Twitter  Like us on Facebook
Follow us on Instagram  wellmed@einstein.yu.edu

WellMed
Albert Einstein College of Medicine

HEALTH
Access to Primary care

EMOTIONAL
Access to Psychological support and care

PHYSICAL
FITNESS
Activity as part of your daily life

NUTRITIONAL
Making healthy diet choices

SOCIAL
Building and maintaining healthy relationships

SPIRITUAL
Finding harmony within yourself and others

INTELLECTUAL
Making learning manageable

FINANCIAL
Understanding debt management

View Full Calendar »

January 25 | 6:00 PM
Healer’s Art
TBA, Boffer
Program Development:

WellMed's goal is to provide opportunities for students to adopt habits and attitudes that will contribute to their balance and positive well-being. By focusing on wellness during the formative years of medical school, students can become better healers and role models to their patients.

Learn about WellMed resources and events at einstein.yu.edu/WellMed

EMOTIONAL

Emotional wellness is integral to overall harmony. If you’re having difficulty striking the right balance and keeping stress at bay, WellMed can help. We provide access to on-campus resources such as the office of academic support and counseling (OASC) as well as referrals to top psychiatry and psychology practitioners. We can also help you find non-medical ways of integrating emotional balance into your daily routine.

Resources:

- Office of Academic Support and Counseling (OASC)
- Montefiore Psychiatry and Psychology Practice
- "Easing Brain Fatigue with a Walk in the Park"
- New York Times Well Blog
- MIT Medical Relaxation and Stress Reduction Resources
- The Center for Mind-Body Medicine
- Healthy Living podcasts
- One Step to Rediscover the Meaning in Your Life
- Pulse magazine: Voices from the Heart of Medicine
- Dr. Simon Rego: 9 Surprising warning signs of depression
- Einstein Peer Mentors
Program Development:

PHYSICAL FITNESS

Exercise can provide the release that is needed in medical school and beyond. Einstein offers a wide range of exercise opportunities to promote healthy habits that can be carried throughout your career. Our Falk Recreation Center offers a comprehensive fitness center on campus, with membership included in the tuition of all students – so staying fit has never been easier. Also keep an eye out for WellMed events that will introduce you to new and invigorating fitness options.
Program Development:

WellMed's goal is to provide opportunities for students to adopt habits and attitudes that will contribute to their balance and positive well-being. By focusing on wellness during the formative years of medical school, students can become better healers and role models to their patients.

Learn about WellMed resources and events at einstein.yu.edu/WellMed

Wellness starts with good physical health. Being busy with classes and clerkships can sometimes take a toll on your own health. We strongly believe that taking care of yourself comes first. Among its many benefits, WellMed has partnered with the Department of Medicine to match students with primary care physicians in the Montefiore General Medical Faculty Practice. Find a doctor, health planners and other resources to keep your health a top priority.

Emotional wellness is integral to overall harmony. If you're having difficulty striking the right balance and keeping stress at bay, WellMed can help. We provide access to on-campus services like the office of academic support and counseling (OA SC) as well as referrals to top psychiatry and psychology practitioners. We can also help you find non-medical ways of integrating emotional balance into your daily routine.

Access key departments and helpful articles, links and videos to help keep you emotionally balanced.
Program Development:

**SOCIAL**

Social wellness starts with a sense of community and connection. WellMed works to build this from the day students first arrive on campus, by hosting social events such as barbecues and boat rides, ice skating outings and dances. We define success as building a community of students who will share experiences and support each other over the years they are in medical school and beyond. Balancing hard work with good times and lasting friendship is central to wellness at Einstein.
Program Development:

**SPIRITUAL**

The definition of spiritual wellness varies from person to person. But feeling grounded is probably the most common characteristic. The pressures of medical school can sometimes lead students to neglect this aspect of their well-being. WellMed works to support spiritual wellness. Whether it's through yoga or meditation class or other activity, WellMed seeks to ensure that students have a wide range of options to stay reflective and centered.

*Mindfulness Meditation: Helping Doctors in Training Find Calm*

**For:**
Class of 2017

**When:**
- February 18th & 25th
- March 4th & 18th
- April 1st

**Location:**
Upper Max & Saddle

**Time:**
5-6PM

**Instructor:**
Rachel Glickstein, R.N.
Certified Kripalu Yoga Teacher and Shatsu Therapist
Program Development:

**INTELLECTUAL**

Success in medical school is based, in large part, on the rapid acquisition of vast volumes of knowledge. WellMed is committed to making the stress of learning manageable. We offer professional academic counseling by OASC, peer tutors and the peer mentoring network. The Career Advisory Program and a novel online alumni and faculty mentoring program provide access to advice from thousands of physicians and scientists from across the country and around the globe.

**Resources:**

- Office of Academic Support & Counseling (OASC)
- Mentor Match: Online Faculty/Alumni Mentoring Network
- Career Advisory Program
- Resources from MedMo Information Hub
- Careers in Medicine Blog Posts on The Doctor’s Tablet
- NRMP ROL Slides 2014
- Einstein Peer Tutoring Program

**Academic Perspectives on First Year** - Student to Student Guide
Program Development:

FINANCIAL

The office of financial aid is available to assist students in financing their medical education, as well as understanding debt management and creating budgets. It also helps students navigate the numerous avenues of available funding, assisting with individualizing loans and creating repayment plans that are realistic and clearly understood.

Resources:

- How to pay loans and save for retirement
- Financial Aid Office
- AAMC Financial Information, Resources, Services and Tools (FIRST)
- AAMC MedLoans® Organizer and Calculator
- Lower rates on student loans
- What borrowers can expect from the new income-driven repayment plan
- How to get your student loans forgiven

AAMC Fast Facts - President Obama’s FY 2015 Budget Proposal: Impact on Medical Student Financial Aid
WellMed Results: 2015 GQ

Students identifying as being “satisfied” or “very satisfied” with programs/activities that promote effective stress management, a balanced lifestyle and overall well being.

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
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</thead>
<tbody>
<tr>
<td>Einstein</td>
<td>55%</td>
<td>60.2%</td>
<td>72.8%</td>
<td>81%</td>
</tr>
<tr>
<td>All Schools</td>
<td>71.6%</td>
<td>72.2%</td>
<td>74%</td>
<td>75.5%</td>
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</tbody>
</table>
Why Wellness: The Impact on Students

• Wellness Survey
  - Questions about diet and exercise, depression, stress, sleep habits and substance use
  - Completed early in first year and again at the end of third year.
  - Aggregate responses from the Classes of 2014 and 2015 were compared between MS1 year and MS3 year.
Wellness Survey Results

100% response rate

<table>
<thead>
<tr>
<th></th>
<th>MS-1 (n=332)</th>
<th>MS-3 (n=336)</th>
<th>P value</th>
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</thead>
<tbody>
<tr>
<td>CES-D &gt;16</td>
<td>94 (28.4%)</td>
<td>131 (39.0%)</td>
<td>P= .004</td>
</tr>
<tr>
<td>Perceived Stress Scale</td>
<td>5.51</td>
<td>6.41</td>
<td>P= .0001</td>
</tr>
</tbody>
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*All 4 items on PSS achieved statistical significance

WellMed Challenges: Our (Failed) Mindfulness Intervention

• Mindfulness interventions have been shown to lead to reduction in depression and anxiety in first and second year medical students. 10,11

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Implementation of Mindfulness Training

• Training Students
  ◆ Clerkship orientation
  ◆ All students received a biofeedback device

• Training Faculty
  ◆ Small group facilitators for the Patients Doctors and Communities Course (PDC) had a faculty development session with Dr. Kligler.

• Keeping Students on track:
  ◆ “WellMed Ambassadors”
  ◆ Planned for two sessions with one hour refreshers from Dr. Kligler
Implementation of Mindfulness Training: Opportunities

• Lessons Learned:
  - Timing with orientation
  - One size does not fit all

• Successes:
  - Creation of space in the curriculum for wellness
  - Our own resilience
    • Mid-year began offering different activities
    • Moved biofeedback training back into mid-second year as part of Step I Success series
Future Directions: What our 3rd years think will make them well...

- Better Shuttle Schedules
- More free food
- Improved Access to Mental Health
- Better Grading Standardization
- Grading Transparency
- Wellness Days
- Study Days

- More Reflection
- Less Reflection
- Puppies
- Extended Gym Hours
- Field Day
- More WellMed Workshops
- Massage Therapist
- A Housekeeper
- More Days Off
WellMed: Future Directions

• Curricular Reform:

  ✷ Integration of wellness education with lifestyle medicine
  ✷ Mindfulness training for small group facilitators
  ✷ Attempt to increase number of PDC-WellMed sessions
  ✷ Create more open space for students to talk about mental illness (beyond general wellness)
Conclusions

• There is an urgent need for wellness programs in undergraduate medical education.

• Given the challenges in identifying those most in need, programs that address the entire student body are required.

• Integrating mindfulness, resiliency and lifestyle medicine training into the curriculum may mitigate the burnout experienced by trainees and improve patient care on a population-level.

• Focusing on their own wellness can be a very effective way to teach students about integrative medicine!
Before LEAPS, I didn't know it was possible to break so completely free of the conventional mold and blast off into the "new medicine" that treats the causes of disease in a safe, sane, and cost-effective manner.”
“The Consortium is a collective voice for influencing and effecting change within integrative health.”