A Comprehensive Medical Student Wellness Program—Design and Implementation at Vanderbilt School of Medicine
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Abstract
Research suggests that student burnout and mental illness are increasing in U.S. medical schools. In response, students and administrators developed the Vanderbilt Medical Student (VMS) Wellness Program to promote student health and well-being through coordination of many new and existing resources. This program consists of three core components: The Advisory College Program, The Student Wellness Committee, and VMS LIVE. Each of the core components includes separate and unique individual programs, but each of these three components collaborates with the other two to accomplish the broad wellness goal of maximizing student health, happiness, and potential. The VMS Wellness Program has had early success with substantial growth and outstanding student buy-in since its inception in 2005. Preliminary data indicate that nearly every student has participated in at least two components of the VMS Wellness Program. In addition to participation, student response has been highly satisfactory, as evidenced by their positive feedback. The VMS Wellness Program is the first published model of a comprehensive medical student wellness initiative. The development and design of the program described in this article may serve as a framework for other institutions.


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esearch shows the intimate relationship between physician well-being and compassionate care for patients. However, many medical students and physicians today are neither adequately trained nor actively involved in their own care. Moreover, many students, residents, and physicians at all levels of practice experience burnout and “compassion fatigue,” losing sight of altruism and empathy under the stress of medical school and modern medical practice. Burnout and stress are serious concerns because, as research shows, these lead to a decline in quality of care and increased substance abuse, divorce, and even suicide. However, physicians with regular wellness practices have improved psychological well-being. Accordingly, student and physician health promotion and wellness education, with the aim of reversing burnout and stress, is becoming more common. Beginning such programs early in medical education can ingrain good habits as part of regular daily activities and may prevent the common decline in health seen during medical school.

A program to address the wellness needs of medical students can incorporate both proactive and reactive approaches. The proactive approaches focus on the idea of prevention—programming that staves off problems before they occur. Equally important, however, are the reactive approaches that involve excellent treatment strategies for students whose wellness has deteriorated significantly. Advisors and medical educators should encourage students who are dealing with evolving or established psychiatric conditions to use traditional resources, including counseling or meeting with mental health professionals. The Vanderbilt Medical Student (VMS) Wellness Program facilitates student access to these resources, but much of the thrust of the program involves a proactive approach to self-care. By engaging students in a program of health promotion early and throughout their training, the VMS Wellness Program aims to lower their risk of developing many of the common problems, including burnout and depression, that plague medical students in the United States. Moreover, the VMS Wellness Program hopes to maximize student potential by fostering physical and psychological well-being through thoughtful and longitudinal programming.

The VMS Wellness Program
The Student Wellness Program has been critical to boosting the cohesiveness, happiness, and ultimately the success of our class.

—Vanderbilt medical student

The VMS Wellness Program began in the fall of 2005 as a brainstorming session attended by interested students and the associate dean for student affairs (S.R.). The associate dean and students created the Student Wellness Committee (SWC) and, through a series of regular meetings over the course of several months, designed a four-year, longitudinal program to address specific stress points in students’ lives during medical school. They identified general stress points, such as times of transition (e.g., preparing for licensing exams, beginning clerkships) and many intellectual and physical challenges (e.g., clerkship hours). Additionally, they noted individual student’s stressors (e.g., family death, divorce), though these are less predictable. Although these stress points are not unique to Vanderbilt medical students, the VMS Wellness Program does tailor activities and resources to its individual institutional culture. In
creating the VMS Wellness Program, the students and associate dean sought to cushion the stress and alleviate the problems that many of the students face throughout medical school by focusing on three core principles:

1. Mentoring and advising: Advisory relationships between junior and senior students as well as between students and faculty are vital for fostering personal growth and resiliency as students progress through their training.36

2. Student leadership: Students are the consumers of Vanderbilt’s educational program, and thus they have the best perspective on the stressful aspects of a Vanderbilt medical education. Additionally, students are creative and enthusiastic; their involvement brings a fresh energy to the process. Finally, involving students as leaders in the program better ensures buy-in from other students.

3. Personal growth: The process of becoming a professional within medicine is challenging. An appreciation for and understanding of one’s psychological development in medical school is therefore of paramount importance.

The VMS Wellness Program, based on the above principles, formally launched in the fall of 2006. Each of the following three individual, but cooperative, components of the program addresses one of the core principles but significantly overlaps with the other principles:

1. The Advisory College (AC) Program addresses mentoring and advising;

2. The SWC addresses student leadership; and

3. VMS LIVE addresses personal growth.

The components were implemented independently and in several phases, gradually increasing the breadth and depth of the entire VMS Wellness Program. The associate dean for medical student affairs coordinates the leadership for all three components (Figure 1).

I. The AC Program

Instant camaraderie within the medical school class; College Cup and faculty advisors opening up their houses to us were high points. —Vanderbilt medical student

Recognizing the importance of a strong advising program, a team of students began working with faculty members to create a new AC Program in early 2006. The previous advising system consisted of a large group of individual faculty advisors (>50), each paired with two students per class. Inevitably, differences existed in the availability and experience of these dedicated faculty members, and as a result, students received different levels of support. The AC Program aims to increase student access, to improve equality of advising, to strengthen faculty organization, and to bolster administrative support.

This AC Program developed in several stages. The VMS Wellness Program team devised a program comprising four ACs bearing the names of former Vanderbilt University School of Medicine deans (Batson, Chapman, Gabbe, and Robinson). Each college would be led by two faculty AC directors (ACDs), who would receive salary support as well as a budget for programming within their colleges. The team presented the program to the deans and executive faculty, who provided strong support and approved funding. The deans, executive faculty, and numerous students recommended faculty for the future ACD positions. These recommended faculty submitted a curriculum vitae and a brief statement of interest. Two deans and a group of four students conducted three independent interviews of each of the highly qualified candidates. They sought experienced, student-focused, personable, and energetic faculty as well as diversity in specialty, race, gender, sexual orientation, and personal interests. Competition for these positions was significant, and ultimately the interviewers selected eight ACDs on the basis of a confidential scoring system. As the VMS Wellness team discovered that many more faculty members wanted to be involved in the program, it created faculty affiliate advisor (FAA) positions, which come without salary support but allow extensive participation. Before the launch of the AC Program in the fall of 2007, ACDs received training via workshops on academic, career, and wellness advising. The associate dean for medical student affairs (S.R.) gave each pair of ACDs autonomy to run their individual colleges to maximize creativity and reduce administrative bureaucracy. However,
the dean does meet with the ACDs on a monthly basis to review all programming and to plan future events. The ACDs are also invited to all Promotion Committee meetings so that they can follow the academic progress of their students.

The AC system launched with the arrival of students in 2007, initially involving only the first- and second-year classes. It was well accepted by both groups, though more so by the incoming first-year students who were unfamiliar with any other system. Students from each class are divided equally into the four colleges, for a total of approximately 100 students per college. Seniors within the college have mentoring responsibilities for the students in the first through third years of training. For those seniors who desire an expanded role as a leader within the college, the student affiliate advisor (SAA) position was created. A rising senior must apply for and be accepted into this position. Since 2007, the AC Program has grown to include all four classes, and more than 20 SAAs and 25 FAAs are active as leaders.

College advising focuses on two central themes: wellness and career counseling (following the Association of American Medical Colleges’ Careers in Medicine model). The ACDs meet with each first-year student individually at least twice during the first year of training, focusing on the students’ adjustment to life in medical school (Wellness) as well as their early thoughts on career choices (Careers in Medicine Program as well as the active Program and the VMS Careers in Medicine Program). ACDs coordinate a great deal of programming with the assistance of the FAAs and SAAs, who also develop events on a smaller scale. Through coordination of events as part of the AC Program, students bond with faculty advisors and student mentors from day one, developing important relationships to rely on in times of stress. AC events are too numerous to discuss here, though two of the more prominent examples are described below.

**Welcome and reception.** Current students work with ACDs to welcome incoming students with a personalized letter prior to arrival. Once in Nashville, each college hosts a reception for new students to meet the advisors and begin interacting with senior students in their college. For esprit de corps, students receive a shirt with their college emblem and color, as well the college’s official pin, which they attach to their white coat. First-year attendance at the welcoming events is nearly 100%.

**College Cup.** Each year the four colleges compete against one another in an Olympic-style event called the College Cup, which has been hugely popular and boasts 97% participation of surveyed first- and second-year students (n = 143, 68% response rate). The total number of participants, including students, faculty, and family members, has been over 200. Events include athletic events (basketball, a 5K walk/run, volleyball, track, Frisbee, and swimming), nonathletic events (Iron Chef, Trivia Challenge), and a spirit competition. The colleges earn points in each competition throughout the day for both wins and participation. The College Cup encourages student wellness on many levels. Students are motivated to train for the athletic events beforehand, both individually and in groups, such that physical wellness becomes a priority for many. Additionally, the nonathletic events promote the exploration of hobbies such as cooking, thereby giving students healthful diversions from the usual medical school routine. The winning college earns the College Cup trophy for a period of one year. The College Cup helps students form deep connections to the faculty and to the other students (in all classes) in their ACs, which allows interpersonal relationships to flourish for the long term.

II. The Student Wellness Committee

I especially love the Commodore Challenge. It really motivates me to focus on my wellness.

—Vanderbilt medical student

The VMS SWC was designed according to a model of five principal wellness areas (Figure 2), modified from the “Six Dimensions of Wellness” of the National Wellness Institute. It began with a small budget and two students in 2005. In its second year, the SWC received increased funding and initiated three subcommittees (mind, body, and mentoring) to increase leadership, organization, and student participation. As students became more aware and involved, the program continued to evolve. Now, after four years, the SWC has strong student leadership from its president, vice president, and five committee chairs (described below; Figure 2). Moreover, the SWC budget has increased to over $10,000 annually, reflecting an assessment by administrators of progressively greater impact of the program on students.

Strong student leadership has been vital for growth and for buy-in. In developing the SWC, the leaders established a steady presence and created student awareness by organizing frequent, low-cost activities.
(e.g., study breaks). Later, leaders interspersed larger-scale programs (e.g., the mental health forum) throughout the semester for greater impact on students. They also began to incorporate existing programs (e.g., student mentoring) into the SWC, thereby gaining credibility and participation through long-standing events and traditions. Finally, the implementation of this program relied heavily on the strong support of faculty and deans. The SWC design allows for students to create and lead programming. A medical student chairs each of the five wellness area subcommittees, which consist of a group of volunteers. Because few activities and resources fall into only a single wellness area, the chairpersons and volunteers of the various subcommittees work closely together. A student president and vice president oversee broad wellness initiatives, manage budgets, and function as support for the subcommittees. Finally, the associate dean for medical student affairs (S. R.) and a senior faculty colleague advise and assist the student leaders.

As a student-run organization, the SWC is uniquely adept at identifying and addressing the many challenges medical students face. SWC activities are often concrete and designed to foster physical (e.g., the running club), psychological (e.g., the mental health forum), or academic (e.g., student—student mentoring) wellness. Other activities are more abstract and foster personal growth through reflection, mindfulness, fun, and creativity (e.g., yoga, meditation, art therapy, mindful eating). Importantly, students know that the SWC is the organization to which they can bring ideas and suggestions for programs to improve wellness. The extensive and diverse nature of SWC programming allows students of all interests to identify with wellness in some way (List 1). In fact, 100% of students surveyed (n = 143; 68% response rate) reported participating in at least two SWC activities. In another sample, 95% of students (n = 116, 56% response rate) rated their experience with the program as positive (mean 4.215 out of 5; 5 indicates most satisfied).

Similar to the ACs, the individual programs that the SWC executes are not necessarily unique to Vanderbilt. Before this wellness initiative, a broad mix of student life activities were available. However, those activities were not united under a comprehensive wellness objective. The Vanderbilt model for wellness and the corresponding central organization uniquely bring many different student-led activities and resources into a unified and cooperative effort.

Below, we briefly define the mission of each programming subcommittee and describe a representative activity or program.

**List 1**

**Sample Student Wellness Committee Activities at Vanderbilt University School of Medicine**

**Mentoring**

Vanderbilt Medical Student (VMS) I - VMS II Student Mentor/Buddy Match
The Anchor: Course review online Student-to-student orientation Student Assistance Program Time management and study skills

**Body**

Nutritional and sleep information sessions Quick and healthful cooking classes Online exercise routines and group workouts Commodore Fitness Challenge Personal exercise goal coaching

**Mind**

Student discussion blog Yoga, Tai Chi, and meditation classes Art therapy and display “Ask A Psychiatrist” – Forum Writing workshops

**Social**

Light Hall Lock-In Exam study breaks Volunteer and charitable events Winter semiformal Faculty appreciation events Spring Festival

**Community**

Online Crime Reporting System Student lounge and study space Survey and improvement of student health care Increasing availability of healthful food options Working with Vanderbilt University Medical College (VUMC) CARES to expand recycling Farmer’s market at VUMC

**Mental Health Forum**

The mental health forum) throughout the semester for greater impact on students. The Commodore Challenge (CC, named for the VU Commodores), for example, motivates medical students to set personal wellness objectives and to incorporate the new practices needed to meet those objectives into their daily lives. The CC requires students to set goals (e.g., taking the stairs instead of an elevator or running/walking X miles daily) and to track adherence using a predefined scoring system (e.g., one point for each mile that the students walked or ran). Last spring, 66 students participated, and together they logged thousands of miles of walking/running and hundreds of hours of performing stress-relief activities. Students reaching a certain score (150 points) receive a small prize (e.g., movie tickets). Identifying and seeking goals, being involved in a program with peers, and receiving prizes are all motivating factors.

**Mind.** The integration of brain, body, and spirit form the foundation of the Mind Subcommittee. This group provides emotional support and helps students develop healthy coping strategies. One of the most visible programs is the Mental Health Forum, an online resource through which students may ask questions anonymously of Vanderbilt University psychiatrists. Students have addressed many important and broadly applicable topics (e.g., coping with high levels of stress, maintaining healthy relationships, managing time), and the psychiatrists’ answers are posted for all students to read. The purpose of the forum is to provide a confidential resource to any student who wants to ask questions of a psychiatrist without formal therapy. It is not intended as a substitute for therapy,
III. VMS LIVE

My friends at other med schools are amazed at the time and effort Vandy puts into ensuring that wellness is emphasized throughout such a demanding program.

Wellness is Vandy’s greatest strength
—Vanderbilt medical student

VMS LIVE is a longitudinal curriculum adjunct focusing on the personal development of physicians-in-training. It consists of a series of workshops with specific goals for each medical school class (Table 1). These annual workshops focus on self-reflection and facilitate discussions—in contrast to the performance-driven and externally focused perspective of traditional medical curricula. The curriculum aims to achieve three objectives:

1. To provide a forum through which faculty model self-care as part of the ultimate goal of providing compassionate care to patients,

2. To provide a context for each student to spend time contemplating his or her life as a person, which will be the engine for his or her life as a physician. Students are encouraged, for example, to contemplate and discuss in broad terms their values, skills, and interests with the goal of examining how these factors determine the direction their professional life will take within medicine, and

3. To foster open dialogue and discussion of issues related to cultivating life-giving relationships, which are central to all compassionate health care.

The purpose of the program is to guide students in a process of self-discovery to identify their abilities, convictions, and values. This process gives students the skills and knowledge to incorporate personal needs and life goals into their future practice of medicine. The workshops take place during annual, daylong wellness retreats for the first- and second-year classes. Shorter presentations are given to the third- and fourth-year students. The retreats, held in the first semester, occur at locations away from Vanderbilt, usually at tranquil and comfortable settings conducive to reflection and relaxation. The eight ACDs participate by leading small groups of students on the selected topics (Table 1). Students are expected to participate, and the first-year class reported 97% attendance in 2008. Both “leadership by college directors” and “small group discussion” were rated highly by students (n = 86, 82% response), scoring a mean satisfaction of, respectively, 4.53 and 4.32 (on a Likert scale of 5; 5 indicates most satisfied). This program is still in development; it was piloted in 2007, and the curriculum will be phased in annually. The Class of 2011 will be the first cohort to cover each topic.

Comments

The mission of the VMS Wellness Program is to promote a healthy balance of responsibility and recreation to foster well-being throughout the community. We have broadly defined wellness as reaching full potential and optimal function in five comprehensive aspects of life: physical, psychological (emotional and spiritual), intellectual, social (interpersonal), and environmental (Figure 2). This mission is realized by the AC Program, the SWC, and VMS LIVE. Significant changes in leadership and coordination of many established resources and activities have occurred as a result of implementing the comprehensive wellness program (Figures 3A and 3B). While the model is purely representative, several of its aspects are especially important. First, having three groups (3B), rather than only the Office of Student Affairs (3A), focused on wellness allows greater coverage of the student community. The empty area represents space to grow or improve the program for broader and more active coverage of the student population. Anecdotal evidence suggests that this area has decreased under the new system as a result of the many new and expanded programs, which have resulted from improved productivity and organized leadership. Participation data indicate exposure of the VMS Wellness Program to nearly all of Vanderbilt’s medical students. Activities, resulting from coordinated leadership efforts and cooperation among the three program components, are now synergistic rather than independent or incongruous. Formerly, the faculty advising system and student

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<tr>
<th>Year in medical school curriculum</th>
<th>Theme</th>
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<td>1</td>
<td>Surviving versus thriving: Understanding the difference</td>
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<td>2</td>
<td>Motivated abilities: Connecting with one’s natural talents</td>
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<tr>
<td>3</td>
<td>Conflict resolution: Working as a member of a team</td>
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<tr>
<td>4</td>
<td>Integration and choices: Putting into practice lessons of years 1–3</td>
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Social. Fun, relaxing, nonacademic activities promote collegiality and close interpersonal relationships for a personal support network and long-term professional relationships. The annual Light Hall Lock-in is one of many popular Social Subcommittee events, in which students gather with their classmates in a safe and low-key environment. More than 100 students each year have attended this event, which is held in the medical school building (Light Hall). Students enjoy an evening of fun activities, including art therapy, yoga, musical performances by students, movies, sports, card and board games, and even fortune-telling by the associate dean for medical affairs (S.R., who fully recognizes—and makes known—that he has no special powers).

Community. The living and working environment should be safe, comfortable, and accessible because students spend so much time at the medical school. The annual Health Fair is just one of many Community Subcommittee programs. During orientation, all the SWC subcommittees promote their programs and provide information about important institutional wellness resources including the student athletic facilities, counseling services, and the health center. A nutritionist is available along with student coaches for developing exercise goals and plans. A recent incoming class (2012) had 95% attendance at this event.

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mentoring system were wholly separate. Faculty advisors may have been out of touch with student life while student mentors had limited access to the resources and expertise of faculty advisors. However, in the new AC Program, these and many other components come together; college directors work with senior students in program development and are actively involved in student life. ACDs have close relationships with students and are the ideal leaders for small-group discussions in VMS LIVE. Likewise, student leaders provide vital student support for accomplishing successful events coordinated by the ACDs, such as the College Cup. For such synergy to exist, there must be well-defined leadership through which information is channeled up the hierarchy to a single unifying program coordinator. At Vanderbilt School of Medicine, the associate dean for medical student affairs fills this role with assistance from the eight ACDs, a program coordinator for VMS LIVE, and the student wellness president (Figure 1).

The VMS Wellness Program is unique in creating a focus on wellness through dozens of events and resources. The program centrally organizes activities and resources for students, faculty, and administrators. Some activities are more subtly wellness related (e.g., the welcome reception), and others are clearly wellness focused (e.g., the mental health forum). The combination of such extensive and comprehensive programs with a consistent theme from the VMS Wellness Program has uniquely solidified wellness in the minds of Vanderbilt medical students, as demonstrated by anecdotal evidence and by the student quotations throughout this article. Moreover, numerous students have reported that a primary reason for matriculating at Vanderbilt is its culture of and appreciation for wellness. Data indicate that nearly every student in the first- and second-year class (the complete program is less than two years old) has been involved in at least two components of the VMS Wellness Program. With such extensive involvement in student life, a student would have to actively avoid the program to not be at least minimally involved. However, if students choose not to participate, we do not force programming on any of them, because doing so would be counter to our wellness goal.

Although we have yet to show objective improvements in student health, we are nevertheless hopeful that we have begun to make a positive difference in the lives of Vanderbilt medical students. Our data, collected as part of routine program evaluations, and deemed exempt from ethical approval by the Vanderbilt University Medical Center institutional review board, indicate that students have had positive experiences with all three components of the program. Participation data and reports by program leaders indicate that the program is reaching nearly all students (e.g., ACDs seek out students), and many students choose to participate actively (e.g., College Cup). According to written and verbal feedback from students, wellness awareness is nearly universal, and most students feel the program has improved their lives. Student buy-in, as measured by participation, positive empirical and anecdotal responses, and substantial program growth has been an encouraging indicator of early success. We attribute this success to five key features of the VMS Wellness Program. First, the program was designed to be comprehensive and proactive. The program designers believe in preventing as well as treating illness. Second, a central leader, who

**Figure 3** The scope of wellness programs at Vanderbilt University School of Medicine. The larger circles of the Venn diagram represent infrastructure; the smaller circles show initiatives, activities, or resources. The empty area outside the circles represents room for growth to involve more students and expand the type and number of programs. (A) Before implementation of the Vanderbilt Medical Student Wellness Program, many programs were available; however, these lacked central organization and coordination. (B) After implementation, an improved leadership structure, synergy from coordination in the overlapping areas, and cooperation and excitement about wellness have all combined to increase program productivity and impact.
coordinates the three-component program, is vital (Figure 1). The Office for Student Affairs, or an equivalent, should be positioned and equipped to orchestrate and finance the programs. As such, the Office of Student Affairs is found in the inner circle of our wellness model (Figure 3). Third, adequate funding is essential. Unfortunately, without financial support, executing large-scale student activities, dedicating faculty advisor time, and developing curricula are impossible. In most cases, this support will come from the dean of the medical school. Fourth, the dean’s administrative support is also crucial to successfully unite and coordinate such large groups of students and faculty. Finally, strong student leadership is vital for generating ideas, identifying needs and problems, and inspiring student buy-in.

Limitations and Future Work
We acknowledge that some improvements in our program could increase the positive impact on students, and we continually strive toward this end. As previously mentioned, the program’s greatest weakness is a lack of reliable health data from which to draw definitive conclusions about its impact. We are in the process of developing several studies with validated metrics for assessing impact. Additionally, in this manuscript we can only briefly describe the development and implementation of the program and provide only a modest delineation of each component. The program is very substantive, and presenting a complete picture of all that has been implemented is difficult. As the program develops further, we anticipate publishing a more detailed account of each component, including success and failures.

In Sum
We have described the development and implementation of the comprehensive VMS Wellness Program. Our goal is simple in theory—to create a program that will promote the health and well-being of medical students. We have developed a tripartite model involving the AC Program, the SWC, and the VMS LIVE curriculum to achieve this goal. Research to examine health outcomes of the program is ongoing. Nonetheless, anecdotal evidence suggests that it is already making a difference in the lives of Vanderbilt medical students, who report outstanding participation in and satisfaction with the program. We will continue to develop and grow the program to fit the needs of students, and to make improvements as data become available.

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References
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