The physician healer track: educating the hearts and the minds of future physicians

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ABSTRACT

Calls to reform medical education recommend explicit training in professional identity formation to promote the development of humanistic, compassionate physicians. The authors report their experience offering The Physician Healer Track, a 500-contact-hour curricula integrated over 4 years, focusing on self-awareness, reflection, being-with-suffering, communication and professional identity development. The voluntary scholarly-concentration program comprises 4 years of monthly dinner meetings with faculty mentors, a two-month preceptorship in the first year, a one-month immersion course in MS4 and one elective. Training in mindfulness, cognitive behavioral therapy, nonviolent communication, motivational interviewing, spirituality in healthcare, wellness, equanimity, and ‘being with suffering’ is reinforced across all 4 years. Community building and reflection are integral to the training both in the monthly sessions and the immersion courses. Enrollment has grown from 26 students in the first year (11% of class) to a total of 258 students across our first 6 years (average of 20–26% of each class). Graduates in our first two cohorts of PHT have exceeded the numbers in the eight other scholarly concentrations offered at UTMB. Among students participating in the summer preceptorship, there has been less than 1% attrition. In serial assessments, students report continued growth in personal development, professional development, and the ability to empathize. Offering PHT has resulted in the growth of training for our medical residents, faculty, physical therapy students and the creation of a student healer association. Despite the demands on student’s time, they are voluntarily participating in a challenging program of integrated training with the intention of keeping them connected to their humanity during the rigors of medical school training.

Introduction

Thought leaders in medical education have called for an explicit focus on professional identity formation (PIF) throughout medical school [1]. Some have suggested students risk losing part of their humanity during training with implications for student and physician well-being and quality of patient care [2]. PIF is a developmental process with individual rates and trajectories of growth influenced by personal characteristics and life experiences [3]. Effective support of PIF may best be accomplished through longitudinal, integrated curricula [1,4] incorporating reflection [5] and socialization into a community of practice [6]. Much of the work to date describes episodic curricula of limited duration, focusing on specific areas of development, e.g. reflection, self-care, mind-body training, mindfulness or relationship-centered care [7]. Dyrbe and Shanafelt call for a longitudinal, multi-faceted approach in a supportive environment to promote the development and prevent burnout [6].

Incorporating these recommendations, we developed a curriculum spanning the 4 years of medical school including mentoring, reflection, socialization, early clinical experiences, and strategies to support students’ development as physician healers. Training as a physician healer emphasizes skills that help students effectively engage in suffering in both themselves and their patients [8]. This paper is an initial evaluation of an educational innovation utilizing routine evaluation data from five cohorts of students with a focus on the students’ developing identities. In this report, we describe the program and examine longitudinal indicators of outcomes relevant to identity development.

Methods

The Physician Healer Track (PHT) is a voluntary area of scholarly concentration at the University of Texas Medical Branch (UTMB). There are nine such areas available to students most of which require
less active involvement on a routine basis across the 4 years. Faculty represent varied disciplines: anesthesiology, family medicine, general surgery, gynecologic oncology, hematology oncology, neonatology, neurology, neurosurgery, obstetrics and gynecology, otolaryngology, pediatrics, psychology, radiation oncology, and urology. We intentionally recruited a diverse faculty to create a broad sense of ownership and participation across the medical school rather than identifying with a specific department or program. We ask students about their specialty interests at enrollment and match them with mentors in that specialty where possible. We also balance groups for gender and personality as expressed on a personality questionnaire at enrollment.

Small groups, comprising 6–8 students and two faculty mentors, meet monthly for dinner, and discuss assigned topics. Prior to each meeting, students submit reflective essays on the topics outlined in Table 1. Faculty review the essays and may use the content to frame the dinner discussion. Many faculty provide specific feedback to students but this is not required. Submission of the essays establishes completion of the assignment. Students meet with the same small group and mentors all 4 years, creating a safe community.

The mission of the program is: 'PHT supports the development of emotional wisdom and healing presence within the community of learners as they engage in life’s personal and professional journeys.’ Training is designed to foster habits of reflection, feeling, and action that will enable development as compassionate, communicative, and resilient physicians. The instructional goals guiding curriculum design and development are:

- **Instructional Aim 1**: Students will develop habits of thought, feeling, and action to enhance self-awareness and self-care. Goals – Students will:
  - 1a: write reflective essays monthly.
  - 1b: develop a personal practice (e.g. journaling or meditation) to support self-awareness and enhance application of course content.
  - 1c: engage in small group meetings to explore course content and form a healers’ community.

- **Instructional Aim 2**: Students will apply habits of reflection, feeling, and action to enhance their personal and professional relationships with others. Goals – Students will:
  - 2a: apply course content and habits to interpersonal interactions.
  - 2b: write reflective essays about their application of course content
  - 2c: communicate with simulated and clinical patients utilizing techniques learned in the course.

- **Instructional Aim 3**: Students will recognize and work to ameliorate suffering in themselves and others. Goals – Students will:
  - 3a: recognize suffering in numerous forms
  - 3b: apply course content to stay present with suffering while maintaining emotional balance and cognitive capabilities.
  - 3c: utilize sources of support (e.g. personal practices and help seeking) to facilitate coping with stressors inherent in medical training.

- **Instructional Aim 4**: Students will develop a sense of identity and community as a healer. Goals – Students will:
  - 4a: participate in large and small group events
  - 4b: attend retreats for personal development and community building
  - 4c: intentionally plan for maintaining the practice and community they developed as they enter residency

To accomplish these goals, we developed five curricular themes: awareness and attention, balance and wellness, communication and connection, integration and acculturation, and reflection (Table 1). The first-year curriculum emphasized awareness and attention, with introductory work in communication and connection. The second-year curriculum expanded the focus of the program; deepening awareness and attention, and improving communication and connection. Over the course of the first 2 years, students read at least five books (Table 1) on personal growth and communication.

Students participated in a required two-month preceptorship between the first and second years, for which they received elective credit (Table 1). During the preceptorship, they spent mornings shadowing in clinical settings and afternoons participating in educational activities addressing each of the five curricular themes. Students completed an 8-week Mindfulness-Based Stress Reduction course taught by a faculty member as well as additional training in interpersonal communication, wellness, compassion, and motivational interviewing. Faculty teaching during the preceptorship have training and certifications in Mindfulness-Based Stress Reduction, hospice care, Non-Violent Communication and the Healers’ Art program. Four of our five core faculty maintain daily meditation practices. During the clinical years, readings from assigned books (Table 1) were the basis for written reflections and personal growth. During the fourth year, in addition to continuing dinner meetings with their group, students completed one elective and a capstone course to revisit tenets of PHT (Table 1). Students who completed track requirements were recognized at graduation and in their MSPE letters, as is true for all scholarly concentration tracks at UTMB.
Table 1. Curriculum summary for the physician healer track.

| Physician Healer Track Curriculum | Year 1 | Year 2 | Year 3 | Year 4 |
|----------------------------------|--------|--------|--------|--------|
| **Monthly Meetings**             |        |        |        |        |
| **Curricular Themes**            |        |        |        |        |
| **Awareness and Attention**      | Stress Awareness | Gratitude (2 sessions) | Revisit 1st & 2nd year topics from both monthly sessions and Preceptorship during specific rotations | Revisit 1st & 2nd year topics from both monthly sessions and Preceptorship during specific rotations |
|                                  | Self-Compassion | Cognitive Behavioral Therapy (2 sessions) |          |        |
|                                  |                 | Internal Family Systems |          |        |
|                                  |                 | Non-Violent Communication |          |        |
|                                  |                 | Shame Awareness and Resilience |          |        |
|                                  |                 | Mindfulness Research |          |        |
| **Balance and Wellness**         | Humor | Religion and Spirituality |          |        |
|                                  |          | Planning Wellness |          |        |
| **Communication and Connection** | Non-Violent Communication | Breaking Bad News |          |        |
|                                  |          | Healing |          |        |
|                                  |          | Presence |          |        |
|                                  |          | Challenging |          |        |
|                                  |          | Communications |          |        |
|                                  |          | Compassion |          |        |
|                                  |          | Empathy |          |        |
| **Integration and Acculturation** | Students apply concepts from the first two years to experiences in clinical clerkships | Students integrate healer concepts into electives. |        |        |
| **Reflection**                   | Students write a reflective essay about the application of the content to their life and engage in reflective discussion at the dinner meetings. | Students continue to write reflective essays and participate in monthly discussions. | Students continue to write reflective essays and participate in monthly discussions. |        |
| **Immersive Experiences**        | Curricular Preceptorship after Year 1 | Capstone course in Year 4 |        |        |
|                                  | 8 week duration | 4 weeks duration |          |        |
| **Awareness and Attention**      | Mindfulness Based Stress Reduction | Daily meditation |        |        |
|                                  | Daily Meditation | 3 day mindfulness retreat |          |        |
|                                  | Internal Family Systems |          |          |        |
|                                  | Weekend Mindfulness Retreat |          |          |        |
| **Balance and Wellness**         | Sleep, Nutrition, Exercise, Relationships, Humor | Nutrition, Exercise, Relationships, Humor | Planning for residency: time, finances, lifestyle, relationships |        |
|                                  | Journaling |          |          |        |
|                                  | Shame Resilience |          |          |        |
|                                  | Life Story |          |          |        |
| **Communication and Connection** | Motivational Interviewing | Motivational Interviewing |          |        |
|                                  | Non-Violent Communication | Non-Violent Communication |          |        |
|                                  | Hospice, Difficult Discussions |          |          |        |
|                                  | Energy Medicine |          |          |        |
|                                  | Being with Suffering |          |          |        |
| **Integration and Acculturation** | Clinical Shadowing | Planning for residency – How to continue to cultivate healer skills |          |        |
|                                  | 'Second Victim' workshop |          |          |        |
|                                  | Equanimity |          |          |        |
| **Reflection**                   | Write reflection on selected movies | Journaling |          |        |
|                                  | Daily journaling | Reflective discussion of application of program content in clinical experiences |          |        |
|                                  | Summative reflective essay (5 pages) |          |          |        |
|                                  | Life Story |          |          |        |

Books Used Throughout the Track

- CBT Journal for Dummies, Wilson R, Branch R. Chichester, England: John Wiley & Sons; 2012.
- Nonviolent Communication: A Language of Life, Rosenberg MB, Chopra D. Encinitas, CA: Puddledancer Press; 2015.
- Naikan: Gratitude, Grace, and the Japanese Art of Self-Reflection, Kech G. Berkeley, CA: Stone Bridge Press; 2002.
- I Thought It Was Just Me (but it isn’t): Making the Journey from ‘What Will People Think? to ‘I Am Enough’, Brown B. New York: Avery, 2008.
- The Art of Being a Healing Presence, Miller JE, Cutshall S. Fort Wayne, IN: Willowgreen Publishing; 2001.
- Parts Work: an Illustrated Guide to Your Inner Life, Holmes T, Holmes L. Kalama Zoo, Mt: Winged Heart Press; 2007.
- Positive Spirituality in Healthcare, Craigie FC. Minneapolis, MN: Mill City Press, Inc.; 2010. (Foundational text for years 3&4)

Support from two grants and donations from teaching faculty fund the cost of dinner meetings. The current faculty compensation plan at UTMB includes compensation for time spent teaching medical students in PHT as well as in required courses.

Formative evaluation has included measures at both levels 1 (satisfaction) and 2 (reaction and learning) in the Kirkpatrick evaluation model [9]. On evaluations, students commented on each element of the program including which aspects have been useful to them and we have continuously revised.
content and delivery strategies to maximize student engagement in track activities.

Level 2 data utilized items from a self-report instrument adapted from the evaluation of a similar program conducted with residents [10]. The questions assess areas integral to the goals of the program as well as for potential incidental learning. For all items, students were asked to indicate the extent to which PHT experience thus far impacted them, on a 5-point scale from very small extent to very large extent. This instrument was included in the student evaluations at the end of each year’s evening sessions and upon completion of the preceptorship.

Summative evaluation for the track is a longitudinal examination of the level 2 data as a way to assess the impact of PHT on student growth. Descriptive statistics, group means and proportions, are reported for both formative and summative perspectives. These data were examined annually for each cohort of students and combined when the number of students enrolled in the track reached 200, a number considered sufficient to provide credible data.

Results

Formative evaluation

During the first year of the program, 26 students enrolled in the track. Each year has seen successive growth with 37, 40, 57, 44 students enrolling in the 4 subsequent years. Originally, eight faculty members served as facilitators; in program year 4, more than 40 clinical faculty members teach 193 students in PHT across all 4 years of medical training. We hear anecdotally from students that PHT was what brought them to our institution. About 10 of the 40 faculty voluntarily attend the meditation retreat that is part of the immersive preceptorship period.

Students enrolled in the track during their first week of medical school and approximately 90% remained in the track until the summer preceptorship in early May. This slight attrition was due primarily to an interest or perceived need to participate in the summer research program, occurring concurrently with the preceptorship. To date, we have also had one student leave the track due to an inability to schedule his final required month. Satisfaction data for all components indicate ongoing enthusiasm by the students for the content and format of the track with all components reviewed at the end of the third year of the program receiving positive reviews by over 80% (128/159) of respondents.

In addition to scaled responses we solicited student comments of which these are typical:

'I know that I can only have an impact on a fairly small number of people, but if everyone practices medicine with loving kindness, it will spread like the ripples on a pond.'

'Physician Healer Track has changed me greatly from the person I was when I first entered medical school. While some lessons hit harder than others, all have had an effect on me. But this lesson hit me the hardest, and it hit me when I needed it most. As I continue with my life and try to overcome its challenges, I hope to return to this book (The Art of Being a Healing Presence) and be reminded of what I set out to be when I decided I wanted to be a doctor.'

We received student feedback on each component of the program and made adjustments as necessary prior to the next iteration. Students have been very positive and most changes have involved scheduling and logistics. There has been no complaint about the amount of time students are required to invest in PHT activities.

Table 2 summarizes level 2 formative responses from each year of the curriculum: thus, four cohorts reported on the impact of the evening session curriculum for MS1 and 5 cohorts provided evaluation data for the 8-week preceptorship; four cohorts provided data regarding the MS2 evening curriculum; three cohorts provided data regarding the year three evening sessions; and two cohorts provide data on the fourth year evening sessions and the 4th year immersion course. A comparison of cohorts at each point in the curriculum confirmed the similarity of scores across cohorts (MS1 F(4,134) = 1.875, p =.118; Preceptorship F

| To what extent has PHT: | MS1 (n = 105) | PRECEPTORSHIP (n = 216) | MS2 (n = 119) | MS3 (n = 98) | MS4 (n = 71) |
|-------------------------|---------------|------------------------|---------------|--------------|--------------|
| Positively impacted my personal development | 3.90 | 4.37 | 4.24 | 4.16 | 4.4 |
| Improved my ability to empathize and connect | 3.66 | 4.29 | 4.11 | 4.10 | 4.34 |
| Positively impacted my professional development | 3.92 | 4.19 | 4.20 | 4.09 | 4.31 |
| Taught skills I have used to take better care of myself | 3.55 | 4.16 | 3.95 | 3.84 | 4.34 |
| Increased my knowledge for personal development | 3.83 | 4.21 | 4.14 | 3.92 | 4.36 |
| Confirmed my satisfaction with my decision to become a physician | 3.84 | 4.19 | 3.96 | 4.00 | 4.07 |
| Helped me cope with stress | 3.32 | 3.89 | 3.80 | 3.65 | 4.26 |
| Increased my ability to work collaboratively | 3.09 | 3.59 | 3.60 | 3.62 | 3.83 |
| Increased my self-confidence | 3.03 | 3.55 | 3.43 | 3.56 | 3.87 |

*Mean values for combined cohorts.
(5,210) = 1.416, p = .220; MS2 F(4,114) = 1.723, p = .150; MS3 F(3,94) = .286, p = .835; MS4 F(2,67) = 1.658, p = .198) thus providing the basis for a decision to combine data across cohorts. All means are within the positive end of the scale (3 – some extent, 4 – large extent, 5 – very large extent) with the highest scores appearing during the MS4 year. Students scored items targeting areas of incidental learning (coping, collaboration and self-confidence) in the same/large extent range and items more closely aligned with program goals in the large/very large extent range.

**Summative evaluation**

We examined the level 2 data longitudinally (Figure 1) using the same data presented in Table 2 and looking more holistically at growth. The examination of mean scores reveals a pattern of incremental growth across the years. Visual inspection and analysis reported above of the data for individual cohorts revealed similar patterns of growth. Therefore, we combined cohorts to provide a more credible picture of students’ developmental pattern. The scores reflect a sense of substantial growth at the conclusion of the preceptorship followed by some contraction as the stresses of MS2 and MS3 (clerkship) occurred. In MS4, following the review and reflection encouraged by the capstone course, the scores indicate a blossoming of growth and appreciation.

**Discussion**

Our initial experience implementing this curriculum indicates greater than anticipated demand among both students and faculty including other healthcare education programs at our institution. The principles and teachings from PHT have expanded to other areas at UTMB. A faculty development program included an additional nine faculty from multiple schools (nursing, health professions, and medicine). UTMB conducted a pilot program with a shortened medical school curriculum and aspects of PHT were incorporated to support PIF with these students. Content from PHT has also been incorporated into several residency programs at UTMB. We anticipate that the communication components, e.g., motivational interviewing, may be expanded to all students in the coming year.

Thus far, we have accommodated all students interested in joining the program. The two-month PHT preceptorship significantly inhibits further expansion of this program as clinical capacity and longitudinal course sizes are limited.

The experience of the 8-week preceptorship was perceived as intense and transformative. The three

![Figure 1. Longitudinal Impact* *Mean values for combined cohorts.](image-url)
items receiving the highest ratings, personal development, professional development, and ability to empathize, relate directly to the instructional aims of the track, supporting the development of personal and professional identity formation. Collaboration and self-confidence are not primary foci of the curriculum, but the outcomes data indicate some impact in those areas.

Considering the longitudinal impact, the 8-week clerkship was considered most impactful. Students approaching the challenges of STEP 1 and the clinical clerkships noticed less impact from PHT with renewed appreciation of its role in their development in the MS4 year.

An emerging need for this program is faculty development in content areas not traditionally included in medical training. The number of faculty participating has grown from eight facilitators to over 40, with each doing the same intensive work and readings assigned to our students.

Program evaluation beyond student participation and satisfaction is an additional area of exploration related to this track. Assessing humanism, communication skills and personal/professional development present unique challenges to medical educators. Thus, planning for faculty development and program evaluation must be integral to curriculum planning and implementation. Additional evaluation plans include a systematic analysis of student comments to understand program impacts.

In summary, the main implication of this evaluation project was that a program designed to support developing humanistic skills and identity as a healer was well-received by our students and faculty and has grown for 5 years. In addition, students in the program reported growth, particularly in self-confidence and their ability to cope with stress.

While this report is of an innovation at a single medical school and is, therefore, of limited generalizability, we share our experience hoping that it may be of value to others interested in achieving similar goals. Lacking established methods for assessment and evaluation in identity development as a healer, we have provided evaluation data beyond student satisfaction to highlight the changes occurring over time in students participating in PHT. It is our responsibility to continue to develop methods to support the development of students so they can become effective physicians providing compassionate patient-centered care.

Acknowledgments

The authors are grateful to the many students and faculty who participated in the transformative work during the development phase of this program. They extend special thanks to Dr. Steve Lieberman for his multifaceted support, particularly navigating the institutional processes. The authors also wish to thank Drs. Susan Gerik, Kristene Gugliuzza, Susan McCammon, Catalina Triana, Victor Sierpina as well as Kevin Haslam in the Office of Alumni Relations for assistance in marshalling resources.

Funding

External funding for the Physician Healer Track comes from the Glenda Gilbert Hickman Legacy Fund and the Dr. Dan and Laura Nell Nicholson FundGlenda Gilbert Hickman Legacy Fund and the Dr. Dan and Laura Nell Nicholson Fund [none available].

Ethical approval

The IRB Committee determined that ethical review was not necessary.

Previous presentations

Parts of this work have been presented at

- 2017 APGO Martin L. Stone, MD Faculty Development Seminar, January 7-10, 2017, Palm Springs, California.
- Association for Medical Education in Europe, Barcelona, Spain, 29 August 2016.
- AAMC Southern Group on Educational Affairs regional annual meeting, April 13-16, 2016, Austin, TX.
- 12th Annual Innovations in Health Science Education Conference, sponsored by The University of Texas Kenneth I Shine, MD, Academy of Health Science Education. Austin, TX. Feb 2016.
- American Society of Bioethics and Humanities Annual Conference, Houston, TX. 25 October 2015
- Symposium at the International Conference to Promote Resilience, Empathy and Well-Being in Health Care Professions, Washington DC. 20 October 2015.
- Regional Academies of Educators Conference, 1 May 2015. Houston, TX.
- Regional Academies of Educators Conference, Galveston, TX. 16 May 2014.

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