Yale University EliScholar – A Digital Platform for Scholarly Publishing at Yale

Yale Medicine Thesis Digital Library

School of Medicine

10-12-2009

Becoming the Doctor I Want to Be: The Professional Development of Internal Medicine Residents

Merritt McLean Evans Yale University

Follow this and additional works at: http://elischolar.library.yale.edu/ymtdl

Recommended Citation

Evans, Merritt McLean, "Becoming the Doctor I Want to Be: The Professional Development of Internal Medicine Residents" (2009). *Yale Medicine Thesis Digital Library*. 141.

http://elischolar.library.yale.edu/ymtdl/141

This Open Access Thesis is brought to you for free and open access by the School of Medicine at EliScholar – A Digital Platform for Scholarly Publishing at Yale. It has been accepted for inclusion in Yale Medicine Thesis Digital Library by an authorized administrator of EliScholar – A Digital Platform for Scholarly Publishing at Yale. For more information, please contact elischolar@yale.edu.

Becoming the Doctor I Want to Be: The Professional Development of Internal Medicine Residents

A Thesis Submitted to the
Yale University School of Medicine
in Partial Fulfillment of the Requirements for the
Degree of Doctor of Medicine

by

Merritt McLean Evans

2009

ABSTRACT

BACKGROUND: Several studies have suggested that the current medical training environment may include experiences that compromise trainees' professional development. Little work has been done to explore this evolution during internship. **METHODS:** Interns in the Yale University Internal Medicine Residency Programs were asked to evaluate their professional development during internship through a qualitative study involving two open-ended written surveys and a focus group interview. Participants were identified in June 2003 during the annual Professionalism Workshop that occurs during internship orientation. Participanting interns completed an initial survey asking them to describe the physician each aspired to be. In February 2004, interns attended a follow-up Professionalism Workshop, Prior to the Workshop, participating interns completed a second survey, which asked them to evaluate their progress toward achieving their previously stated aspirations. Following this Workshop, interns were divided into three groups for a focus group interview. Each facilitator followed the same script, probing the personal and professional changes interns noticed in themselves during internship. Interviews were taped and transcribed. Data were analyzed using the constant comparison method by at least two investigators, who achieved consensus regarding the extracted themes. Twenty-four interns from the primary care, traditional, and medicinepediatrics residencies participated, and nineteen completed all parts of the study. **RESULTS:** On the initial surveys, interns demonstrated great concordance in describing physician characteristics to which they aspire, such as being compassionate (N=19), competent (N=19), and an effective communicator (N=10). On the follow-up survey and in the focus groups, none of the interns said they were failing to become the doctor they would like to be. In the focus group discussion, interns believed they were on track to attain their professional ideals, although the constraints of internship forced them to delay focusing on certain aspirations, with more emphasis on developing certain competencies (e.g. technical proficiency and medical knowledge) instead of others (such as interpersonal skills). Themes that emerged from the interns' descriptions of how they struggled to sustain their professional development included: acceptance of the role of intern (as distinct from an ideal of physician), the necessity of constricting their responsibilities to their patients given the limitations of internship, increased emphasis on self-care and self-awareness, and pride in the skills they mastered.

CONCLUSIONS: Our interns entered residency with professional ideals consistent with most professionalism statements. Although interns were frustrated by parts of their educational experience, they still believed they were on track to become the doctors they wanted to be. However, they felt that they postponed development of interpersonal skills while emphasizing technical and knowledge aspects of care. Further research should evaluate more senior physicians to see if they still delay attainment of certain ideals, achieved their ideals, or altered them in favor of more attainable ones. If professional development remains compromised, the factors preventing physicians from achieving their ideals should be clarified and modified.

ACKNOWLEDGEMENTS

I would like to acknowledge the generous support of the Office of Student Research for the initial summer research stipend that supported this project. The development of this project was also supported by the Department of Internal Medicine, which subsidized the poster presentation of our work at the Society for General Internal Medicine Annual Meeting, Spring 2007. I would also like to thank Eric Holmboe and Jeffrey Wong for their help in analyzing the data.

This thesis would not have been possible without my advisor Julie Rosenbaum.

TABLE OF CONTENTS

| Introduction | • | • | • | • | • | • | ٠ | • | p. 4 |
|---------------|---|---|---|---|---|---|---|---|-------|
| Specific aims | | | | | | | | | p. 14 |
| Methods | | | | | | | | | p. 15 |
| Results | • | | | | | | | | p. 19 |
| Discussion | | | • | • | • | • | • | • | p. 46 |
| References | • | | | | | | ٠ | | p. 53 |

INTRODUCTION

Research into professionalism in medical education is motivated by a simple fundamental concern: to produce doctors who are not just competent medical providers but who are honest, knowledgeable and altruistic healers. This must be an ongoing effort as each generation of doctors is challenged by new issues that impair the doctor-patient relationship. Arnold Relman argues that the commercialism of health care delivery is the most important threat to professional values in America, describing how applying a business model to medicine undermines the fundamental principles of the doctor-patient relationship. (1) Other medical educators worry about the role of the pharmaceutical industry in shaping the treatment choices of physicians as a violation of the profession's obligation to place the interests of patients above self-interest (2). Some argue that America's primary care provider is a failure of professionalism, a failure of our medical education system to fulfill the profession's obligation to meet the health needs of our communities (3). The problem of instilling professional values in medical trainees has received much attention in the last decade, but it is far from being resolved. It continues to be the obligation of the medical profession to examine the values being passed on to the next generation of physicians and to ensure that doctors deserve the trust given them by society.

Research on professionalism has generally focused one or more of the following questions: What is professionalism? How should professionalism be measured? How should professionalism be perpetuated: through coursework, through the choice of certain kinds of students, or through the culture of the hospital? How can educators establish environments in which practitioners can act on their professional ethics? In this section, I

will review the current state of the research addressing these questions and then introduce what the current study adds to the literature.

Defining professionalism:

Professionalism can be defined through a variety of different methods and for a variety of different reasons. It has been defined empirically and prospectively, for the purpose of making a statement to guide all physicians and for the purpose of evaluating third year students at the end of a clerkship. Ultimately the defining qualities of professionalism are the same, although some may be more or less emphasized depending on the technique or purpose.

One of the most definitive statements about professionalism is the physician charter produced by the American Board of Internal Medicine (ABIM) Foundation, the American College of Physicians-American Society for Internal Medicine (ACP-ASIM) Foundation, and the European Federation of Internal Medicine. The Charter on Medical Professionalism, published in 2002, is a normative document representing over two years of work done by members of the Medical Professionalism Project to formulate the essential values of the medical profession in a world in which technology and complex care arrangements challenge the traditional doctor-patient relationship. The document outlines three fundamental principles and ten professional commitments at the core of the medicine. (See Table.) These principles and commitments reflect the central elements of professionalism: social justice, excellence in care, and integrity in the therapeutic relationship (e.g., commitment to confidentiality, responsibility, and honesty) (4).

| FUNDAMENTAL PRINCIPLES | PROFESSIONAL RESPONSIBILITIES | | | |
|--|--|--|--|--|
| Principle of primacy of patient welfare. | Commitment to professional competence. | | | |
| Principle of patient autonomy. | Commitment to honesty with patients. | | | |
| Principle of social justice. | Commitment to patient confidentiality. | | | |
| | Commitment to maintaining appropriate relations with patients. | | | |
| | Commitment to improving quality of care. | | | |
| | Commitment to improving access to care. | | | |
| | Commitment to a just distribution of finite resources. | | | |
| | Commitment to scientific knowledge. | | | |
| | Commitment to maintaining trust by managing conflicts of interest. | | | |
| | Commitment to professional responsibilities. | | | |

Medical schools have taken these elements and selected which they intend to emphasize in their graduates. For example, the educators of Northeastern Ohio Universities College of Medicine require a long list of qualities and actions from their students, including reliability and responsibility, honesty and integrity, maturity, respect for others, altruism, interpersonal skills, ful• llment of the contract governing the doctorpatient relationship, and absence of impairment (5). On the other hand, at the University of California, San Francisco School of Medicine, students are evaluated on their competence in a more limited number of domains: professional responsibility, self-improvement and adaptability, relationships with patients and families, and relationships with members of the health care team (5). These definitions are normative statements on what trainees should strive to be as physicians.

In addition to the large number of normative definitions of professionalism, a few researchers have studied what healthcare professionals already believe professionalism to be. Peggy Wagner used qualitative methods to examine how several groups of health providers – medical students, residents and academic faculty – and patients viewed professionalism. The primary themes that emerged clustered around the concepts of

knowledge and technical skills, the patient relationship, and character virtues. Secondary themes included medicine as a unique profession, congruency between a person's character and outward appearance, and the importance of peer relationships. They found notable differences in the emphasis placed on the central themes between groups, with patients and students focusing on the patient relationship and faculty and residents dwelling on the knowledge and technical aspects of caregiving. Participants appeared to emphasize the aspects of professionalism most relevant to their daily work. Social justice was remarkably absent from each participant's definition of professionalism, perhaps indicating either that it is not emphasized by the medical education system or that it is felt to be irrelevant to the daily work of an academic medical institution (6). This finding corresponds to other research showing that residents believe that altruism is less important in practice and in their education than the other principles of professionalism (7) and omit the social justice when discussing professionalism (8).

Measuring professionalism:

Although there is general consensus among medical educators on the principles that define professionalism, there is less consensus about how those principles should be applied in the real world of clinical encounters. This ambiguity complicates the evaluation of professionalism in trainees and practicing physicians difficult.

Professionalism is widely defined by values, but it is most worthwhile when it is implemented as actions. The recent focus in research on measuring professionalism concerns how to evaluate emerging doctors through their behavior. This, too, has proven to be less straightforward than it appears initially.

The work of Shiphra Ginsburg has focused on evaluating the proposition that medical students should be rated based on their observable behaviors by faculty. She has found that a great deal of variability exists among faculty regarding what is the correct choice in a variety of professionally challenging situations (9). She has used this research to argue that it is more important to examine the maturity of a learner's ethical reasoning in a challenging situation than that learner's behavior. In order to further develop that argument, she has studied how students and faculty approach professionally challenging situations. She has found that both students and faculty decide how to act by relying on a combination of obeying professional imperatives (e.g. "Be honest."), using their emotional responses to guide them (e.g. "I would feel guilty about doing that."), and predicting the implications of their actions (e.g. "My team would judge me harshly if I did that."), which often contradict, leaving students and faculty to decide which to prioritize in each situation (10,11). She has found that situations can be further complicated by students having legitimate concerns that are actively disavowed by the official medical curriculum, such as worrying about how an action might impact a clerkship grade, which is construed as selfish by the avowed curriculum (10). The application of professional principles is not straightforward, and the layers of reasoning surrounding challenging situations may be even more complicated.

Establishing methods to measure professionalism is nevertheless necessary, both because "if it can't be measured, it can't be improved" and because "they don't respect what you expect; they respect what you inspect" (2). Especially since professionalism has been designated as a core competency by the Accreditation Council for Graduate Medical Education (ACGME), residency programs must evaluate the professionalism of their trainees in some way so that they can prove that their graduates meet a standard before

being certified to practice independently.

In general, assessment methods can be formative, meaning that they assist learners in honing their skills by providing feedback, or summative, meaning that they provide a final score or grade that can be used to rate the learner as compared to others. Most programs use some combination of the two methods. A recent review of professionalism assessment tools found that eighty-eight methods had been developed and used since 1982. These tools differed in content area (e.g. ethics or comprehensive professionalism) and outcomes (e.g. behavior or cognition). This review concluded that evaluation methods should depend on the learner's level of training, with medical students being evaluated formatively and longitudinally, with residents receiving 360-degree responses from ancillary staff and patients as well as teachers, and with practicing physicians soliciting feedback from patients and demonstrating cognitive understanding of professional values (12). These recommendations correlate with an earlier review's discussion of Gregory Miller's pyramid model of learning, in which a learner must first attain knowledge ("know"), then the ability to apply knowledge appropriately ("can"), then the consistent use of knowledge in practice ("do"). Medical students might be held to the standards of know, residents know and can, and attendings know, can and do (6). The assessments of each stage of training should therefore reflect the level of competence appropriate to that stage, just as a medical student's knowledge about the heart is tested differently than an experienced cardiologist's.

Teaching professionalism:

Assessment tools are in and of themselves methods for teaching, as long as they are transparent and the learning objectives were made clear. For motivated students, knowing what they will be tested on is enough to get them to learn skills and knowledge. In addition, medical schools and residency programs include classes and workshops to develop the professionalism of their trainees. Much of the literature in this area consists of papers reporting one institution's approach to professionalism education and the outcomes they measured.

An example of how institutions incorporate professionalism into their curriculum is Yale's professionalism workshop. Internal medicine residents participate in a workshop that consists of two small group seminars, one during orientation and another eight months later. After introductory remarks, interns are divided into small groups of approximately eight to ten and are asked to discuss a variety of situations that are ethically challenging arising from four categories, including balancing personal and professional responsibilities, handling medical mishaps, dealing with colleagues, and coping with difficult patients. The discussions are moderated by selected internal medicine faculty and chief residents. During the second session, the interns are divided into similar groups and revisit similar scenarios, but they are then able to incorporate their own experiences into a rich discussion. The Yale workshops include several components that are common in professionalism education, namely an opportunity for self-reflection, guidance from experienced mentors, and scenarios challenging learners to develop their cognitive processing of professional dilemmas.

Fostering professionalism:

The biggest challenge that medical educators face in promoting professionalism is not in designing courses but rather in ensuring that learners work in an environment that fosters professional behavior. Fred Hafferty divides educational messaging into three different domains: the formal curriculum, which can be found in stated learning objectives and course syllabi; the informal curriculum, which is delivered by residents and attendings in impromptu settings on the wards; and the hidden curriculum, which he defined as "a set of influences that function at the level of organizational structure and culture." He lists "institutional policies, evaluation activities, resource-allocation decisions, and institutional 'slang'" as examples of ways that the hidden curriculum can be conveyed (13).

Research into professionalism has shown that the hidden curriculum exerts a powerful influence on trainees, as the sociologist Terry Mizrahi found during her immersion into a large medical center in the early 1980s. She discovered that the dominant cultural ethic was "getting rid of patients" and that because of the miserable working conditions and patient load, residents resented and objectified their patients, whom they discharged as soon as medically possible (14). Working conditions for house staff have significantly improved since Mizrahi did her study, as exemplified by the institution of the eighty-hour work week, which requires house staff work no more than eighty hours a week and thirty hours straight. However, housestaff continue to have experiences as part of their training that are professionally uncomfortable and may negatively influence the way they practice medicine (15).

Interestingly, when residents were asked how they prefer to be taught professionalism, they named elements of the informal and hidden curriculum over the formal curriculum (7, 16). In one survey of residents, majorities listed role-modeling by

attendings, example-setting by colleagues, and evaluation and feedback (85%, 80%, and 75%, respectively) as their preferred methods to learn professionalism, while rejecting standardized patients, role-playing and video-taped interviews as techniques (7). A similar study found that senior residents felt that they learned best from positive role models, interactions with patients and their families, and negative role models (16). The general culture of the institution was also named as a factor that could promote professionalism. This research suggests that if the messages of the informal and hidden curricula are in line with the professional values of the medical community, then the messaging will be both powerful and welcomed by learners.

Predicting unprofessional behavior:

A number of researchers have examined the characteristics of emerging physicians to see if any predict later unprofessional behavior, so as to identify students in need of remediation before any harm is done. Several predictive factors have emerged, which all fit into a general pattern of failing to meet professional obligations or standards. Using disciplinary action by state medical boards as their outcome measure, Papadakis, et al., have identified several risk factors for unprofessional behavior: unprofessional behavior during medical school (especially irresponsibility or severely limited capacity for self-improvement), low grades during medical school, low professionalism scores during residency, and low scores on the ABIM certification boards (17, 18). Using performance on third year clerkships as an outcome measurement, Stern, et al., found that information available to the admissions committee was useless in predicting future professional performance, but that students who demonstrated either conscientious behavior (i.e. getting timely immunizations and completing course evaluations) or

humility (i.e. underrating their performance during standardized patient interviews compared to their official evaluation) were more like to succeed in professional domains during their clerkships (19). None of these associations are strong enough to allow educators to predict with certainty that a particular student will have problems in the future, but these studies emphasize the importance of evaluating professionalism early since early problems are linked to later, more serious professional violations.

Contributing to the professionalism literature:

Much of the existing professionalism literature describes what educators should do to promote professional ethics without rigorously evaluating how the existing learning environments impact students. This study contributes to the current research by exploring qualitatively how internship year affected the professional development of emerging physicians in the field of internal medicine. It examines what changes they identified in themselves, both personally and professionally, and what factors they saw as aiding or hindering their development. From the data collected, we were able to define elements of Yale's hidden curriculum and to elucidate strategies the interns used to maintain their professional values in a system that challenged them.

AIMS

- 1. To explore whether medical interns feel that their professional ethics are compromised by their education.
- 2. To discover how interns perceive themselves developing professionally over internship.
- 3. To elucidate strategies the interns used to maintain their professional values in a system that challenged them.

METHODS

Data Collection:

Internal medicine interns at Yale University were asked to evaluate their professional development during internship through a qualitative study that took place over an eight month period and involved two open-ended written surveys and a focus group interview.

Study participants were a convenience sample drawn from interns in the three Yale Internal Medicine Residency Programs (traditional, primary care, and medicine-pediatrics). All interns were invited to participate in the study via written information they received in June 2003 prior to orientation. Participation was voluntary, and participants were not compensated. Twenty-four interns participated, and nineteen completed all parts. Relative to the class as a whole, female interns and interns from the primary care track were over-represented. (See Table 1.)

Written consent was obtained prior to participation.
Research ethics approval was obtained from Yale University
School of Medicine Human
Investigation Committee.

| Characteristic | # Participants (%) | # Whole Class (%) | | |
|----------------|--------------------|-------------------|--|--|
| Med-Peds | 2 (8%) | 4 (5%) | | |
| Primary Care | 12 (50%) | 28 (37%) | | |
| Traditional | 10 (42%) | 44 (58%) | | |
| | | | | |
| Female | 15 (62.5%) | 39 (51%) | | |
| Male | 9 (37.5%) | 37 (49%) | | |
| | | | | |
| Total | 24 | 76 | | |

Table 1. Characteristics of study participants.

The first part of the written survey was completed in June 2003, following their first Professionalism Workshop. This workshop is part of the formal curriculum of all three of Yale's Internal Medicine programs, as described above. Study volunteers participated in the workshops just as the non-volunteers did, but in small groups consisting only of other volunteers. Before the initial small group discussions of the

Workshop began in June, interns who participated in the study completed an initial survey, which asked each trainee to describe three features of the physician that he or she would like to become, based on the image of the ideal doctor that she or he might have developed during medical school. Interns were also asked to reflect on their concerns about internship and on whether they expected their priorities or professional values to change during the year. Prior to the follow-up workshop in February of 2004, the interns completed a second survey, at which time they were asked whether they thought they were becoming the physician they thought they would be and whether their concerns about internship were accurate or if they were surprised by aspects of their experience. Participants were able to see their answers from June to facilitate reflection on personal change. Twenty-four surveys were initially completed, and nineteen participants completed both surveys.

Upon completion of the February Professionalism Workshop, subject interns were interviewed in three small groups, the same groups they had participated in during the second workshop. They were interviewed by the investigators Julie Rosenbaum, Jeffrey Wong, and Eric Holmboe with a semi-structured method using a standardized question guide. The interns were asked to describe changes occurring over the course of internship and differences in their perception of themselves personally and professionally, in their understanding of professionalism, and in their approaches to the workshop scenarios. Additionally, they were asked to respond to the question, "Do you think that you are becoming the physician you thought you would be?" The interviewers took field notes to record group dynamics. The length of group discussions averaged an hour. The interviews were audiotaped and transcribed, and any personally identifiable information was removed. The focus groups yielded seventy-five pages of data in total.

Analysis:

The data from the focus groups were analyzed using the constant comparison method of qualitative analysis (20). This method allows themes to emerge from the data through the process of coding each concept as it occurs while continuously comparing each coded concept to other examples, thereby fleshing out the full dimensions of each concept and the variety of relationships it may have with other concepts. This method is also referred to as grounded theory, since it is an inductive process that produces results based on the data and not on pre-supposed hypotheses. At least two investigators coded each transcript, and differences in coding were resolved by consensus. Each group's transcript was coded in turn, and thematic saturation was reached by the third group, which means that no new concepts were encountered with the addition of more data. Deviant cases were explored and accounted for in the coding structure. The final coding structure was reviewed and agreed upon by the team. The final structure was entered into N6 qualitative data analysis software (Version 6.0, QSR International Pty Ltd., Melbourne, Australia).

The surveys were analyzed using both quantitative and qualitative methods.

Responses to the questions regarding ideal qualities in a doctor and attainment of personal goals were categorized and tallied. Responses to the open-ended questions were analyzed using the coding structure developed from the focus groups, and no new themes emerged. Through combining the focus group structure with individual surveys we gained the advantages of focus groups – the efficiency of talking to a larger number of people in shorter period of time and the opportunity of observing interpersonal dynamics – while still ensuring that the group format was not repressing themes that participants

did not feel comfortable sharing publicly. Our survey data correlated well to our group data, suggesting that we did not lose intimate reflections through the public format. In the results section, I will primarily present quotations derived from the focus group interviews, unless specified otherwise. The number of participants expressing or agreeing with each quote will not be specified as the quotes represent themes that emerged through the data analysis process. Their significance lies in their contribution to the overall theory and not in their quantitative weight. The quotations have been edited for clarity and grammar.

Clarification of work distribution:

The study was initially designed by Julie Rosenbaum, with the input of Jeffrey Wong and Eric Holmboe. They drafted the surveys and interview guide and conducted the focus groups. The resulting transcribed data was analyzed by Merritt Evans, who developed the coding structure, which was then negotiated by all of the four investigators. The creation of a narrative from the results has been primarily the work of Evans with the assistance of Rosenbaum.

RESULTS

Internship represents a significant transition in the life of a physician. It is the first year of residency, which is the training period following medical school during which doctors learn the skills needed to practice medicine independently. It is an intense period of education, as interns learn how to negotiate the hospital system, how to manage patients both medically and interpersonally, and how to cope with the demands of their job. In this section I will explore how our study participants perceived and negotiated this period of professional transition. First, I will describe the hospital context, as they saw it. Next, I will discuss the often conflicting roles that interns are expected to fill, which we categorized as the Worker Role, the Learner Role, and the Caregiver Role. Finally, I will discuss the coping strategies the interns used to handle the hospital context and the roles they were expected to play within it.

I. The Hospital Context

Study participants identified several aspects of internship that were perceived to hinder their professional development. Among these factors, limited time and their workload were deemed most important, but also the medical hierarchy, team expectations, evaluation and interdepartmental competition were found to be challenging.

Limited time:

Study participants were acutely aware of the limited nature of time. Repeatedly they spoke of how they were not able to do all that they wanted to do in the limited amount of time available to them in the hospital. Our study was conducted after the implementation of the eighty-hour work week rule, whose limitations our study subjects were very mindful of. One intern spoke of being frustrated with the limited amount of

time she could spend with her patients in the morning, "especially when you're prerounding, you have a full load and with these 80/30 rules, you know you can't get to the
hospital too early so that you don't violate it" (FG#1 4). One intern felt that the hospital
culture had not fully adjusted to the work hour rules – "this whole thing of going home at
a set time, it's hard to get over even though we are the first year that it's legal and that
you have to do it by law, we all kind of still went to med school and all of our mentors
and stuff still have that mentality of just putting in a gazillion hours" (FG#2 5) – but the
interns did not report any instances of being asked to violate the work hour rules.

Because time was so limited for study participants, they were especially focused on spending it well, both inside and outside the hospital. The interns evaluated the use of their time very critically. One participant commented on the frustration of feeling like he was wasting his time on trivialities, "It just drives me nuts when I feel like the stakes are nothing, and I'm spending all my time on nothing stakes" (FG#3 20). Another intern discussed the zero-sum nature of her working hours: "if you spend 30 minutes talking to this patient who wants to go downstairs and smoke, you're going to break down because there are people who are more acutely ill who aren't going to get care" (FG#3 5). Many interns seemed to be continuously calculating the value of what they achieved in return for their time. One intern described her disappointment with her investment of time in her clinic patients, "I've noticed that I spend a lot a time, a lot of education, and give a lot of effort, and don't necessarily have the gratification there" (FG#3 8), whereas another intern spoke positively of learning to recognize instances when spending more time was rewarding for him: "There are some moments where more interaction is called for ... I'll just have a gut instinct of, 'This is a patient I need to talk to.' I'll spend more time with that patient and there may be ... something that, in my heart, I feel like I need to learn

from the experience of talking to them. ... I just sort of notice myself doing it more and more over the course of the year just because time's so precious" (FG#1 4). Assessing the value of what the interns got in exchange for time invested appeared to be a dominant framework for how study participants viewed their daily interactions.

Workload:

The workload of interns consists primarily of their patient load and menial work, including scut work and documentation. Our study subjects viewed the menial work as both being unpleasant and consuming the majority of their time. Documentation work, which included completing discharge forms, writing prescriptions, filling out patient instruction sheets, and documenting history and physicals, was perceived as particularly problematic. One intern saw this work as taking away from his training as a doctor, "to write [a comprehensive history and physical] takes 20 minutes, much less ... thinking through it. ... You put that on top of computerized order systems at Yale that are bizarre and hard to decipher, and I spend a large fraction of time doing stuff that doesn't really ... train you in your role as a physician" (FG#1 17). Another intern viewed the work as detracting from his medical reasoning, "As an intern, [my plan] has got to be shorter. Like, hypotensive: fluid. Before, ... I wanted to know why I was doing it and how I was going to do it" (FG#1 18). The work was also perceived as a barrier to spending time with patients. "The thing that I think about a lot is just how little time I get to spend with my patients. Just doing all of the other—the notes, the scut, everything. ... I see them ten minutes a day" (FG#2 18). Another intern calculated "how much time we spent on notes as compared to how much time we really spent on people ... [is] at least ten to one" (FG#2 19). Although the interns seemed to resent the need for documentation, they also

appeared to view it as non-negotiable. They had to finish their notes, and so they felt forced to sacrifice both time with patients and educational opportunities, which were the experiences they found more inherently meaningful. The institutional message they seemed to hear was that it was more important for them to do menial work than to learn to be a better doctor or to directly care for patients.

Hierarchy:

A complex hierarchy of roles exists within the hospital. Of the physicians, interns are lowest in status, as residents and attendings outrank them. However, study participants did not express desire to continue up the hierarchy in order to have increased power over others, but rather in order to have increased control over one's own time and workload. As one intern said, "So, next year, a few months from now, we're going to be residents and we will be able to do more things that we really want to do, and by the time you become an attending, I mean, the sky is the limit. You have so many options, and then you really sit back and say, 'OK, what do I enjoy most that I want to do?'" (FG#1 19). Although the interns complained about their superiors not giving them as much respect as they should on occasion, such as by not introducing them by their proper title (FG#1 13), and about having to do the bulk of the grunt work, they did not seem to resent the hierarchy, seeing it instead as a pre-determined career path that they were guaranteed to progress along. Even if internship was difficult for the reasons already described, they could look ahead in the hierarchy and see that "the residents do have extra time to sit and think about patients and, sometimes, they have a little extra time to get that other history because they don't have to do the menial work and write the notes" (FG#1 3). The interns

seemed to believe that as long as they survived internship, they would advance to a position more in keeping with their professional goals.

Teams:

Medical care is traditionally seen as a dyad: one doctor and one patient. However, because of the round-the-clock nature of inpatient care and the need for supervising physicians to oversee the work of doctors-in-training, in a teaching hospital, medical care is provided by a team of doctors. Teams differ in their components, but generally have an intern, a senior resident and an attending physician. In order to provide 24-hour coverage, teams work with each other so that every patient in the hospital is covered without each doctor being continuously present. For study participants, teams were a powerful force in their working lives, socializing interns with hospital norms, supporting them both professionally and personally, and challenging them to strike the right balance between team and individual responsibility for patient care. These themes will be explored further in the section discussing the worker role.

Evaluation:

Interns are routinely evaluated, both formally as part of the medical education system and informally by their co-workers. They are commonly evaluated on their patient presentations during morning rounds. This is the time when the eyes of the whole team turn to the intern and they are judged by their ability to present a concise, coherent story with a correct plan of care. Subject interns felt strongly pressured not to waste the time of their teams during their presentations. Several spoke of learning only to present medical (not social) information, with one intern describing a lesson from her third year of

medical school: "I was presenting, the ER attending was like, 'That's not really important. I don't want to hear about that.' So I think that really sort of made a mark on me. ... As a third-year medical student, you're taught that you do this, this, and that. And even now, [with] MICU patients you don't really talk about the social history" (FG#2 32). Although the interns in our study cared about the personal lives of their patients, they felt that this information was not valued by the medical system because they were rebuked from including it in their presentations:

There's things that you're evaluated on and there's ways that you want to be. So if I want to go in and spend time discussing things with my patient, the things that people want to hear from me are: what was the sodium, potassium? what did the chest x-ray show? what did this or that study show? They really don't care about other things in life for the patient – like the patient relationship or whatever. That's not what anybody wants to hear from me when I'm trying to present these patients on rounds (FG#2 32-33).

This intern felt that it was important to talk to her patients about the other parts of their lives, but felt that this was not recognized as a valuable way to spend time by the systems of evaluation, especially patient presentations during morning rounds. Study participants did not mention any form of evaluation that valued humanistic care and opposed the message given by their superiors during morning rounds.

Interdepartmental competition:

Caring for hospitalized patients requires not only cooperation within the primary team but also between departments, as patients usually receive care not only from the Internal Medicine department but also from the Emergency Department, the Radiology Department, and various other specialty departments. A few of our study participants found the interactions between departments to be hostile at times. One commented, "Everyone's fighting with everybody. You're yelling at radiology, radiology is yelling at you. In the whole big picture, like why we came into this, we're trying to help this person, but in the process we're all making each other miserable and fighting about things, and it just seems crazy" (FG#3 10). Another intern agreed, "It's like low lying competition all the time, too, in some ways. Like, you blame the ER docs for not having done something that you find later, and they blame the outside physicians for not taking better care of the patients that come in. ... It's not the friendliest of environments" (FG#3 10-11). These participants found the interdepartmental conflict to be not only difficult to deal with personally, but also contrary to the mission of the hospital to provide care to patients. Interdepartmental conflict seemed to send the message to the interns that fighting over territory and assigning blame were more important than caring for patients.

II. Roles

Interns are expected to fill a variety of roles in the hospital. They are relied upon to deal with the grunt work of patient care, but they are also expected to have educational opportunities to train them as doctors. Furthermore, they have their own conceptions of what it means to be a doctor – a caregiver who listens and does not just prescribe medications – that is outside of their daily routine. During internship year, interns divide

their time between these different roles, and look for evidence to see how well they are succeeding in their roles. These roles often conflict, forcing the intern to decide which to prioritize in the limited time of their busy days.

The Worker Role:

As discussed above, interns in a hospital are expected to do an enormous amount of work, especially the more menial medical work. They are largely responsible for the details of patient care, such as ordering tests, calling consults, fielding calls from nurses and writing notes. In this role, interns are valued for their ability to get this work done. Given the limited amount of time available, as a worker, interns are valued (and value themselves) for their efficiency, their ability to get work done as quickly as possible. This role pressures interns to develop competence, since being competent at a task often means that it can be done faster. Interns can also perform this role better with more clinical knowledge, since that gives them the ability to triage patients and prioritize their medical needs. As one intern said, "Fix what's going to kill them, and if there's time left over, do everything else" (FG#1 6). However, in this role, interns are not necessarily given the time to develop new knowledge, instead implementing plans developed based on the knowledge of others.

In the hospital, being a good worker also means being a good teammate. Learning to trust the team was a difficult process for some of the interns in our study. As described earlier, many entered residency with the idea of being the sole caregiver for their patient, which is not feasible given the structure of inpatient care. Therefore, study participants had to readjust their expectations of what it meant to be dedicated to their patients. One intern explained, "Not that I'm less dedicated, but I'm realizing more and more now that

I'm just one part of a team. ... There's no way that one person can do everything. ... For your own sanity and for your own competence, you have to be willing to leave. You can't be here 24/7" (FG#1 14). For this intern, being dedicated to her patients meant relying on her team so that she could rest from the hospital and do a better job when she returned. Another intern described the importance of maintaining individual responsibility despite the team setting:

If it's like 1:00 ... you're pretty much done, but then you remember, "Oh, I should have checked this, or I should have check that." It's easy to think to yourself, "Oh, that's my responsibility. This is my patient and I can't leave it up to the resident [that] maybe he checked on it. You just kind of feel more ownership. ... You have to see it yourself, and you want to go to sleep knowing that you saw it and not kind of pass the buck or thinking that you should be cushioned, because it is your patient and you should own the responsibility of your patient (FG#3 2).

In order to operate effectively as team workers, interns had to find the right balance between letting their teammates help them care for their patients and making sure they had followed through on all of their responsibilities before leaving.

Being a good teammate required study participants to develop other skills that would be less necessary in a one-on-one doctor-patient relationship. As one intern explained:

I think it's a really different mindset. ... You always want to have responsibility to your patient, because you always want to be committed and make sure they have the best care possible. ... I think that the difference for me was I realized you can still do those things and not be in the hospital for 200 hours ... by setting things up and making a good plan out and making sure that you highlight the most important things that do need to get done and explain to your patients that this is the new person that's taking over from me. You can still be those things and provide those things and not physically be there, and it's okay (FG#2 7).

In a team approach to care, interns must be able to think through the plan well enough that it can be communicated clearly during sign out and manage the expectations of patients so that they are not confused by the repeated transfer of care. Study subjects were

pushed by the pressure of managing the work of internship to learn these skills, as well as to trust a team approach to care. Interns considered themselves to be successful workers when they were able to get the work done efficiently without being overwhelmed.

Learner Role:

As well as doing their daily work, interns are expected to be learning the essential skills of doctoring. These skills are learned through didactic sessions, such as noon conferences, and through experiential learning on the wards. Our subjects found that their educational experiences developed certain competencies more so than others, specifically that their technical skills and medical knowledge improved more than interpersonal skills, including conveying empathy and communicating effectively.

I think most of the changes ... have been a little more focused on technical and practical things this year, and I think that side of me has ... progressed more than the sorting out interpersonal relationships issues with patients. And it's not that I think that's not going to happen ever, but I don't think that things are advancing equally in all aspects of becoming the sort of physician I'd like to be later (FG#1 16).

I feel like I've learned a lot about micro-management, technical things, but for a lot of the social things ... I want to be compassionate and a patient doctor, very humanistic, and it's been really hard this year. ... Sometimes I feel like that social part of being a doctor is not progressing, but I'm learning a lot this year (FG#1 17).

The interns seemed to believe this was an acceptable prioritization of their education, even though it was the interpersonal domain that initially attracted the interns to medicine. However, given the limited time of internship and the amount of work that they needed to do, it made sense to the interns that technical skills, which would allow them to do that work more quickly, were more important to learn than interpersonal skills, which would require time to execute well.

Many interns seemed to believe that qualities like empathy and compassion were an intrinsic part of their nature and that therefore they would persist regardless of the educational environment. One intern said about being compassionate towards patients, "The reason why we do that is because it's part of who we are. It's not like we just turn that off, irrespective of how much sleep we get" (FG#2 27). However, not all interns believed that their humanistic qualities were weathering the hospital environment well. One intern noted, "I feel like I've lost my response to people's pain and suffering. ... My empathy is less than it used to be. ... I'm kind of numb ... even to things that might be going on in my family. I rationalize it" (FG#3 8-9). She found the pressures of the hospital – to get the work done, to think clinically, to focus on developing technical skills – had a negative effect on her empathy, an effect that continued into her life outside the hospital.

When interns spoke about developing their interpersonal skills, it was usually in the context of a positive role model. "Some of the best information I get from attendings is sitting down and watching their body language and watching their word choice and just observing how they are with patients. That's usually an important resource, especially for us at our stage" (FG#2 28-9). Sometimes the role model was another intern, as with this one who caused his co-intern to change his expectations of how deeply he should delve into a patient's social history: "I was very embarrassed about my own notes after [seeing this person's notes] because this person had done an incredible social history. ... I was surprised because said person was on call the night before and got six patients and this is something that I may have thrown into the waste if I had gotten six patients. ... It was impressive" (FG#2 31). Another intern was inspired by her patients to "gain a much deeper understanding of all the different facets of human nature and their capabilities

because ... it's really amazing what people will talk to you about and what you can learn" (FG#3 5). Overall, when the interns spoke of the general learning environment they described it as being focused on developing technical skills, but many of them were able to find individuals – attendings, co-residents, or patients – who inspired them to develop their compassionate caregiving skills.

Caregiving Role:

Caregivers do more than carry out a management plan, they listen to the ill person and offer compassion, support, and reassurance. One intern described it as, "It's not just treating them with medicine. It's a lot of listening to them, too" (FG#2 17), while another said that it's "trying to be all things for your patient, to care for all of their needs while they're under your care" (FG#2 24). This is the role that the interns put the most pressure on themselves to fill. When the interns succeeded at the roles of worker or learner, they were directly rewarded by the system, through being able to go home earlier for completing the day's work quickly or receiving the approval of the team during morning rounds for an efficient and medically relevant presentation. The interns in our study did not mention any outside incentive for being a caregiver to their patients, although many spoke of the personal rewards of being able to connect to a few special patients. "It's amazing how patients respond to you. I had one female ... that I really bonded with at the VA. ... She was really tearful the day that I was leaving and she called me the love of her life, and I was like, 'Oh, my God!' ... It was so sweet" (FG#2 21). Caring for rewarding patients was highly important to the study participants. The rewarding patients represented evidence that the interns were successful as caregivers and that their aspiration of providing compassionate care to patients was possible.

Role conflict:

Given the limited time and large amount of work, it is inevitable that interns found themselves unable to fill every role all the time. The role conflict that came up most often for study participants was a conflict between the worker and caregiver roles. Sometimes the conflict was merely logistical, just not enough time to do both the work and the caregiving:

I may be doing the efficient medical thing and doing the work that needs to be done, but there's a role that I don't think I'm trying to take on ... as far as just spending extended comforting. ... I do manage to do that sometimes, but if there are six admissions that all come in at the same time, it's a fact I won't do it for all those people, and if I do it, it's not that I comforted them perfectly in the ten minutes I spent with them, because I'm sure they could have used somebody who would spend more time (FG#1 3).

Other times, however, the conflict was psychological, as in this conversation between two female interns:

Intern #1: If you're very overworked and you're tired ... having a patient who survives a code coming to the unit would be just so much more work. ... You can add an extra four hours of work to your night right there. ... If they don't make it, they don't come, that's four less hours that you have to work, and feeling a certain sense of relief from that, whereas, in the meantime, it's somebody that died. It's just a very difficult thing for people to reconcile. ... People have this sense that, "Wait a minute, am I not a compassionate person?" ... Is it that versus just being so overworked?

Intern #2: I was definitely in that situation. There was a night in the MICU that we had a bunch of admissions, like 8 admissions or something like that. And there was one person that I admitted early on, but it didn't look like she was going to make it. And I just decided not to start the admission note, gambling that she was probably not going to make it through the night, and I wouldn't have to present her. ... I felt bad. And she didn't [make it] (FG#2, p15).

Under the stress of being overworked, the interns found themselves viewing patients primarily as work and the deaths of patients meaning less work. In the role of worker, it was entirely logical for an intern to hope for her workload to be reduced, but these interns

wanted to identify with the caregiver role more strongly. They wanted to feel compassion for a family's grief rather than relief from work spared.

In order to manage the workload of a busy call night, interns felt that they had to prioritize their worker role over their caregiver role. "Fix what's going to kill them, and if there's time left over, do everything else. ... If you have eight or twelve patients, you have to do that. ... If you have one person crashing, you can't necessarily go and talk about their grandson in Oklahoma who's doing this and that. ... You've got to take care of what you've got to take care of' (FG#1 6). In the context of internship, study participants felt forced to prioritize managing their workload over spending additional time caring for non-medical needs. Sometimes that meant having to postpone caregiving to a later time when they were less busy. Other times that meant hoping that a patient would die so that they wouldn't have to do the work of caring for them. The first intern above asked the crucial question: does this logic make me a bad person or does it reflect the context of my working conditions? The results of our study indicate that their thoughts and actions resulted from the roles they were expected to play and not from intrinsic personality flaws. When roles conflicted, they felt forced to choose the worker role that the system required of them and not the caregiver role that they expected of themselves.

III. Impact on self

Internship is a challenging experience, during which emerging doctors have experiences that are personally troubling and may be professionally detrimental. So far we have discussed the key elements of the hospital environment as perceived by the interns and the often-conflicting roles that the interns played or tried to play. In this

section we will explore how these forces appear to impact the interns as individuals.

What was the effect on their professional identities? What strategies did they use to cope with the stresses? What new knowledge caused lasting changes to their identities or actions?

Professional Identity:

The results of our study indicate that interns enter their training process with a clear idea of the kind of doctor that they want to be. This ideal, which we are calling the professional identity, differs from the roles previously discussed in that it encompasses who they want to be, whereas the roles describe how they act. Competent and compassionate were the two qualities the majority (79% and 75%, respectively) of participants named as central to the doctor they wanted to become when surveyed at the start of internship. (See Table 2.) These two qualities correspond well with the roles described above. Competence is gained by the learner and implemented by the worker, while compassion is offered by the caregiver. In addition to these two main characteristics, interns expressed intentions to be skilled at communication (46%), to be committed to the integrity of the doctor-patient relationship (33%), which included qualities such as dedication, honesty and trustworthiness, and to be focused on non-medical patient needs (25%), where the perceived needs were for advocacy, education and social justice.

| Primary category | Secondary category | # Codes | # Interns | % Interns |
|------------------|--------------------|---------|-----------|-----------|
| Competent | | 25 | 19 | 79% |
| | Competent | | 8 | |
| | Knowledgeable | | 8 | |
| | Good at learning | | 5 | |
| | Confident | | 2 | |
| | Efficient | | 1 | |
| | Respected | | 1 | |
| Compassionate | | 22 | 18 | 75% |

| | Compassionate | | 15 | |
|--------------------------------|-------------------------------|----|----|-----|
| | Caring | | 2 | |
| | Empathetic | | 2 | |
| | Nonjudgmental | | 1 | |
| | Humanistic | | 1 | |
| | Patient | | 1 | |
| Skilled at communicating | | 12 | 11 | 46% |
| | Good at conveying information | | 5 | |
| | Good at listening | | 5 | |
| | Approachable | | 2 | |
| Dedicated to integrity | | 11 | 8 | 33% |
| of doctor-patient relationship | Dedicated | | 4 | |
| | Honest | | 3 | |
| | Trustworthy | | 3 | |
| | Respectful | | 1 | |
| Focused on non-medical needs | 3 | 7 | 5 | 21% |
| | Good at educating | | 3 | |
| | Good at advocating | - | 2 | |
| | Altruistic | | 1 | |

Table 2. Responses to the survey question, "What are three features of the physician you would like to be?"

When asked eight months into internship whether they were becoming the physician they had wanted to be at the start of internship, all respondents said yes, although nearly two-thirds (63%) qualified their answer in some way. A typical qualified answer was, "Yes, but I'm not what I'd ideally like to be completely yet in practice because of all the menial jobs of an intern. However, when I have time, I am very happy with the type of physician I am, and I know that things will only improve" (Survey H 1B). Most of the qualified answers mentioned time constraints, workload or fatigue as reasons for why they did not always act in accordance with their professional values, which is consistent with our findings that limited time and increased workload and fatigue compelled the interns to play the worker role, as opposed to the more personally gratifying caregiver role. On the other hand, the interns felt strengthened in their professional identities when they were able to act as students and caregivers, developing their competence and demonstrating their compassion.

In particular, there appeared to be a correlation between an intern's growing sense of confidence in her medical acumen and her comfort with her professional identity. One intern described the feeling of being a doctor as knowing what to do medically, as well as interpersonally: "Now I'm up to like a doctor five times a week and not just in terms of medical knowledge but also in terms of ... knowing how to deal with house staff and ... with patients and their families. I feel more sure of my abilities" (FG#2 1). Another intern correlated her increasing confidence with professionalism:

I'm the doctor. I take care of people and I, to some degree, know what I'm doing, and I feel like I'm a valuable part of the team in the hospital. ... That really gives you a much stronger sense of professionalism. I think that you really become much more invested in it the more that you identify with that as your role (FG#3 12).

This feeling of confidence, however, can be weakened by the unskilled, menial aspects of the intern's job:

It goes back and forth. There are definitely times when ... you feel like you are a doctor. When a patient's family member comes to you and asks you a question, and you're able to give them an answer. ... There are other times when you're just like a scut monkey, running around doing paperwork all the time (FG#3 13).

Taken together, these quotes indicate that as interns develop their medical knowledge and are able to demonstrate their competence through meaningful (i.e. not scut) work, their sense of professionalism is deepened and they feel more responsible for the patients under their care.

Additionally, participants spoke of ways to maintain their patient-centered orientation despite the pressure of time and work. One always included a fact about his patient in the first sentence, such as, "This is a seventy-year-old golfer presenting with..." Another always wrote an extensive social history in his notes, while another claimed that she would take her listeners hostage when she presented and would tell them

about her patient's social history whether they wanted to hear it or not. Others renegotiated the time that they spent with patients so has to have time to talk with them during less busy parts of their days. These interns seemed to take pride both in their ability to meet their self-expectations and to have learned the system well enough to work around it. The more that they were able to live out their professional ideals of clinical competence and compassion, the more the professional identity became part of the personal identity.

Time management:

As described earlier, interns often experienced role conflict that caused them to have to choose between getting work done and making a personal connection with their patients. Some interns coped with this conflict by rescheduling interpersonal time with their patients.

The way I kind of deal with that is in the morning if I know this person really needs somebody to talk to, and I know I can't do it at that moment, I say, 'OK, you know, Ms. X or whatever, I'm really rushed right now. Will it be OK if I come back later during my down time or something like that?' And most of the time they do understand, and I'll try to come back later, because you lose your trust if you say you're coming back and you never show up. Even if it's on my way out, I can stop back, give them like maybe five to ten minutes. I kind of talk to them and say, 'Oh, thanks for understanding. I couldn't really talk to you in the morning because I had X, Y and Z to do'" (FG#1 4-5).

Other interns seemed wary of this approach because of the possibility of losing the trust of patients: "I find that's hard, because I'm not going to have enough time to go back later in the day, and then you end up lying to the patient, basically" (FG#2 17). Some interns found that they were able to create spaces to act as caregivers through disciplined time management, but not all were able to employ this strategy effectively. It is important to note that this was an individual strategy to overcome the institutional problem, as

perceived by the interns, that they were not able to spend enough time with their patients during the time (pre-rounding) designated for patient interactions.

Deferment of professional goals:

Just as some interns put off spending time with patients to less busy times, most of the interns in our study felt that they were postponing achieving their professional goals until after internship. As stated earlier, most study participants felt that they were on the path to becoming the doctor that they would like to be: "I've always said that I think I'll be the physician I want to be, but just not during the internship year. ... Everybody here knows what type of doctor that they want to be. It's just there's not enough time when you're an intern" (FG#1 3). One of the interns felt encouraged by her attendings that it was possible to delay her goals and still achieve them later:

One thing that has encouraged me when I've been down on the fact that maybe I'm not compassionate enough is that the majority of attendings are very, very compassionate towards the patients. ... What encourages me is ... even if my lack of compassion is because I'm exhausted or overworked, that, perhaps, when I go through this and I have a little bit more time ... [compassion] will come with maturity and with sort of being removed from the day in and day out of having to take care of the nitty gritty of patient care (FG#2 30).

Study participants did not believe that they always acted in accordance with their professional values, but hoped that they would be able to do so more in the future.

Looking ahead in the hierarchy was encouraging to most of them, as they saw residents spending more time talking to patients and attendings modeling the kind of compassionate care that they would like to offer.

Constriction of personal responsibility:

In order to prevent themselves from becoming overwhelmed by the work of internship, many study participants described redefining their senses of personal responsibility. One intern noticed that he had decreased what he was willing to apologize for:

I find that I definitely apologize less now to patients. When I started internship, I apologized for everything! 'I'm sorry you had to wait so long in the ED.' 'I'm sorry that your insurance doesn't cover this medicine.' And then, ... midway through, it's like, it's not my fault that their insurance doesn't cover, that they spend 9 hours in the ED. It's just the way it is. ... These things that either aren't my fault or I can't change, I don't apologize for them anymore (FG#3 4).

Another intern had become more tolerant of his shortcomings: "I forgive myself more. ... I excuse myself for not being able to do every single thing that I know I need to do or should do" (FG#3 1). The interns felt that they had entered internship with a great sense of personal responsibility. Over the course of the year, however, they learned what was impossible given the limitations of the medical system and of their own abilities. This constriction of personal responsibility was correlated with their growing reliance on their teams to provide care to patients, as described earlier.

It was also correlated with the degree to which the participants identified with being an intern, as opposed to a doctor. As one intern explained:

I think I'm just in a situation. I have certain responsibilities just because of who I am. I'm an intern. And, unfortunately, that doesn't allow me to be the person who actually did the reading on the patient's issues. It doesn't allow me to be the person who went back in under no pressure and flushed out other pieces of history after they heard the basic story. I'm the person who got the first story. I'm the person who spent the most time. And then I have to fill that role. And in the coming years I'll be able to continue to build on the experiences I had this year, but in the meantime I'm practicing medicine the way I want to but within the limits of my current job role. ... Our job is to collect the information and to make sure we know everything, and then it's other people's jobs to piece it together. And soon it will be our job to do that. It doesn't change who I am and what I want to be as a physician. It's just what internship year is (FG#1 6-7).

This participant very strongly identified as being an intern. As a result, he felt that he was only responsible for the things that he believed interns were responsible for – e.g. gathering information, but not necessarily interpreting it. This is a useful strategy because it prevents discouragement – limitations could be blamed on his job and not on himself.

The value of this coping strategy is best illustrated by the intern who apparently was not able to engage in it. This intern spoke of her transformation over the course of internship from being excited about caring for and educating her patients to trying to transfer to pathology:

I'm totally gung ho, going into clinic. These are going to be my patients. I'm going to take good care of them. And I sit and spend a lot of time: I make lists, I draw pictures, I try and explain it really thoroughly, ... and then talking with the patient about it and them just not seeming like they remembered anything that we talked about. ... That's been really hard for me in terms of clinic patients. ... I'm actually looking into applying to pathology for this year because I have taken it really personally with my patients. ... I want to have my patients and do a really good job caring for them, but I found that it's more taxing to me, personally, to do that. ... I love the science of medicine and that's why I loved doing education with patients and talking to them about pathophys in basic terms — I really try to break it down — but I think because I've spent so much time, it's exhausting. ... If I'm not able to do that, I don't feel like I'm being thorough (FG#3 8-9).

From this intern's description of herself, it is clear that she held high standards of herself in terms of patient care and education, standards that she was not willing to compromise. However, she was unable to get enough satisfaction from her job to make up for the time and energy she was expending living up to her standards. Since she was unwilling to redefine her sense of personal responsibility, she concluded that her only option was to transfer to a field in which she would not be responsible for patient care.

Support systems:

Study participants identified their friends, family and co-workers as crucial sources of support during internship. Many had anticipated that friends and family would

help them through this year, but they were surprised at the importance of their coresidents in supporting them both professionally and personally. "I hadn't relied on people as much as I have since I've come to Yale ... If I didn't allow myself to do so, if I didn't allow myself to say, 'Stop,' if I didn't say, 'This patient's fine – the unit's got it. I'm going,' if I didn't say this stuff, I would have lost my chips ... It's changed me" (FG#3 14). The experience of learning to trust her team not only helped her manage her work but also changed her view of herself: not as someone who worked alone but as someone who relied on others to help her. Another said, "I didn't expect to make really good friends when I came to my intern year ... But I got here and I made some really, really amazing friends ... I think we would all burn out a lot quicker if we didn't have that ... I always had someone to call ... There's always someone's house to go over to. It made a difference" (FG#3 14-15). Co-residents supported the interns emotionally, helped them manage their workload, and, for some, enhanced their professionalism: a "vast majority of the people ... you feel good about what they do ... they do stuff that represents you well. ... I think that's really good because it gives you incentive to be better and to be as professional as you want to be. ... There's kind of a herd mentality that helps you out here" (FG#3 21). The dual sense of professional and emotional support from their co-residents was highly important to the interns and came up repeatedly as an unexpected aspect of internship.

Personal and professional balance:

Study participants struggled with the question of how to balance their professional responsibilities with their personal needs. Being able to rely on their co-residents and constricting their sense of personal responsibility in the hospital assisted them in

maintaining a satisfying life outside of the hospital. In the words of one intern, "I've become more comfortable setting boundaries. I think I've become more comfortable saying it's OK that I'm done now. This is under control and it will be fine" (FG#2 6). She learned to trust the system of care and therefore had an easier time leaving to attend to her own life. Another intern felt that a comfortable balance became more achievable with increased competence: "I'm able to get the work I need to get done and still go to conferences, get home, have time to read some at night, and just balance it better ... I just think I'm getting a little bit better at learning how to fit it all in" (FG#2 8). She was able to remain committed to her work, education and family life by becoming more efficient at getting patient care work done. Some interns argued that self-care made them better caregivers:

To be good at any given profession you have to be good at being a person ... I'm a doctor but I also like to run, and I like to do other things ... there's different aspects of your life and you need to foster the ones that really make you you, and by fostering each of those, you become better at all of them as a whole ... I'm a better person because I try to be well rounded ... if I just work at medicine all the time, I will get burned out very quickly and be of no utility to anyone, including myself (FG#2 7).

The interns valued having a balanced life, in which their personal needs were met along with their professional goals, but found it difficult to achieve. They were aided in their objective by trusting their teams, by becoming more competent, by setting boundaries and by believing that being a well-balanced person was valuable both to themselves and their patients.

Recognition of the complexity of doctoring:

Interns enter the hospital with preconceived ideas of how the medical system works. During the course of their immersion into the hospital, they learned that some of

their ideas were correct and others incorrect. "The biggest change is a sense of understanding what I've gotten myself into. ... I was very naïve in certain ways about the profession, about the medical system. ... Being an intern ... [has] been a crash course in terms of really understanding the reality of what this is and what this is all about" (FG#3 6). Overall, they learn that situations and their solutions are not as simple as they might have felt prior to internship. "I think I have more contextual appreciation for things. ... When we were talking about things at the beginning of the year, I think it was a little bit more abstract, and I can now envision more gray areas. ... It's not always straightforward how things apply" (FG#1 10). Study participants learned that it was not as easy to apply abstract ethical principles to complex situations as they thought it would be.

What was more disturbing to at least one participant was that he found medical standards to be difficult to apply as well:

I'm turning out to be a little more nihilistic when it comes to things with patients than I ever thought I would be. When you first start, ... you want to have everybody on the medications that they're supposed to be on, and everything should be evidenced based. And you realize it's just not that important for the patient to be as adherent to these regimens and things as it is for you sometimes. ... They have so many larger kind of life style issues, ... which can just totally overshadow that anyway. ... I thought I would feel more like what I did made more of a difference. ... I don't take all these therapies and things as seriously. ... I didn't think I'd feel that way, coming in (FG#3 20).

Another intern reiterated that increased experience had made him less convinced of the right thing to do medically, especially with patients with difficult social issues: "Hypothetically, I could imagine that the people then might not respond well to interventions, that the care you give might not be appreciated, but now I have a lot of examples of just more or less wasted effort" (FG#1 15). These interns were struck by the complexity of doctoring – that caring for patients is not straightforward and is often made more difficult by factors out of the control of both the doctor and the patient. Neither one

of the interns quoted above seemed to have worked out a way of dealing with these kinds of situations. Instead, one of them spoke of the appeal of the intensive care unit, since in that setting patients are completely under the control of their doctors and dramatic differences can be made.

Deepened self-knowledge:

Like other challenging experiences, internship presents an opportunity for emerging physicians to deepen their self-awareness and increase their self-knowledge. Many interns spoke of the importance of self-awareness in helping them deal with the difficulties of internship. "I think it's hard to have an idea of something and then hard to put that into practice, ... but my being aware of that, I think, is one of the things that's been most important" (FG#2 28). He was challenged by the task of maintaining a positive attitude with every patient. However, his recognition of the challenge, especially with certain patients, helped him to maintain his ideals. Similarly, another intern advocated the importance of experiencing personal discomfort with conflicts that arise, such as the complicated emotions caused by patients on the unit described above: "The problem is that people don't stop back and say, 'Why did I say that?' and realize that this is the patient that just died, and think about the reality of the situation as opposed to just ... 'Oh, good. The person didn't make it. I don't have a work-up,' without thinking about why you said that" (FG#2, p. 16). Having inappropriate feelings under stressful circumstances is normal, but maintaining a high enough level of self-scrutiny so that those inappropriate feelings do not come to seem normal was an important strategy for interns who maintained their ideals during the stresses of internship.

For some, the knowledge gained during internship changed their career goals. "I'm redefining. I started this wanting to be a primary care doctor, now I'm going into emergency medicine. ... Things have come to light that I didn't know about. I was better at some things and not so good at other things that I didn't know about before" (FG#1 16). For most of the interns who spoke about changing their career goals, they spoke about changing their focus away from altruistic work:

I always felt like I'd had ... enthusiasm for service work and the challenges that went along with it. It's really surprised me: ... the repetitive frustrations of people who don't have medical follow up and it's always a crisis every time when they come into the clinic, and there's no visits that are not ... complicated by social issues. ... I didn't expect to lose my enthusiasm for it (FG#1 7-8).

I've thought about becoming very non-clinical. I always thought it was going to be fifty/fifty, and now I'm thinking like eighty/twenty. I may do something in health management, ... and what brought me to medicine was totally kind of grassroots medicine. It was free health clinics and Podunk rural areas and that type of stuff. ... That's not there right now (FG#3 15).

I always thought I was going to do more kind of primary care type stuff. ... I get a little bored with that now. I like excitement. ... If I stay in clinical medicine, I'll probably do something in critical care, because that just feels so much more meaningful. I always thought ... I would love the social issues and stuff, ... but it's hard for me. It's really frustrating and I don't enjoy it (FG#3 19).

For all of these interns, they learned about themselves that they did not find the process of service work to be satisfying and they intended to switch career paths so as to avoid complicated social issues. The only intern who described remaining passionate about service work said that he expected the difficulties presented by socially complicated patients: "I expected it, ... because I came from a program, as a student, where there was a very underserved population – it was inner city Brooklyn – and so I dealt with that as a student and that's part of what I love about medicine, so I expect to not get out as much as I put in. ... If you're go in with lower expectations, you don't end up in the bottom of the cage" (FG#1 8). He was able to maintain his career goals, because his expectations of patient care were attainable, even in the setting of complicated social issues.

DISCUSSION

Internship is perceived to be a rite of passage in the lives of developing doctors, marking the initial period of transition from non-doctor to doctor. A rite of passage, as described by anthropologists, is an event to mark the change in a person's status. It is characterized first by the separation of individuals from the rest of society. This separation is followed by a liminal period during which the persons undergoing transformation belong to neither group and can participate in behavior outside of the normal bounds of society. The rite concludes with a reintegration of individuals back into society at a different place in the societal hierarchy (21). Our study participants experienced a sense of being cut off from normal society, of being immersed into a hospital system very different from their lives outside the hospital. They felt a sense of the shifting of roles, of being at times very much a doctor and other times still feeling like a non-doctor. They also described enduring challenges during the year, some of which caused them to act or feel in ways that they did not expect or find acceptable. Finally, they perceived the experience as being of limited duration and looked forward to its conclusion, which they believed would mark them as being more fully a doctor and would allow them to act in ways more in keeping with their goals.

During this transitional period, many felt that their initial values were challenged by the cultural messages of the hospital and by the roles they were expected to play.

Every study participant entered internship expecting to become a patient-centered physician. However, in order to cope with the demands of internship, some postponed aspects of being the doctor they wanted to be until later. Others found ways of incorporating compassionate care into their daily practices, even if those efforts were not institutionally supported. Many participants changed in some way, by constricting their

self-expectations so that they forgave themselves more, by gaining self-knowledge that changed their career goals, or by gaining confidence that allowed them to identify more strongly with their professional identity. In this section we will explore the context and significance of these findings.

Institutional messages:

Several themes that emerged from our data describe a work environment that is not wholly patient-centered. Study participants were concerned about the amount of time they spent on menial work, which they felt took directly away from time with patients, as well as from educational activities. This resonates with other studies showing that residents perceive time constraints and workload to be barriers to professionalism (6) and describing how the inefficiencies of menial work lead to less satisfying patient care (22). It also supports ongoing efforts to reduce the amount of scut work and duplicate paperwork required of interns.

Study participants felt that the educational agenda of internship was oriented towards developing their technical skills, not their interpersonal skills, with some believing that their interpersonal skills suffered as a result. This is consistent with other research demonstrating that knowledge/clinical capabilities and empathy are two distinct realms of competency, and that residents progress separately in developing in each one (23, 24). Evaluation of the two areas of competency must be done separately in order to ensure that trainees area progress in both and to be accurate since previous research has shown that in a global assessment of a clinician's professional acumen, clinical competence is often conflated with interpersonal skills (4). For the interns of our study, a formal assessment of their humanistic side would most likely have been welcomed, since

they expressed frustration at being negatively judged for elaborating on the social histories of patients during morning rounds, which seemed to be the primary setting in which the interns were judged by their teams.

The role of social justice:

The results of this study echoed the findings of previous studies showing that housestaff do not consider social justice to be an essential element of professionalism (5, 6, 7). Only one participant included altruism in response to being surveyed about ideal physician characteristics, as seen in Table 2. However, several participants spoke about the desire to do service work as a motivating factor in choosing a medical career. All of these participants but one then described becoming frustrated with the challenging nature of patients with complicated social situations and deciding that service work was not for them. The one participant who continued to be interested in service work credited having a realistic expectations as the reason he was able to maintain his enthusiasm. If medical educators want residents to include a commitment to altruism as part of their working definition of professionalism, then they need to emphasize social justice issues in the formal curriculum and give residents opportunities to succeed in carrying out service work. Since this study was conducted, professional dilemmas relating to social justice have been included among the cases discussed during Yale's professionalism workshops. Additionally, opportunities for clinical rotations in resource-limited settings such as Uganda have been expanded, providing opportunities for residents to have potentially more satisfying service work experiences and to gain more personal experience with the need for a just healthcare system that provides a basic level of primary care to all. It

would be interesting to do a follow-up study to see if these interventions are enough to increase the prevalence of social justice in the professional self-definition of Yale interns.

Finding ways to be caregivers:

Many study participants were remarkably self-conscious about finding ways to be caregivers despite being in a context in which there was many more external pressures to be workers. As previously discussed, one intern always started his presentations with a humanizing descriptor, while another wrote an extensive social history in his notes regardless of how busy he was. One intern told her team about the social histories of her patients even if they seemed disinterested, while another arranged time in her day to chat with her patients even if there weren't enough time during pre-rounding. For all of these residents, they were able to find a way to remain consistent with their humanistic values on a daily basis, and they served as an example to other residents who might have been doubting the feasibility of their goals. Educators wishing to promote patient-centered care should find ways of identifying these residents so that they can be publicly recognized for their efforts and so that their behavior can be emulated by others.

Deferment of ideals:

The interns described above developed ways of remaining true to their professional self-expectations within the confines of their situation. For most study participants, they dealt with the limitations of their job role by postponing attainment of their professional goals to the future. They did not give up on their ideals, but they recognized the difficulty of implementing them during internship, and so they consciously postponed them. They felt comfortable doing so because they had role

models further along in the medical hierarchy who were able to offer the compassionate care that the interns wanted to be able to provide. These role models, both residents and attendings, provided through their actions instruction on how to form therapeutic doctor-patient relationships and reassurance that satisfying relationships would eventually be possible. The implication of this finding for educators is that systemic adjustments that allow more contact between attendings and interns would likely benefit both the education and the motivation of trainees.

Learning what's possible:

Most of the themes related to how internship affected the individual self are ultimately related to the process of the interns forming beliefs about what is or it not possible within medicine. Several came to believe that making a difference in the lives of patients with complex social needs was impossible and therefore service work was not for them. Some found ways of acting humanistically within their job constraints, while most decided that it would be more possible to do that later. The constriction of personal responsibility that many participants spoke about was their way of reconciling their initial expectations of what would be possible with what they actually found themselves able to do. Conversely, evidence of their increasing competence gave them more confidence that they would succeed in what they had set out to become, compassionate and competent physicians, and strengthened their professional self-identity. Our study makes clear that emerging physicians enter internship with the deeply held desire to provide patient care that is both technically and interpersonally excellent. Trainees will continue to strive for that as long as they believe that it is possible to provide care that meets their self-expectations. It is up to educators to provide examples of successful role models, to give

them opportunities to succeed, and to create learning environments in which the successful implementation of ideals is expected.

Future directions:

All qualitative studies are limited in that their findings apply most directly to a specific time and group of people, and so they can not be easily generalized. Therefore our conclusions about the learning environment at Yale should be most directly applied to efforts to reform Yale's graduate medical education system. However, these themes undoubtedly have parallels elsewhere and should be used as starting points for other institutions interested in promoting a culture of compassionate caregiving. This study may have been additionally limited by the use of a focus group formats to explore a potentially sensitive topic, an intern's personal professional growth. We tried to overcome that limitation by providing a way for interns to give anonymous, individual responses via the surveys. Since we did not discover new themes in the survey responses that were not brought up in the focus groups, we concluded that the public format of the focus group did not inhibit data generation.

Further research should evaluate more senior physicians to see if they still delay attainment of certain ideals, achieved their ideals, or altered them in favor of more attainable ones. Ideally, a follow-up study of the individuals studied in this cohort could potentially yield important longitudinal data on the evolution of professional ideals over time. If professional development remains compromised, the factors preventing physicians from achieving their ideals should be clarified and modified.

REFERENCES

- Relman, A.S. 2007. Medical professionalism in a commercialized health care market. JAMA 298:2668-70.
- 2. Saultz, J.W. 2007. Are we serious about teaching professionalism in medicine? *Academic medicine : journal of the Association of American Medical Colleges* **82**:574-7.
- Cohen, J.J. 2006. Professionalism in medical education, an American perspective: from evidence to accountability. *Medical education* 40:607-17.
- 4. ABIM Foundation. American Board of Internal Medicine, ACP-ASIM Foundation, and European Federation of Internal Medicine. 2002. Medical professionalism in the new millennium: a physician charter. *Ann. Intern. Med.* 136:243-6.
- 5. Arnold, L. 2002. Assessing professional behavior: yesterday, today, and tomorrow. *Academic medicine : journal of the Association of American Medical Colleges* **77**:502-15.
- 6. Ratanawongsa, N., Bolen, S., Howell, E.E., Kern, D.E., Sisson, S.D., and Larriviere, D. 2006. Residents' perceptions of professionalism in training and practice: barriers, promoters, and duty hour requirements. *Journal of general internal medicine: official journal of the Society for Research and Education in Primary Care Internal Medicine* 21:758-63.
- Wagner, P., Hendrich, J., Moseley, G., and Hudson, V. 2007. Defining medical professionalism: a qualitative study. *Medical education* 41:288-94.
- 8. Eggly, S., Brennan, S., and Wiese-Rometsch, W. 2005. "Once when i was on call...," theory versus reality in training for professionalism. *Academic medicine : journal of the Association of American Medical Colleges* **80**:371-5.
- 9. Ginsburg, S., Regehr, G., and Lingard, L. 2003. The disavowed curriculum: understanding student's reasoning in professionally challenging situations. *Journal of general internal medicine : official journal of the Society for Research and Education in Primary Care Internal Medicine* 18:1015-22.
- 10. Ginsburg, S., Regehr, G., and Lingard, L. 2004. Basing the evaluation of professionalism on observable behaviors: a cautionary tale. *Academic medicine : journal of the Association of American Medical Colleges* **79**:S1-4.
- 11. Ginsburg, S., Lingard, L., Regehr, G., and Underwood, K. 2008. Know when to rock the boat: how faculty rationalize students' behaviors. *Journal of general internal medicine : official journal of the Society for Research and Education in Primary Care Internal Medicine* 23:942-7.
- 12. Lynch, D.C., Surdyk, P.M., and Eiser, A.R. 2004. Assessing professionalism: a review of the literature. *Medical teacher* **26**:366-73.
- 13. Hafferty, F.W. 1998. Beyond curriculum reform: confronting medicine's hidden curriculum. *Academic medicine: journal of the Association of American Medical Colleges* **73**:403-7.
- 14. Mizrahi, T. 1985. Getting rid of patients: contradictions in the socialisation of internists to the doctor-patient relationship. *Sociology of health & illness* 7:214-35.
- 15. Rosenbaum, J.R., Bradley, E.H., Holmboe, E.S., Farrell, M.H., and Krumholz, H.M. 2004. Sources of ethical conflict in medical housestaff training: a qualitative study. *Am. J. Med.* 116:402-7.
- 16. Brownell, A.K., and CÃ'té, L. 2001. Senior residents' views on the meaning of professionalism and how they learn about it. *Academic medicine: journal of the Association of American Medical Colleges* **76**:734-7.
- Papadakis, M.A., Arnold, G.K., Blank, L.L., Holmboe, E.S., and Lipner, R.S. 2008. Performance during internal medicine residency training and subsequent disciplinary action by state licensing boards. *Ann. Intern. Med.* 148:869-76.
- 18. Papadakis, M.A., Teherani, A., Banach, M.A., Knettler, T.R., Rattner, S.L., Stern, D.T., Veloski, J.J., and Hodgson, C.S. 2005. Disciplinary action by medical boards and prior behavior in medical school. *N. Engl. J. Med.* 353:2673-82.

- 19. Stern, D.T., Frohna, A.Z., and Gruppen, L.D. 2005. The prediction of professional behaviour. *Medical education* **39**:75-82.
- 20. Glaser B.G., Strauss A.L. 1967. *The Discovery of Grounded Theory: Strategies for Qualitative Research.* Aldine de Gruyter. Hawthorne, New York.
- 21. Volpp, K.G., and Grande, D. 2003. Residents' suggestions for reducing errors in teaching hospitals. *N. Engl. J. Med.* **348**:851-5.
- 22. Auslander, M. 2006. Rites of Passage. In *Encyclopedia of Anthropology*. H.J. Birx, editor. Sage Reference. Thousand Oaks, CA. 2022-2025.
- Hojat, M., Paskin, D.L., Callahan, C.A., Nasca, T.J., Louis, D.Z., Veloski, J., Erdmann, J.B., and Gonnella, J.S. 2007. Components of postgraduate competence: analyses of thirty years of longitudinal data. *Medical education* 41:982-9.
- 24. West, C.P., Huntington, J.L., Huschka, M.M., Novotny, P.J., Sloan, J.A., Kolars, J.C., Habermann, T.M., and Shanafelt, T.D. 2007. A prospective study of the relationship between medical knowledge and professionalism among internal medicine residents. *Academic medicine: journal of the Association of American Medical Colleges* 82:587-92.

¹ Relman 2007

Arnold 2002
Wagner 2007
Ratanawongsa 2006
Eggly 2005
Ginsburg 2004
Ginsburg 2003
Ginsburg 2008
Lynch 2004
Hafferty 1998
Mizrahi 1985
Eggly 2002

² Cohen 2006

³ Saultz 2007

⁴ ABIM 2002

⁵ Arnold 2002

¹⁵ Rosenbaum 2004

¹⁶ Brownell 2001

Papadakis 2001
Papadakis 2008
Papadakis 2005
Stern 2005
Strauss, Glaser 1967
Auslander 2006
Volpp 2003
Hojat 2007
West 2007