And Now, Please Sign on the Dotted Line: Teaching Residents About Professional Life After Residency

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Objectives: Despite possible long-term repercussions, few training programs teach their residents about the business of medicine. In particular, certain contractual issues can adversely affect a young physician's career mobility.

Methods: We designed a business-of-medicine curriculum and used a survey to determine whether the curriculum satisfied attendees' perceived knowledge gaps about the topics covered in the course, which included four key contractual matters: physician employment contracts (including restrictive covenants), malpractice insurance, job search, and interviewing skills. We used a postsurvey in 2015 and added a presurvey for the course in 2016. The same content was delivered in a 1-hour conference to internal medicine residents attending a regular noon conference series in 2015 and a regional academic meeting in 2016. Survey data are presented in terms of descriptive statistics. We used χ^2 tests for comparisons of pre- and post-Likert scale survey data.

Results: Of 108 residents, 50 returned the surveys for an overall response rate of 46% across the 2 years of the course. Overwhelmingly, residents found the conference to be beneficial to the understanding of the four key contractual matters, with each topic having a statistically significant difference in perceived knowledge between the pre- and postconference questionnaires ($P < 0.001$). The majority of the residents indicated that they wanted to learn more about business-of-medicine topics, in particular financial challenges (76%) and job opportunities (68%).

Conclusions: Our results confirm that our curriculum is effective in increasing the residents' perceived understanding of restrictive covenants, malpractice insurance, negotiating skills, and job search. Our results also demonstrate that residents have a desire to learn more about job searches; negotiating skills; and contractual issues, including restrictive covenants and malpractice insurance.

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A resident's employment after residency represents the culmination of many years of often-expensive education, long hours, and training; however, postresidency business-of-medicine matters are infrequently addressed during residency training. A review of the literature reveals attempts by some programs to address business-of-medicine matters during residency. These endeavors have included training in the business aspects of medicine, including pilot projects for training in practice management,[1–3] medicolegal issues,[4] and personal finance.[5] Only a few, however, specifically introduce residents to the basic but critical physician employment contract concepts.[6]

Business-of-medicine issues are many and some can be complex; however, some aspects of this matter are undoubtedly valuable to all residents as they leave the protected world of residency to enter the job market, namely securing that first job and signing an employment contract. It is easy for the novice to be guided purely by the salary as the main determining factor in his or her job choice. It is rare, however, that a young physician just out of residency will land his or her "dream job" as his or her first job, and it is not unusual for him or her to change jobs three or four times before being fully satisfied with his or her career. It is therefore imperative that postresidency physician employment contracts are scrutinized closely, particularly important contractual matters such as noncompetes or restrictive covenants, and tail liability insurance, both of which can significantly hinder a physician's career options and flexibility if not properly

Key Points

- Teaching residents about the business of medicine is an ever-growing area of need in today's educational and practice environment. This includes contractual employment issues.
- There is insufficient teaching surrounding the business aspects of medicine for young physicians in early postgraduate training.
- With some organization, introducing important aspects of the business of medicine can be easily embedded in the teaching curriculum. This can be done in a way that does not take away from, but actually supplements, early postgraduate physicians' training.

understood. Some articles have highlighted the importance of these contractual issues[7–10] and the often-adverse career and life events of poorly understanding these highly significant issues, particularly in the face of many states showing a greater inclination to enforce restrictive covenants.[11] If not properly understood and negotiated, tail liability insurance can be costly for physicians if they choose to leave a job. Per the American College of Physicians Center for Practice Improvement and Innovation, "Restrictive covenants, often called non-compete clauses or non-competition agreements, can be one of the most important yet least understood and potentially most contentious aspects of an employment agreement. Following termination of employment, these clauses seek to prohibit the physician from practicing medicine for a specified period of time in a specific geographical area."[12] This same resource comments on tail insurance as follows: "The 'tail' provides coverage after the physician's termination for any events that may have occurred during his/her period of employment."[12]

These are matters that new physicians are unlikely to have prior exposure to, and if not considered carefully, can prove to be highly costly. It appears, however, that postresidency business concepts and skills are addressed inadequately.[13,14] There is little in the literature regarding a systematic approach to addressing these matters in residency programs.

During residency training, there is an abundance of information and new material for residents to learn. As a result, little or no time exists to discuss key postresidency business-of-medicine issues. Although some hire an attorney to assist them with understanding and negotiating contracts, many do not. A lack of understanding of contract items such as noncompete covenants, tail liability insurance, among other important contract items can prove costly and limiting to a physician. Even for physicians who hire attorneys, knowing what items in a contract are the most important to them personally can help them negotiate more effectively or guide their attorney as to what matters most to them.

Our residency program sought to remediate this knowledge deficit by creating a curriculum that discusses the key postresidency business-of-medicine issues such as job search and interview skills, employment contracts, restrictive covenants, and malpractice insurance. It is unknown, however, whether the curriculum has been effective in closing the perceived knowledge gap of the residents.

Methods

We designed a survey to determine whether the curriculum satisfied attendees' perceived knowledge gaps about the business-of-medicine. The content was presented as a 1-hour lecture during which attendees were taught about job search and interview skills, employment contracts and restrictive covenants, and malpractice insurance. This project was deemed not to be human subjects research by our local institutional review board. The Appendix outlines the content of the curriculum (see Supplemental Appendix, http://links.lww.com/SMJ/A90).

The content was decided primarily based on similar workshops in the literature and on the local faculty members' shared experience of business-of-medicine experiences encountered after residency and when entering the job market. Local faculty, led by one faculty member with a particular interest in this area, designed and delivered the content. Because the course was based on local experience, it was well received by the residents and they found it applicable to their particular situation.

This "Life after Residency" conference was delivered to the residents from a single program in 2015 as part of their regular noon conference series. They were asked to complete an anonymous postconference questionnaire only. Residents from six residency programs attending a regional academic meeting received the conference in 2016. They were asked to complete both anonymous pre- and postconference questionnaires. Both the pre- and postconference questionnaires asked about demographics and contained questions about understanding business-of-medicine topics. Assessment was done using a 5-point Likert scale, from strongly agree to strongly disagree. The postquestionnaire additionally asked about an overestimation of knowledge and interest in business-of-medicine topics (same 5-point Likert agreement scale) and contained questions about topics to learn more about in the future (topics of interest selected from a list).

The content between the 2015 and 2016 conferences was essentially unchanged. Because the 2016 conference was a regional conference attended by some of our residents, there were a few residents who may have attended both conferences. Prior attendance is captured in the postsurvey. The curriculum was presented in the last few months of the academic year for both 2015 and 2016 because this is the time of year that residents focus their attention on postresidency career options.

Data are presented in terms of descriptive categorical statistics. Categorical variables are presented as counts and column percentages. The χ^2 tests were used for comparisons between pre- and postdata.

Results

The majority of the residents in 2015 were women (52.6%), whereas in 2016 the majority were men (54.8%). Most of the residents were 25 to 30 years of age (78.9% in 2015 and 77.4% in 2016). Participants were spread across the 3 years of training, although the proportion of postgraduate year-1 residents who attended the conference in 2015 was higher than in 2016 (Table 1).

A total of 50 residents returned the conference postsurveys (a 46% overall response rate). In 2015, 19 residents from a single residency program returned the postconference survey out of 48 resident attendees (40% response rate). In 2016, 31 of 60 resident attendees from six different residency programs returned the postconference surveys (52% response rate). A total of 33 of the 60 resident attendees in 2016 returned the presurvey (55% response rate). Because the key demographics of both

Table 1. Postsurvey demographics, 2015 and 2016

	2015	2016	*P*
Total number of responses	19	31	NA
Sex (%)			0.597
Male	9 (47.4)	17 (54.8)	
Female	10 (52.6)	13 (41.9)	
No answer	0 (0.0)	1 (3.2)	
Age, y (%)			0.588
25–30	15 (78.9)	24 (77.4)	
31–35	2 (10.5)	5 (16.1)	
36–40	2 (10.5)	1 (3.2)	
No answer	0 (0.0)	1 (3.2)	
PGY (%)			0.124
1	9 (47.4)	5 (16.1)	
2	5 (26.3)	12 (38.7)	
3	5 (26.3)	10 (32.3)	
Other	0 (0.0)	2 (6.5)	
No answer	0 (0.0)	2 (6.5)	
Career plans (%)			0.006
Fellow	5 (26.3)	12 (38.7)	
Hospitalist	4 (21.1)	2 (6.5)	
Ambulatory	3 (15.8)	1 (3.2)	
Academia generalist	2 (10.5)	6 (19.4)	
Traditional (inpatient/outpatient)	4 (21.1)	0 (0.0)	
Academia subspecialist	1 (5.3)	0 (0.0)	
No answer	0 (0.0)	10 (32.2)	
Attended a prior conference (%)			0.365
Yes	6 (31.6)	6 (19.4)	
No	13 (68.4)	23 (74.2)	
No answer	0 (0.0)	2 (6.5)	

PGY, postgraduate year.

postsurvey groups were not statistically distinct, with the exception of career plans, postdata were grouped from 2015 and 2016 into one postgroup (Table 2).

Residents overwhelmingly found the conference to be beneficial to their understanding of the four key contractual matters: noncompete clauses, tail insurance, negotiation tactics, and job search tips, with each topic having a statistically significant difference between the pre- and postconference questionnaires (Table 2, Fig.; $P < 0.001$). For instance, 45% of the residents disagreed or strongly disagreed about having a good understanding about noncompete clauses before the conference. After the conference, 92% of the residents agreed or strongly agreed about their understanding of the four key concepts. Similarly, 57% of the residents indicated they had the two lowest levels of understanding about tail insurance before the conference, whereas 92% of them agreed or strongly agreed about having a good understanding about it after the conference. We found similar results when restricting to only graduating residents and when restricting to nongraduating residents.

Across both years of the course, 68% of the residents responded in the postsurvey that they had overestimated their knowledge about business-of-medicine topics. Similarly, the majority of attendees across both years (88%) agreed or strongly agreed about having an interest in business-of-medicine aspects and indicated they wanted to learn more about key topics, especially financial challenges (76%; Table 3). We found similar results when restricting to graduating and nongraduating residents, except in 2016 when the majority (60%) of graduating residents did not indicate that they wanted to learn more about negotiation tactics.

Discussion

Our results confirm that our curriculum is effective at increasing residents' perceived understanding of restrictive covenants, malpractice insurance, negotiating skills, and job search skills. Our results also demonstrate that residents have a desire to learn more about job searches, negotiating skills, and contractual issues, including restrictive covenants and malpractice insurance.

Table 2. Comparison of pre- and postunderstanding of business-of-medicine topics

"I have a good understanding of"	Presurvey	Postsurvey	*P*
Total number of responses	33	50[a]	
Noncompete clauses (%)			<0.001
Strongly disagree	5 (15.2)	1 (2.0)	
Disagree	10 (30.3)	0 (0.0)	
Neutral	4 (12.1)	2 (4.0)	
Agree	14 (42.4)	26 (52.0)	
Strongly agree	0 (0.0)	20 (40.0)	
No answer	0 (0.0)	1 (2.0)	
Tail insurance (%)			<0.001
Strongly disagree	3 (9.1)	1 (2.0)	
Disagree	16 (48.5)	0 (0.0)	
Neutral	3 (9.1)	3 (6.0)	
Agree	11 (33.3)	23 (46.0)	
Strongly agree	0 (0.0)	23 (46.0)	
Negotiation tactics (%)			<0.001
Strongly disagree	4 (12.1)	1 (2.0)	
Disagree	14 (42.4)	0 (0.0)	
Neutral	8 (24.2)	3 (6.0)	
Agree	7 (21.2)	29 (58.0)	
Strongly agree	0 (0.0)	17 (34.0)	
Job search tips (%)			<0.001
Strongly disagree	2 (6.1)	1 (2.0)	
Disagree	13 (39.4)	1 (2.0)	
Neutral	9 (27.3)	10 (20.0)	
Agree	8 (24.2)	23 (46.0)	
Strongly agree	1 (3.0)	14 (28.0)	
No answer	0 (0.0)	1 (2.0)	

[a]*Contains 2015 (N = 19) and 2016 (N = 31) postdata combined.*

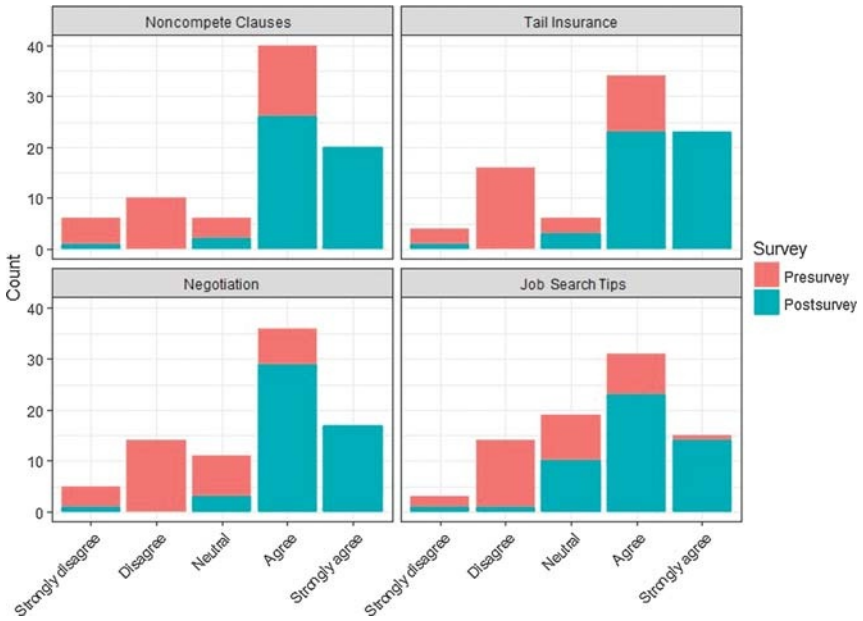

Fig. Distribution of survey responses to pre- and postunderstanding of business-of-medicine topics.

As in the world of patient care, times of transition are notoriously difficult and present unique challenges. Transitioning from the rather protected world of residency training to the "real world" of physician practice can be challenging at multiple levels. Curricula such as this one may effectively facilitate such a transition and help residents avoid costly mistakes associated with these pitfalls.

It is debatable what the role of the residency program should be in providing such guidance to residents, or who is best equipped to educate residents regarding these matters. As evidenced by our literature search, however, it is clear that there is an unmet need in this area of residency training. It is important for residents to understand that such conferences are not led by an attorney. Neither do they constitute legal advice nor are they an alternative to hiring an attorney to negotiate contracts. We need to investigate the most efficient and effective method of delivering such a curriculum, whether it be in the form of a retreat led by experts in the field, the development of a comprehensive nonclinical curriculum,[15] collaboration with local business educators, or any other creative and innovative format. It is imperative that such programs also introduce residents to the basics of physician employment contracts before leaving residency.

We believe the strength of our study is that it describes a unique curriculum that addresses a key gap in residency training. In addition, we believe that the approach described, in which local faculty members embed this curriculum into the teaching time that is already reserved for resident education, makes it straightforward to implement.

Our study has some limitations. One limitation is that the study included internal medicine residents from a single region of our state; however, we believe the results can be generalized to programs across the United States for two reasons. First, the

Table 3. Postsurvey distribution of interest in learning more about business of medicine

	2015	2016	*P*
Total number of responses	19	31	NA
Overestimated knowledge (%)			0.717
Strongly disagree	0 (0.0)	2 (6.5)	
Disagree	4 (21.1)	8 (25.8)	
Neutral	6 (31.6)	11 (35.5)	
Agree	8 (42.1)	9 (29.0)	
Strongly agree	1 (5.3)	1 (3.2)	
Interested in business of medicine (%)			0.074
Strongly disagree	0 (0.0)	0 (0.0)	
Disagree	1 (5.3)	1 (3.2)	
Neutral	1 (5.3)	3 (9.7)	
Agree	6 (31.6)	20 (64.5)	
Strongly agree	11 (57.9)	7 (22.6)	
I want to learn more about			
Job opportunities (%)			0.793
Yes	12 (63.2)	22 (71.0)	
No answer	7 (36.8)	9 (29.0)	
Negotiation tactics (%)			0.666
Yes	13 (68.4)	18 (58.1)	
No answer	6 (31.6)	13 (41.9)	
Financial challenges (%)			0.16
Yes	17 (89.5)	21 (67.7)	
No answer	2 (10.5)	10 (32.3)	
Other (%)			0.803
Yes	1 (5.3)	0 (0.0)	
No answer	18 (94.7)	31 (100.0)	

NA, not applicable.

results were statistically significant across residents from six different residency programs in terms of their size, urban/rural location, and affiliation with an academic institution. We also had residents from both civilian and military programs, although we do not have the specific breakdown of percentages from each type of institution. The similarity of the findings of the 2015 and the 2016 conferences further supports the generalizability of the findings. Although our overall response rate was <50%, we are not aware of any differences between residents who returned the surveys and those who either did not participate in the conference or attended but failed to return the surveys. One further limitation is that the survey tested perceived resident knowledge of the topics of interest and not actual knowledge. Finally, the current data do not allow us to describe how the different career plans of the residents across both years of the conference affect the results.

The hope is that this experience would incentivize other internal medicine training programs to carve out time for teaching residents about the business aspects of medicine. It would be of interest to survey the residents who attended these conferences after they have settled in their new jobs to ask them about whether they continue to perceive the conference as effective.

Conclusions

We have found that residents are interested in learning more about important but often unaddressed life-after-residency issues, including job searches, negotiation skills, and contractual employment agreements. Our study confirmed that using resources already available to teaching programs such as current faculty members, embedding this into the curriculum is fairly straightforward and effective at increasing resident-perceived knowledge of these important topics. This can be accomplished even with the ever-present challenge of limited time.

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