ORIGINAL ARTICLE

Expansion of the Coordinator Role in Orthopaedic Residency Program Management

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Abstract The Accreditation Council of Graduate Medical Education's (ACGME) Data Accreditation System indicates 124 of 152 orthopaedic surgery residency program directors have 5 or fewer years of tenure. The qualifications and responsibilities of the position based on the requirements of orthopaedic surgery residency programs, the institutions that support them, and the ACGME Outcome Project have evolved the role of the program coordinator from clerical to managerial. To fill the void of information on the coordinators' expanding roles and responsibilities, the 2006 Association of Residency Coordinators in Orthopaedic Surgery (ARCOS) Career survey was designed and distributed to 152 program coordinators in the United States. We had a 39.5% response rate for the survey, which indicated a high level of day-to-day managerial oversight of all aspects of the residency program; additional responsibilities for other department or division functions for fellows, rotating medical students, continuing medical education of the faculty; and miscellaneous business functions. Although there has been expansion of the role of the program

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Department of Epidemiology & Biostatistics, Case School of Medicine, Case Western Reserve University, 11100 Euclid Avenue, Cleveland, OH 44106, USA coordinator, challenges exist in job congruence and position reclassification. We believe use of professional groups such as ARCOS and certification of program coordinators should be supported and encouraged.

Introduction

The Accreditation Council of Graduate Medical Education (ACGME) Outcome Project [17], initiated in 1999, heralded an intentional shift in emphasis for granting Graduate Medical Education (GME) accreditation from a program's potential to educate to a program's accomplishments, as revealed by assessment of program outcomes. Expectations for increased emphasis on outcome assessment are reflected in changes to program and institutional requirements that require programs to (1) identify learning objectives related to ACGME's general competencies, (2) use increasingly more dependable and objective methods of assessing residents' attainment of these competency-based objectives, and (3) use outcome data to facilitate continuous improvement of resident and residency program performance. The ACGME Outcome Project has a fourphase 10-year time line for creation of models of excellence for the core competencies of GME. The first two phases conducted from July 2001 through June 2006 focused on the development of an initial response to changes in requirements and sharpening of the focus and definition of the competencies and assessment tools. The third phase of the project that began in July 2006 and runs through June 2011 calls for full integration of the competencies and their assessment with learning and clinical care. The project will initiate its final phase in July 2011 with expansion of the competencies and their assessment to develop models of excellence.



This shift has led to redefinition of the professional responsibilities and requirements of the residency coordinator as an essential member of the management team of an integrated program. This agenda requires strengthening of administrative systems and day-to-day management oversight necessary to maintain accountability and relevancy for orthopaedic surgery residency programs. The program director holds ultimate responsibility for overseeing and organizing the activities for an educational program; however, administrative staff involvement is critical given an annual program director turnover rate of 16% per year. According to ACGME's Data Accreditation System, 124 of 152 or 82% of all orthopaedic surgical residency program directors have 5 or fewer years of tenure.

Although the current literature addresses the evolution of orthopaedic residency education [2, 3, 6, 8, 9], proposals to improve orthopaedic surgery GME [16], evaluative tools [5, 7, 10, 19, 20], and the impact of requirements and regulations from a clinician's perspective [4, 11, 15], there is virtually no discussion regarding management of the administrative burden associated with these expansions and the director-coordinator relationship. Specifically, there is a paucity of literature on the evolution of the Association of Residency Coordinators in Orthopaedic Surgery (ARCOS) and its effort to increase the level of professionalism in the field. Likewise, the literature contains little information on the coordinators' new and expanding roles and responsibilities in response to ACGME requirements for the orthopaedic surgery residency program, institutional requirements, and integration of the ACGME Outcome Project.

The survey designers addressed the following questions: What is the profile of a typical residency coordinator? What do they really do? What perceptions do they hold regarding their expanding roles and responsibilities? Collectively, what can be done to ensure their positional viability and promote professional development?

Materials and Methods

The 2006 ARCOS Career Survey was designed to generate qualitative information necessary to illuminate how the role of the orthopaedic surgery residency coordinator had expanded since the initiation of the third phase of the ACGME Outcome Project in July 2006. Described as the integration phase [17], Phase 3 runs for 5 years with the goal of full integration of the competencies and their assessment with learning and clinical care.

In August 2006, the draft survey instrument was drawn up and presented for review to a focus group of four well-experienced orthopaedic residency coordinators. After being revised to incorporate focus group members' input and finalized, the survey was distributed by US mail to the 152 orthopaedic residency program coordinators in the United States in November 2006. The three-page survey instrument consisted of 27 questions grouped around five topics: (a) the residency coordinator profile; (b) stakeholder interactions; (c) resident coordinator roles and responsibilities pertaining to resident/fellow selection and program accreditation; (d) job satisfaction; and (e) special topics that related to resident/faculty diversity and a detailed description of the responsibilities of the residency coordinator (see Table 1 for specific questions). Included among the 27 questions were 10 short-answer, two numerical rating scale, four multiple-choice, four yes/no, and seven open-ended questions. Once distributed in hard copy, coordinators were reminded and asked to complete survey via two separate e-mails from ARCOS during the investigation period.

Responses were received from 60 of 152 orthopaedic surgery program coordinators, yielding a 39.5% return rate. For virtually all data reported, there was at least an 85% response rate to survey questions; the exceptions were the survey items on diversity, job congruence, and the number of residents per year.

Quantitative data were analyzed with SPSS software (SPSS Inc, Chicago, IL).

Results

Sixty-one percent of the respondents had been in their current positions more than 5 years (Table 1). Thirty-one percent had attained a bachelor's or advanced degrees. On average, there were 22.3 residents currently in their programs, with 62% of respondents identifying the program director as a faculty member other than the chair of their department or division. Annual compensation averaged \$43,308. Ninety-two percent of respondents replied to a question concerning their detailed job responsibilities. Their comments ranged from "too much/too many to list" to multipage attachments. Of those who provided detail, the commonality of the oversight and management of the residency program were consistent themes. Additionally, most respondents provided similar levels of oversight and management for other elements of the orthopaedic department or division, which included the fellows program, medical student clinical rotations, continuing medical education for faculty, human resources, travel arrangements, and miscellaneous business functions of the department.

Ninety-six percent of respondents indicated some level of involvement in ensuring successful resident and fellowship matching. Sixty-nine percent had either total



Table 1. Key 2006 ARCOS survey data

Question	Response			
	< 1 year	1–5 years	5–10 years	> 10 years
How long have you been in your position? $(n = 60)$	5%	33%	35%	26%
	High school	Some college	Bachelor's degree	Advanced degree
What is your current educational level? $(n = 60)$	22%	47%	23%	8%
	Yes	No		
Have you taken any special college or graduate level courses relevant to your current position? $(n=60)$	13%	87%		
	Yes	No	Not sure	
Would your institution support these endeavors? $(n = 56)$	50%	34%	16%	
	Yes	No	Don't know	
Does your institution underwrite the cost of obtaining continuing medical education meetings to enhance your job skill set relevant to your position? (n = 59)	80%	15%	5%	
	Mean	Low	High	
What is your annual salary? $(n = 57)$	\$43,308	\$25,000	\$87,000	
	Mean	Low	High	
What do you envision your ideal salary based upon your current job description and responsibilities? $(n=52)$	\$51,259	\$35,000	\$110,000	
	High	Medium	Low	Nonresponsive
Estimate the congruency of your current job description and your actual job duties. ($n=60$)	23%	22%	18%	37%
	Yes	No		
Do you work on weekends? (n = 59)	75%	25%		
	Mean	Low	High	
Number of weekends per academic calendar? $(n = 56)$	4.31	0	40	
	Yes	No		
Have you been successful in getting your job upgraded? $(n = 52)$	42%	58%		
	Yes	No		
Should your job be upgraded? $(n = 55)$	73%	27%		
	Very satisfied	Satisfied	Not very satisfied	
What is your current level of satisfaction with your job benefits? $(n = 60)$	48%	42%	10%	
	High	Medium	Low/ No	
What is your current level of familiarity with ACGME core competency regulations? $(n = 55)$	29%	42%	29%	
	Responsive	Nonresponsive		
What suggestions do you have for increasing the participation of women and underrepresented minorities in orthopaedic residency programs? $(n = 60)$	43%	57%		
What suggestions do you have for increasing the number of women and underrepresented minorities within the faculty of your department? $(n = 60)$	28%	72%		

ARCOS = Association of Residency Coordinators in Orthopaedic Surgery; ACGME = Accreditation Council of Graduate Medical Education.



responsibility for or coordinated the application process. Ninety-eight percent of respondents indicated they had a role in the completion of the Program Information Form for their program. Seventy-eight percent of respondents indicated complete responsibility or sharing of responsibility with the program director. All of the respondents were involved in the preparation for the ACGME-Residency Review Committee site inspection, with 76% indicating a total or high level of responsibility for overseeing the site visitors' inspection of their residency or fellowship program. The majority of the respondents reported a consistent level of contact with the Chicago office of the ACGME-Residency Review Committee, with 68% indicating contact one to six times a year and 16% indicating multiple contacts monthly.

Response to questions posed regarding professional development and recruitment varied based on topic. Eighty-seven percent of respondents had never taken college or graduate level courses relevant to their current positions, although 50% thought they would be supported by their institution if they chose to enroll for such coursework. Eighty percent reported employer reimbursement for costs associated with participation in continuing medical education meetings to enhance their job skills. When asked to indicate their level of familiarity with ACGME core competency regulations, 29% were highly familiar, 42% were moderately familiar, and 29% had low familiarity or were unfamiliar. Response rates to questions on strategies for increasing the participation of women and underrepresented minorities in orthopaedic fellowships or residency programs and as faculty were low (43% and 28%, respectively).

When comparing their written position description with actual roles and responsibilities, 45% of respondents confirmed a high to medium level of congruence. Although 73% of the respondents believed their positions should be upgraded from clerical to managerial, only 42% had been successful in achieving this objective. Respondents envisioned an ideal annual average salary of \$51,259. Only 10% of the respondents were dissatisfied with employee benefits such as retirement and healthcare plans (Table 1).

Discussion

The ACGME Outcome Project [17], initiated in 1999, heralded an intentional shift in emphasis for granting GME accreditation from a program's potential to educate to a program's accomplishments, as revealed by assessment of program outcomes. The roles of directors and coordinators have been altered considerably by the ACGME's phased introduction of revised outcome metrics. The survey designers wanted to answer such questions as: What is the

profile of a typical residency coordinator? What do they really do? What perceptions do they hold regarding their expanding roles and responsibilities? Collectively, what can be done to ensure their positional viability and promote professional development?

There are limitations of this survey. First, although the 39.5% response rate of this followup instrument represented an increase of 8% over the initial survey of 2004, one should not overgeneralize the results. Second, the 2006 instrument was designed based on the first instrument; however, direct comparisons of data between the two are limited because of differences between the two questionnaires. The second instrument was designed with more open-ended questions to solicit a broader range of responses, but this design also increased the opportunity for response bias, which made it difficult to form specific conclusions. Third, the focus group that reviewed the 2006 draft was chosen because of availability and not randomly selected from ARCOS membership. Focus group members represented the varied types of facilities, and they all were experienced or seasoned program coordinators. Finally, the data from an inactive program were included in the responses and data analysis and affected the lower end of range values in some instances.

A major challenge faced by orthopaedic residency program directors, as presented in ACGME's essentials of accredited residencies in GME, is the classic tension between the provision of patient care and resident education. While maintaining the qualifications necessary to be a program director (specialty expertise, documented educational and administrative abilities, American Board of Orthopaedic Surgery certification, appointments in good standing, and station at the primary teaching site), they are responsible for organization and oversight of educational programming in all participating institutions, preparation of statistical and descriptive narratives of the program, and annual updating of program and resident records through ACGME's Accreditation Data System. In response to the exponential increase [16] in the functions of the program director, the role of the residency program coordinator has evolved with a more critical managerial component.

Although sparse, the recent literature does cover to some extent such topics as evolution of the orthopaedic residency education process and the impact of progressive ACGME regulations on residency programs. We found discussions of the program director's role, responsibilities, and challenges in specialty journals relating to ambulatory medicine, radiology, family medicine, and internal medicine [4, 8, 12, 21]. Of particular interest was a 2004 article [16] in a leading orthopaedic journal that proposed strengthening the program director's position by eliminating the requirement that the chairperson be the program director in orthopaedic surgery residency programs.



Virtually nothing has been published on the expanding administrative burden of ACGME program requirements and the program coordinator's role in surgical subspecialty programs, orthopaedic surgery included. Articles relevant to the coordinator position [13, 14] confirm the survey data with respect to breadth of their actual roles and administrative duties that encompass responsibilities for programs and functions beyond the residency program.

In a 2005 article [13], Ruth H. Nawotniak, a past president of the Training Administration of Graduate Medical Education [18], details the stakeholders that a residency coordinator serves from the local level to the national level, the types of services provided, and the politics of the position. She writes, "The push and pull between the needs of education and the needs of service is often a topic of conversation between the program director and coordinator and the hospital administrators...In each of these areas, the program coordinator needs to understand the issues and recognize the impact on their particular training schedules" [13]. Data provided by respondents supporting the rationale for upgrading the position concur with her discussion of how the program coordinator should be positioned to maximize the success of the residency program. "To be successful, the program director and the faculty must view the position of program coordinator as that of a mid-level manager" [13]. She writes, "When these perceptions come together, the coordinator is given the opportunity to become an active, productive participant, involved in achieving all of the goals and objectives of the training program" [13].

We found no literature or survey instruments focused on program coordinators, their roles and responsibilities in response to ACGME standard requirements for the orthopaedic surgery residency program, institutional requirements, or the ACGME Outcome Project. This lack of attention is unfortunate because expansion of the skills, resourcefulness, responsiveness, and professionalism of the orthopaedic residency coordinator is essential to attainment of accreditation goals and to full compliance with the ACGME Outcome Project.

Based on the challenges identified by respondents in the 2006 Career Survey and its mission, ARCOS appears uniquely positioned to provide professional development support to its membership and provide a platform for networking and information sharing nationwide. Similar actions have taken place in internal medicine by the Association of Program Directors in Internal Medicine who have endorsed the "program administrator position as one of professional stature" and prepared a standard job description with suggested qualifications and duties [1].

The orthopaedic surgery residency coordinator role has expanded to keep pace with the functional requirements of the program director, the medical education requirements of orthopaedic departments or divisions, and the impact of the turnover rate of the program director position. Adding to the educational and training requirements of an orthopaedic surgery residency education inherently affects clinical orthopaedics and the training of physicians, whether this is a structural linkage with academic medicine or orthopaedic surgery staffing. To maintain accreditation, long-term program viability, and institutional memory, all stakeholders have a role to play in encouraging the necessary increases in program coordinator professionalism and perceptions regarding their expanded role in the management of the orthopaedic surgery residency program.

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