

BRIEF REPORTS

Work Activities of Clinician-Educators

John V. L. Sheffield, MD, Joyce E. Wipf, MD, Dedra Buchwald, MD

In order to make meaningful scholarly contributions, clinician-educators need protected time. Forty-one clinician-educators at the University of Washington recorded their work activities in 30-minute intervals for 2 weeks. The average work week was 58.7 hours (SD = 13.8). The time devoted to scholarship, 7.6 hours (13%), was significantly less than the 20% designated for scholarship in the clinician-educator job description ($p < .001$); 42% of scholarly work occurred outside the regular work week. At a time when many schools rely on clinician-educators to sustain their clinical and teaching missions, schools should ensure that faculty have adequate time and resources to meet scholarly expectations for promotion.

KEY WORDS: faculty; clinician-educator; productivity; work activities.

J GEN INTERN MED 1998;13:406-409.

Separate promotion tracks for clinician-educator faculty were established by medical schools to sustain their clinical and teaching missions without expanding the ranks of tenured faculty.¹⁻⁵ Recently, increased attention has focused on methods used by promotion committees to evaluate clinician-educators.⁶⁻⁹ Promotion within clinician-educator tracks generally requires demonstrated excellence in patient care and teaching, in addition to scholarly productivity.^{1-3,6-8} In order to make meaningful scholarly contributions, clinician-educators need protected time,¹⁰ but clinical work, teaching, and administration often limit time for scholarship and force it to off-hours and weekends.¹¹

At the University of Washington (UW), clinician-educator faculty are appointed to a separate promotion track; the first appointments to the track were made in 1990. Promotion within this track depends on excellence in teaching, clinical work, and scholarship. The definition of scholarship used by the UW Appointment and Promotions Committee broadly includes the production of medi-

cal education materials (e.g., syllabus material, textbook chapters, videotapes), clinical research (e.g., case reports, review articles, participation in clinical trials), and managerial development in medicine or medical education. According to school policy, clinician-educators are expected to devote 80% of their time to patient care, teaching, and administration and to reserve the remaining 20% for scholarly work. The prevailing sense at UW, however, is that clinician-educators spend less than 20% of their time performing scholarly work, and many clinician-educators are concerned about their ability to meet expectations for promotion.

The goal of this study was to determine how UW clinician-educators spend their time. In particular, we wondered how much time is devoted to scholarship and when scholarly work occurs. We also analyzed demographic information to determine whether any characteristic identified faculty with more scholarly time. To our knowledge, this is the first study in more than 15 years to document the actual work activities of clinician-educators.

METHODS

The study was approved by the UW Human Subjects Committee and conducted in the Department of Medicine in the fall of 1995. All clinician-educators received a study description and were asked to complete a survey of basic demographic and academic information. Participants who completed the survey were asked to record prospectively their work activities in 30-minute intervals for 2 weeks (October 23 through November 5, 1995) on specifically designed time cards. Faculty who were out of town for 2 or more days of either study week were asked to record activities during a third week (November 6 through 12, 1995). All work time was classified in one of five categories: patient care or teaching, administration, scholarly work, continuing medical education (CME), and miscellaneous. Definitions were summarized on the back of the time card; we used the UW Appointments and Promotions Committee's definition of scholarship (as described above). Regular work hours were defined as Monday through Friday, between 8 AM and 6 PM.

Total scholarly output was compared among faculty subgroups using rank-sum tests. Differences in work time proportions were analyzed using χ^2 tests. Multiple regression analysis was performed to determine whether certain characteristics (time on faculty, rank, total number of scholarly products, fellowship training, specialty

Received from the Division of General Internal Medicine, Department of Medicine, University of Washington, Seattle.

Abstract presented at the Society of General Internal Medicine's 18th annual meeting, Washington, D.C., May 3, 1996.

Address correspondence and reprint requests to Dr. Sheffield: Harborview Medical Center, Dept. of Medicine, Box 359782, 325 Ninth Ave., Seattle, WA 98104.

training, and external source of funding) were associated with greater amounts of scholarly time.

RESULTS

Of the 52 full-time clinician-educator faculty, 41 (79%) completed both the survey and time study. The participants' demographic and academic characteristics including scholarly productivity are summarized in Table 1. Distribution of the academic ranks of nonparticipants was similar to that of participants; the lone clinician educator at the rank of full professor did not participate. Clinician-educators had produced a broad array of scholarly work

including original research, review articles, book chapters, case reports, medical school and CME course materials, and instructional videotapes. Scholarly output increased significantly with academic rank, fellowship training, and specialty division ($p < .01$ for all three comparisons).

Results of the time study are shown in Table 2. The work week averaged 58.7 hours (range, 46.5–87 hours). A mean of 38.1 hours (65% of the work week) was spent in patient care and teaching and 8.9 hours (15%) in administrative tasks. The mean time available for scholarly work, 7.6 hours (13%; range, 0%–45%), was 7% less than the 20% designated in the clinician-educator job descrip-

Table 1. Demographic and Academic Characteristics of Clinician-Educators

Characteristics	Variables		
Demographics			
Mean age, years (SD)	38.5 (4.3)		
Female, n (%)	16 (39)		
Fellowship training, n (%)	25 (61)		
Mean time on UW faculty, years (SD)	4.4 (3.4)		
Mean time at current rank, years (SD)	2.5 (1.7)		
Academic rank of participants, n (%)			
Acting instructor	8 (19)		
Acting assistant professor	4 (10)		
Assistant professor	22 (54)		
Associate professor	7 (17)		
Division, n (%)			
General internal medicine	20 (49)		
Specialty	21 (51)		
Participants who produced any of the following types of scholarship, n (%)			
Original research or review articles*	33 (81)		
Book chapters	35 (85)		
Abstracts	27 (66)		
Course syllabi	28 (68)		
Other†	21 (51)		
	Mean	Median	Range
Scholarly productivity			
Original research or review articles*	8.6	3.0	0–55
Book chapters	5.9	4.0	0–28
Abstracts	7.7	3.0	0–52
Other†	1.1	0.0	0–9
Total scholarly products by rank, fellowship training, and division‡			
Acting instructor	4.3	3.0	0–17
Acting assistant professor	10.7	9.0	6–19
Assistant professor	23.4	13.0	5–78
Associate professor	52.0	35.0	25–130
Fellowship completed	30.4	25.0	5–130
No fellowship	12.2	6.0	0–51
Specialty division	35.1	28.0	5–130
General internal medicine division	12.2	6.0	0–51

* Published in peer-reviewed journals.

† Includes instructional video tapes, and case reports.

‡ Total represents sum of original articles/review articles, book chapters, abstracts, and other scholarly works; differences in total scholarly products by rank, fellowship status, and division are all significant ($p < .01$).

Table 2. Work Activities of Clinician-Educators by Academic Rank*

Work Activities	Acting Faculty† (n = 12)	Assistant Professor (n = 22)	Associate Professor (n = 7)	All Ranks (n = 41)
Total hours (SD)	56.3 (13.6)	58.0 (14.6)	65.2 (11.0)	58.7 (13.8)
Patient care or teaching, hours (%)	38.0 (67)	37.7 (65)	39.5 (61)	38.1 (65)
Administration, hours (%)	5.7 (10)	9.3 (16)	13.3 (20)	8.9 (15)
Scholarly work, hours (%)	7.2 (13)	7.8 (13)	7.9 (12)	7.6 (13)
CME, hours (%)	3.6 (6)	1.5 (3)	3.1 (5)	2.4 (4)
Miscellaneous, hours (%)	1.9 (3)	1.7 (3)	1.4 (2)	1.7 (3)

*Time spent in hours in each activity in a 7-day week.

†Includes faculty at acting instructor and acting assistant professor rank.

tion (95% confidence interval [CI] of the difference from 20% was 4%, 11%; $p < .001$). Of the total 7.6 hours in the week that were devoted to scholarship, 4.4 hours (58%) occurred during weekdays between 8 AM and 6 PM and 3.2 hours (42%) occurred outside the regular work week. The proportion of time spent by clinician-educators in various activities was consistent among all ranks and divisions. There were no significant predictors of time for scholarship among the characteristics studied. Specifically, scholarly work time did not correlate with total number of scholarly products or fellowship training.

DISCUSSION

In a 1979 study, general internal medicine (GIM) faculty spent 9% of their work time conducting research.¹² According to a 1993 survey, only 25% of GIM division heads thought their clinician-educators had sufficient time to make a “meaningful scholarly contribution.”⁷ More recent surveys indicate that current job offerings in academic GIM emphasize patient care over research and feature less protected time for research than GIM fellowship graduates expect.^{13,14} In particular, faculty practicing in competitive health care markets find that clinical responsibilities limit time for research.¹⁵

For UW clinician-educators, the average work week was 58.7 hours. Actual scholarly work time was significantly less than the amount considered ideal by the medical school. In a 58.7 hour week, 11.7 hours should have been available for scholarship, but only 7.6 hours were actually spent on this activity. Moreover, 3.2 hours (42%) of scholarly work time occurred outside the regular work week. Thus, our results confirm the general impression that clinician-educators have little protected time for scholarship.^{7,12-14}

All clinician-educators had similar amounts of scholarly time, but those with fellowship and specialty training were more productive. Involvement in ongoing projects and the development of research and writing skills are only two of the attributes of fellowship training that may result in greater efficiency. Even if one uses a broad definition of scholarship,¹⁶ faculty without fellowship training

most likely will require more time to design and implement scholarly projects. Thus, our findings have particular relevance for GIM clinician-educators, only 18% of whom at our institution had prior fellowship training. Although a recent study found that promotion committee chairs consider patient care and teaching skills significantly more important than research and scholarship when evaluating clinician-educators,⁶ scholarship remains an important criterion. A large proportion of GIM faculty may find the discrepancy between ideal and actual scholarly work time a significant obstacle to meeting scholarly requirements.

Our study has several limitations. It was conducted at a single institution, had a relatively small pool of available participants, and did not achieve 100% participation. Individuals may have defined work activities differently from what we delineated on the time cards, and we cannot confirm that time cards were completed prospectively as requested. Also, it is likely that protected time is not evenly distributed throughout the year and that the weeks used were atypical for some individuals.

Nevertheless, we believe that a 2-week study period including two different months was sufficient to describe accurately the spectrum of clinician-educator work activities without limiting participation, and that these concerns are unlikely to have affected the major finding that time for scholarship is limited. Currently, protected time may be even more scarce with pressure to increase clinical productivity and implement Health Care Financing Administration guidelines for documentation. Institutions should ensure that their clinician-educators, especially junior faculty, have adequate time, resources, and guidance to achieve scholarly expectations for promotion.

The authors are indebted to the participating clinician-educators for their time and effort.

REFERENCES

1. Parris M, Stemmler EJ. Development of clinician-educator faculty track at the University of Pennsylvania. *J Med Educ.* 1984;59:465-70.

2. Kelley WN, Stross JK. Faculty tracks and academic success. *Ann Intern Med.* 1992;116:654-9.
3. Greer DS. Faculty rewards for the generalist clinician-teacher. *J Gen Intern Med.* 1990;5(suppl):S53-8.
4. Jones RF. Clinician-educator faculty tracks in US medical schools. *J Med Educ.* 1987;62:444-7.
5. Bickel J. The changing face of promotion and tenure at US medical schools. *Acad Med.* 1991;66:249-56.
6. Beasley BW, Wright SM, Confrancesco J, Babbott SF, Thomas PA, Bass EB. Promotion criteria for clinician-educators in the United States and Canada: a survey of promotion committee chairpersons. *JAMA.* 1997;278:723-8.
7. Jacobs MB. Faculty status for clinician-educators: guidelines for evaluation and promotion. *Acad Med.* 1993;68:126-8.
8. Lubitz RM. Guidelines for promotion of clinician-educators. Society of General Internal Medicine Education Committee. *J Gen Intern Med.* 1997;12(suppl 2):S71-7.
9. Jones RF, Fromm JD. Faculty and administration views of problems in faculty evaluation. *Acad Med.* 1994;69:476-83.
10. Vardan S, Smulyan H, Mookherjee S, Mehrotra KG. Factors encouraging research productivity in a division of general internal medicine. *Acad Med.* 1990;65:772-4.
11. Kroenke K. Conducting research as a busy clinician-teacher or trainee: starting blocks, hurdles, and finish lines. *J Gen Intern Med.* 1996;11:360-5.
12. Friedman RH, Pozen JT, Rosencrans AL, Eisenberg JM, Gertman PM. General internal medicine units in academic medical centers: their emergence and functions. *Ann Intern Med.* 1982;96:233-8.
13. Zakowski LJ, Cooney TG, Noel GL. Academic general internists: job descriptions for clinician/researchers and clinician/educators. *J Gen Intern Med.* 1996;11(suppl):112. Abstract.
14. Zakowski LJ, Cooney TG, Noel GL. Do graduates of general internal medicine fellowships get the jobs they want? *J Gen Intern Med.* 1996;11(suppl):112. Abstract.
15. Campbell EG, Weissman JS, Blumenthal D. Relationship between market competition and the activities and attitudes of medical school faculty. *JAMA.* 1997;278:222-6.
16. Boyer EL. *Scholarship Reconsidered: Priorities of the Professoriate.* The Carnegie Foundation for the Advancement of Teaching. Princeton, NJ: Princeton University Press; 1990.



ANNOUNCEMENT

JGIM Website — Visit us online today!

Please visit the JGIM World-Wide Website:

<http://www.blacksci.co.uk/products/journals/xjgim.htm>