

Academic Support Services in U.S. and Canadian Medical Schools

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Abstract: Background: Academic support services play a critical but largely undocumented role in helping medical students meet the challenges of the curriculum.

Purpose: To determine the prevalence of academic support programs in medical schools, and to find out how these are conceptualized and implemented.

Methods: Questionnaires were sent to medical schools in the US and Canada. Questions addressed specific services, providers, and funding.

Results: The survey was returned by 86 of the 135 (67.7%) schools. Almost all (95.3%) provide academic support in the first two years, and a large majority in third (82.6%) and fourth (79%) year. Great variability exists in the infrastructure and funding of the programs, and in the training of the providers.

Conclusions: Academic support is common, but has broad interpretation; services are varied. Programs are conceptualized differently, some to provide specific assistance to pass courses, and others for skill development, to enhance self-directed, life-long learning.

Keywords: academic support, medical students, student counseling, medical education

Academic support services within medical schools play a critical but largely undocumented role in helping medical students meet the challenges of the undergraduate medical curriculum and in helping institutions accomplish their educational mission. Approximately sixty-two percent of the students surveyed in the 2003 Association of American Medical College's (AAMC) Graduation Questionnaire indicated they were satisfied or very satisfied with the "academic counseling" available to them, and 56% were satisfied or very satisfied with the "tutorial help." The specific role and impact of academic support services on academic achievement and on quality of life remains unclear. Medical schools have an immediate interest in fostering student academic success to facilitate timely progression through courses, clerkships and licensure examinations, to increase graduation rates, and to educate medical students as future physicians to become effective self-directed learners. It is important that we begin to better understand the role academic support services play in promoting effective learning.

Some aspects related to academic support have been discussed in the literature. Several studies addressed the importance of academic support in matriculating and retaining underrepresented minority students.^{1,2,3} In 1989, a survey of student-directed services at AAMC member schools found that 75.8% of those who responded offered peer tutoring programs.⁴ A survey

conducted in 1997 asked about the prevalence of services provided for students with learning disabilities. Formal support programs for learning disabled students were reported in 71 schools (67.6%) and tutoring was listed as an accommodation in 98 (93.3%).⁵ In 1999, a specific failure at the University of Michigan was described.⁶ However, we found that national data about the role of academic support services in medical education are lacking.

As direct providers of academic support to medical students, and as experienced administrators of these programs, we wondered how academic support services were conceptualized at other medical schools. We anticipated that the focus and structure of academic support services at different schools would vary according to institutional needs, priorities, and available resources. Our goal was to determine the prevalence of academic support programs in medical schools, and to find out how these programs are conceptualized and implemented.

Methods

In October, 2000, an author designed survey was mailed to 39 medical schools in the Northeast Region of the Association of American Medical Colleges (AAMC). The survey asked questions about what aca-

demographic support services were provided, the qualifications of those who provide services, and about funding. Several types of questions were asked: those with short checklists, e.g., "Check all that apply," questions that required a "yes" or "no" response, questions which required open-ended responses, e.g., "What is the total yearly cost for your tutoring program?", and those that asked for descriptive answers, e.g., "Please describe...", "Please explain...", "What training do you offer?", etc. In February, 2001, we wished to expand the sample and decided to revise the survey, deleting items that did not seem to offer interpretable responses, and adding four additional questions regarding specific services for students diagnosed with learning disabilities, degree status and training of providers, student access, and confidentiality. (Both versions of the survey can be viewed in the Appendix of this article.) The revised survey was sent to an additional 96 AAMC member schools in the United States and Canada, for a total of 135 surveys distributed. All surveys were sent to the attention of the Dean of Student Affairs at each medical school listed in the May, 2000 AAMC *Group on Student Affairs (GSA) Directory of School Representatives United States and Canada*. We maximized the response rate by first contacting school representatives by email and re-sending the survey to those who had not responded. Follow-up phone calls were then made to non-respondents after the second mailing.

Results

Eighty-six surveys (63.7%) were returned. The surveys were completed by the Dean of Student Affairs at each school or a designee. Responses were received from 31 of 39 medical schools in the Northeast region (79.5%); 55 of 96 responses (57.3%) were received from schools outside the region. Results are summarized in Table 1. (Since the revised February, 2001 survey was not sent to the original Northeast region schools, the answers to the additional questions are unfortunately missing from the 31 respondents as indicated.)

Prevalence: Academic support is a widespread and sustained intervention for medical students in all four years, not just a means of providing short-term transition services to beginning medical students. Almost all (95.3%) medical schools report providing academic support to students in both the first and second years. A large majority of schools provide academic support to students in the third (82.6%) and fourth years (79.0%) as well.

Specific Services and Providers: The term *academic support* is interpreted broadly, and the types and

range of services provided are varied. Seventy-nine percent of the respondents reported that academic support was offered by academic departments, and consisted primarily of content review sessions and 1:1 faculty/student tutoring. Special preparation programs for the United States Medical Licensure Examination (USMLE) were offered in 52.3% of the schools. Services for students with learning disabilities (LD) were reported by 56.4% of the respondents.

Although it is difficult to identify the importance placed on the provision of academic support services within an institution, the presence of a recognized and designated office, with secretarial/administrative staff, is likely significant. Although 68.6% of the schools offered academic support through the Office of Student Affairs, 45.3% reported that there was a specific designated office that provided academic support services to students. Many names were reported for these offices, as shown in Table 2. Secretarial/administrative staff specifically designated to manage academic support services was employed in 45.3% of the schools.

Another likely indicator of the emphasis placed on academic support is the presence of trained, knowledgeable providers. Of the 55 schools responding, 67.3% employ designated individuals to provide academic support. Of those providers, 36.4% have degrees in education at the masters level, while 14.5% hold doctorates in education. Ph.D. degrees were held by 43.6%, and 25.5% have M.D. degrees. However, only 21.8% of all the providers are trained in adult learning principles, and only 32.7% were described as having previous experience with college students. Of those schools that offered tutoring services, 74.4% employed medical students and 59.3% employed graduate students to provide the service. Although some respondents indicated that training was provided for tutors, this was not a widespread occurrence.

How available are the academic support services to students and how comfortable do students feel about reaching out for support? Forty-four of 55 (80.0%) schools responding indicated that students are able to access academic support services directly, without a referral. Confidentiality for students seeking academic support was maintained in 30 (54.5%) of the 55 schools responding to this question.

Funding: The costs of academic support programs were reported from no [separate line item] cost, to more than \$100,000 per year. Funding came from three sources: the Dean's Office, individual academic departments, and from grant support. Although some schools used volunteer tutors, one school reported paying tutors \$80 per hour; most offered remuneration of

Table 1. Academic Support: Table of Results	Total (N=86)		Northeast Re- gion (N=31)		All Other Schools (N=55)	
	No.	%	No.	%	No.	%
Academic support available:						
Year 1	82	95.3	30	96.8	52	94.5
Year 2	82	95.3	30	96.8	52	94.5
Year 3	71	82.6	26	83.9	45	76.4
Year 4	68	79.0	26	83.9	42	76.4
<u>Specific Services & Providers</u>						
Academic support offered through:						
Academic departments	68	79.0	3	74.2	45	81.8
Office of Student Affairs	59	68.6	19	61.3	40	72.7
Specific, designated office	39	45.3	19	61.3	20	36.4
Other	22	25.6	8	25.8	14	25.5
USMLE preparation program offered	45	52.3	20	64.5	25	45.5
Specific services for LD students						
Yes			*		31	56.4
No			*		20	36.4
Employ administrative/secretarial staff specific to academic support	39	45.3	13	46.9	26	47.3
Use designated faculty/staff to provide academic support			*		37	67.3
Faculty degree/training for those providing academic support:						
M. Ed.			*		20	36.4
Ed. D.			*		8	14.5
Ph. D.			*		24	43.6
M.D.			*		14	25.5
Trained in adult learning			*		12	21.8
Experience with college students			*		18	32.7
Other			*		8	14.5
Use medical student tutors	64	74.4	24	77.4	40	72.7
Use graduate student tutors	51	59.3	16	51.6	35	63.6
Students can access services directly						
without referral			*		44	80.0
Confidentiality maintained			*		30	54.5
<u>Funding</u>						
Overall cost of programs	Range = \$0 - > \$100,000					
Funding sources	Varied: Dean, Grants, Departments					
Tutor salary	Range = \$0 - \$80/hr; most \$10 - \$15/hr					
Limit # of tutoring sessions	21	24.4	8	25.8	13	23.6

*Data not requested

between \$10 and \$15 per hour for tutoring. As a way to reduce costs, some schools require eligibility for tutoring, such as, low exam grades or a recommendation by a course director; others allow students to request a tutor on an as-needed basis. Only 24.4% of those responding limited the number of tutoring sessions available to students.

Discussion

In sum, most medical schools profess to provide academic support to students. It is a common and seemingly acceptable intervention. However, academic support is defined in many different ways, and a range of services is offered. There is great variability in the ad-

Table 2
Offices Which Provide Academic Support

Office of Student Academic Support Services
Office of Academic Enrichment & Assessment in Office of Student Affairs
Office of Academic Development
Office of Minority Affairs
Office of Professional Development
Office of Academic Advancement
Office of Medical Student Academic Affairs
Office of Academic Support
Office of Undergraduate Medical Education & Student Affairs
Office of Medical Education
Office of Student Affairs
Student Sources Network
Counseling Service; Counseling Center
Advising Resources Service of the Office of the Dean for Student Affairs
Coordination Committee of Undergraduate Program
Cognitive Skills Program
Dean's Office

ministration of the offices that provide academic support services, the expertise of those providing services, and the extent of institutional support.

There is difficulty in gauging the degree to which academic support services stress long term skill development (life-long self-directed learning) versus content boosting (tutoring), since both are often discussed in an intertwined manner. It might be assumed that academic support provided within an academic department would focus mainly on immediate academic success rather than on more generalized skills. Students may reach out for remedial academic support when academic difficulty is feared or realized. But the variability of the academic support services documented in the results of this survey suggest that some programs are perceived less as remedial and more as programs leading to professional enhancement. All medical schools must continue to retain and graduate students, and also to meet the current LCME Accreditation Standard that states: "The faculty should foster in students the ability to learn through self-directed, independent study throughout their professional lives." It is increasingly important, therefore, that each school examine whether its faculty who provide academic support are prepared to meet this directive.

We believe that comprehensive programs that provide both assistance with specific content (tutoring) and training in specific learning strategies (for life-long self-directed learning) should be promoted. Perhaps as more physicians receive formal training as educators, and more educators are trained in the area of medical education, this will become more the reality. Further study is needed to determine how different paradigms

of providing academic support influence student success. Comprehensive academic support programs are likely to continue to play an important role in student retention and in promoting lifelong learning. It behooves us to learn more about these prevalent but loosely defined programs.

Acknowledgements

The authors would like to acknowledge Robert Lebeau, Ed.D. for his critical review of this manuscript.

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APPENDIX

October, 2000 Survey:

Dear Colleague,

We are interested in information about academic support services available to medical students in the Northeast region. This information will be collated and reported at the spring meeting of the AAMC Northeast Group on Student Affairs. If you would like a copy of the information, please include your address on the survey. **Your participation is essential and appreciated.**

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PLEASE RETURN THIS SURVEY IN THE ATTACHED ENVELOPE BY NOVEMBER 15, 2000.

1. Academic support is provided to medical students in which years? (Check all that apply.)
- year 1
 - year 2
 - year 3
 - year 4
 - none provided
2. Is academic support offered by faculty through the departments in connection with individual courses?
- yes no
- If yes, how is this service provided? (Check all that apply.)
- 1:1 tutoring
 - Small group reviews
 - Other (Please describe.) _____
3. Is academic support offered via a centralized office, e.g., Office of Education, Deans Office, etc.?
- Yes No

If yes:
What is the name of the office? _____
What services are provided?

Tutoring by faculty in specific subjects yes no
If yes, which subjects _____

Peer tutoring yes no
If yes, for which subjects? _____

General academic support (for time management, test taking, etc.) yes no
Other (Please describe.) _____

4. How many professional staff are directly involved in academic support? _____
Do these individuals have faculty appointments? Yes no

5. Is there administrative/secretarial staff designated specifically for your academic support programs?
yes no
If yes, how many people and for what percentage of time? _____

**IF YOU HAVE A TUTORING PROGRAM, PLEASE ANSWER QUESTIONS 6 TO 13.
IF YOU DO NOT HAVE A TUTORING PROGRAM, PLEASE SKIP TO QUESTION 14.**

6. How do you identify medical students who are eligible for tutoring?

7. Do medical students provide the tutoring? yes no

8. Do graduate students provide the tutoring? yes no

9. How are your tutors selected? _____

10. What, if any, training/supervision is provided for the tutors? _____

11. How much are the tutors paid? _____

12. Do you limit the number of sessions available to a student? Yes No
If yes, how do you do this? _____

If yes, how much service is allowed per student? (# of hours, length of time, etc.) _____

13. What is the total yearly cost for your tutoring program?_____

14. What is the annual cost for all your academic support programs available to medical students?

15. From where are the financial resources allocated (departmental funds? deans funds? grants? personal payment? etc.) _____

16. In what locations are academic support services provided? (Check all that apply.)

___ Offices designated for this purpose

___ Classrooms

___ Offsite

___ Other (Please describe.)_____

17. Please comment on any other aspects of your academic support program which you think would be of interest (e.g., Do you provide services only to medical students or to others in the university community as well? Are there any services designated specifically for students with learning disabilities? Is consultation on teaching/learning issues provided to faculty?) Continue on back of page if necessary.

18. Is passage of the USMLE Step 1 required for graduation at your school? yes no

19. Is passage of the USMLE Step 2 required for graduation at your school? yes no

20. Is a Board preparation program offered at your medical school? yes no

If yes, do you have a program for _____ all students

_____ only for students who failed and are planning to retake exam

THANK YOU FOR YOUR PARTICIPATION.

Name of Person filling out this survey_____

Title_____

Medical School _____
Address if you wish to receive the results: (Please
print.) _____

February, 2001 Survey:

Dear Colleague,

We are interested in information about academic support services available to medical students. We recently surveyed schools in the Northeast and are interested in expanding this to all the AAMC member schools. The information we collect will be collated and reported. If you have any questions about this study please contact us. **Your participation is essential and appreciated.**

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PLEASE RETURN THIS SURVEY IN THE ATTACHED ENVELOPE BY FEB. 23, 2001.

1. Academic support is provided to medical students in which years? (Check all that apply.)

year 1

year 2

year 3

year 4

none provided

2. Is academic support offered by faculty through academic departments in connection with individual courses? Yes No

Please describe: _____

3. Is academic support offered

through your Office of Student Affairs?

via a centralized office, e.g., Office of Education, Academic Development, etc.?

other (Please describe.) _____

4. Is academic support provided by a person(s) specifically trained and designated to provide academic support? Yes No

If so, what is the person(s) degree/background? (Check all that apply.)

M.Ed.

- Ed.D.
- Ph.D.
- M.D.
- Trained in adult learning
- Experience with college students
- Other (please describe.) _____

5. Are students able to access academic support services directly, without a referral from the Student Affairs Office? Yes No

Please explain: _____

6. Confidentiality: Is information about students who seek academic support routinely made available to others (e.g., Student Affairs deans, promotions committees, etc.?) Yes No

7. How many professional staff are directly involved in academic support? _____
For what percentage of time? _____

8. Is there administrative/secretarial staff designated specifically for your academic support programs? Yes No

**IF YOU HAVE A TUTORING PROGRAM, PLEASE ANSWER QUESTIONS 9 TO 16.
IF YOU DO NOT HAVE A TUTORING PROGRAM, PLEASE SKIP TO QUESTION 17.**

9. How do you identify medical students who are eligible for tutoring?

10. Do medical students provide the tutoring? Yes No

11. Do graduate students provide the tutoring? Yes No

12. How are tutors selected?

13. What, if any, training is provided for the tutors? _____

14. How much are the tutors paid? _____

15. Do you limit the number of sessions available to a student? Yes No

If yes, how do you do this? _____

If yes, how much service is allowed per student? (# of hours, length of time, etc.) _____

16. What is the total yearly cost for your tutoring program? _____

17. What is the annual cost for all your academic support programs available to medical students?

18. Does your program of academic support have its own budget and funding? (Please describe.) _____

19. Are there any services designated specifically for students with learning disabilities? Yes No
Please describe _____

20. Is consultation on teaching/learning issues provided to faculty? Yes No
Please describe _____

21. Please comment on any other aspects of your academic support program which you think would be of interest. Continue on back page if necessary.

22. Is a Board preparation program offered at your medical school? Yes No

If yes, do you have a program for

all students

only for students who failed and are planning to retake exam

other

(Please describe.) _____

Please provide a brief description of your Board preparation program.

THANK YOU FOR YOUR PARTICIPATION.

Name of Person filling out this survey
(Please print.)_____

Title_____

Medical School_____