

Reflection on Academic Protected Time: An Opportunity to Integrate Educational Programs

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Abstract

Objectives: We sought to identify the structure of academic protected time curriculum and to determine interest in a knowledge-sharing, web-based initiative.

Methods: We undertook a survey of the 16 obstetrics and gynaecology program directors in Canada.

Results: The response rate was 88%. Seventy-one percent of the responding program directors are responsible for developing protected time curriculum. Seventy-eight percent use a template based on a two-year rotation of topics, 64% use lectures as the main educational format, and 50% have incorporated professional competencies into academic time. The largest barrier to curriculum development is time constraints. Seventy-eight percent of program directors are interested in a network for sharing ideas.

Conclusions: In most programs, the curriculum for academic protected time is developed by program directors, who are dependent upon lectures and limited by time constraints. Programs therefore have difficulty integrating professional competencies into the academic curriculum. This educational environment could prove fertile ground for establishing a collaborative curriculum initiative.

Résumé

Objectifs : Nous avons tenté d'identifier la structure du curriculum du temps réservé à l'apprentissage universitaire et de déterminer l'intérêt envers une initiative de partage des connaissances sur le Web.

Méthodes : Nous avons mené un sondage auprès des 16 directeurs de programme d'obstétrique-gynécologie au Canada.

Résultats : Le taux de réponse a été de 88 %. Soixante et onze pour cent des répondants ont affirmé être responsables de l'élaboration du curriculum du temps réservé à l'apprentissage universitaire. Soixante-dix-huit pour cent des répondants ont affirmé qu'ils utilisaient un modèle fondé sur une rotation des sujets pendant une période de deux ans; 64 %, qu'ils utilisaient des cours magistraux à titre de principal format pédagogique; et 50 %, qu'ils avaient intégré les compétences professionnelles au sein du temps réservé à l'apprentissage universitaire. Les contraintes de temps constituaient le plus important obstacle à l'élaboration du curriculum. Soixante-dix-huit pour cent des répondants ont affirmé être intéressés à l'idée d'un réseau de partage des idées.

Conclusions : Dans la plupart des programmes, le curriculum du temps réservé à l'apprentissage universitaire est élaboré par les directeurs de programme, lesquels font appel à des cours magistraux et sont limités par des contraintes de temps. Ainsi, les programmes ont de la difficulté à intégrer les compétences professionnelles au curriculum universitaire. Ce milieu pédagogique pourrait s'avérer propice à la mise sur pied d'une initiative de collaboration en ce qui a trait au curriculum.

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INTRODUCTION

Academic protected time for postgraduate trainees in obstetrics and gynaecology (also referred to as resident time, protected teaching, and academic half-day) allows residents to be excused from their clinical duties to participate in a more structured component of the academic curriculum. In most programs, there is a set amount of academic protected time each week. The time-consuming task of developing curricula for academic protected time usually falls to the program director, who has many other responsibilities. Furthermore, residency programs in Canada now have the challenge of incorporating into teaching and evaluation the Royal College of Physicians and Surgeons of Canada (Royal College) CanMEDS roles of medical expert, communicator, collaborator, health advocate, manager, scholar, and professional,¹ which are now expected to be fundamental components of obstetrics and gynaecology educational programs.

Canada has, arguably, a standardized educational environment: 16 residency training programs in obstetrics and gynaecology, all university-based and all having the same Royal College educational objectives. As a result, there may be an opportunity to combine and share resources among programs to maximize the quality and consistency of educational protected time. A collaborative approach to program development and competency teaching has been used in other specialties, such as allergy/immunology, but has not yet been described in the obstetrics and gynaecology educational literature.² The objective of this study was to

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Table 1. Numbers of faculty and residents and hours of protected time in obstetrics and gynaecology residency training programs

	Mean	Median	SD	Minimum	Maximum
Number of faculty	46	37	32	10	113
Number of residents	24	23	7	11	42
Weekly hours of academic protected time	3.5	3.2	0.6	2.5	4.5

SD: standard deviation.

Table 2. Percentage of time dedicated to each format in Canadian obstetrics and gynaecology resident protected time

	Mean	Median	SD	Minimum	Maximum
Lecture format (%)	64	66	14	40	90
Small group format (%)	28	30	15	0	50
Web/online format (%)	1	0	4	0	10
Self-learning format (%)	8	0	11	0	25
Other learning format (%)	6	0	9	0	25
Resident as primary presenter (%)	37	23	29	0	90
Staff as primary presenter (%)	62	78	28	10	100
Staff attendance (%)	86	90	16	50	100

SD: standard deviation.

determine the current structure and organization of academic protected time in the context of potentially developing a network to share educational ideas and resources.

MATERIALS AND METHODS

Ethics approval was obtained from the University of Alberta Health Ethics Review Board. In the fall of 2004, a survey was sent by email to all 16 program directors of Canadian obstetrics and gynaecology residency programs. Program directors were asked about the current structure of their academic protected time, including development, format, inclusion of the CanMEDS competency objectives, examination policies, and any barriers they encounter with respect to curriculum development. Statistical analysis was done by correlation analysis, the Mann-Whitney non-parametric test, and the Fisher exact test.

RESULTS

Fourteen out of 16 (88%) program directors responded to the survey. Numbers of faculty and residents and hours of protected time are shown in Table 1.

Thirteen of 14 programs excuse residents from clinical service during protected academic time. In one program, external clinical pressure has prevented residents from attending academic time. At the opposite end of the spectrum, two programs describe some resistance from the residents themselves, who may choose to assist in the operating room rather than attend structured learning activities. Several programs have noticed a decrease in resident attendance due to provincial on-call requirements that mandate residents be excused after call, although this was not perceived as a barrier to attendance per se.

Seventy-eight percent of programs in the survey use a template based on a two-year rotation of topics, with a goal of covering all learning objectives twice during the residency period. Several programs are modifying the curriculum template and are attempting to incorporate the CanMEDS competencies.³ In 10 programs, the program director is the primary developer of the curriculum; four programs include a committee or the chief resident in curriculum design. In one program, a potential role model for others, the curriculum is a standing agenda item for the residency education committee. A subcommittee chooses topics, the subspecialty faculty assigns teachers, and the administrative assistant assigns times and collects goals and objectives.

Table 3. Academic time format by program

Program	Format
A	2, 1.5-hour sessions with resident plus staff/fellow
B	2, 1.5-hour sessions; 25% by staff, 75% by residents; staff attends 50% of time.
C	2 short sessions and 1 long session in 3 hours; mostly didactic; juniors have surgical skills lab incorporated
D	3, 1-hour interactive sessions run by staff
E	3, 1-hour workshops each session; topic assigned one year ahead to one staff and one resident, who together decide on the format (lecture, hands-on, etc.)
F	30 minutes with industry re: new products etc., 1 hour with staff, case-based; 2 hours with lectures, some with role-playing or cases; faculty usually attends
G	4 sessions in 1 half-day, may be part of a continuing course such as critical appraisal
H	5 hours every second week
I	1 hour grand rounds, 1 hour core topics over a 2-year schedule, 1-hour subspecialty teaching with cases
J	1 topic per half-day; resident gives lecture, staff attends, adds cases and guides management
K	30 minutes business, 1-hour case-based topic and clinical practice guidelines by resident, 1-hour resident lecture, 1–2 hour staff presentations by topics; 1 half-day per month for research
L	4 topics weekly by staff; 1 half-day per month for research
M	staff participation with junior and senior residents
N	half lectures, half PBL; 1 topic per half-day

PBL: problem-based learning.

All Canadian programs responding to the survey integrate first-year residents into academic protected time. In some programs, residents may be rotating through off-service specialties and find it more difficult to be excused from clinical commitments. Thirteen of 14 programs present the same curriculum to all levels of residents regardless of their year of training. Table 2 shows the format of protected time, and Table 3 shows the educational structure of the 14 programs.

The majority of programs (68%) use lectures as their primary educational format; lectures are used 64% of the time overall. Other educational modalities include anatomy labs and laparoscopic courses with models, and critical appraisals within protected time rather than in a distinct journal club. There is no correlation between the percentage of the program that is lecture-based and the number of faculty ($P = 0.421$) or residents ($P = 0.790$).

Only three programs use web-based resources in their curriculum. One program has an online histology course to that residents have access to; another makes use of computer-based courses in colposcopy. In a third program, junior residents develop seminars, which are corrected on the web by faculty. Two programs use the web for posting reading lists and goals and objectives. All centres but one are interested in expanding their web-based resource.

Eight of 14 programs have been able to formally incorporate one or more of the CanMEDS competencies other than the medical expert (communicator, scholar,

collaborator, manager, medical advocate, and professional) into academic protected time, but no program has been successful in incorporating all six. Table 4 shows examples of techniques used by programs to introduce these competencies.

In the survey, we asked about perceived barriers to curriculum development for academic time, including time constraints, funding, availability of experts, and resources. The greatest barrier was time, which six program directors said was a considerable barrier to curriculum development. Surprisingly, inadequate resources and lack of local experts were not considered barriers. There was not a strong correlation between perceived barriers and the number of faculty or residents. Ten of 14 programs do not have an internal system of sharing lectures between the program and the department. The remaining four programs post lectures via website or email. There are currently no external systems of sharing educational information between Canadian obstetrics and gynaecology residency programs.

Program directors were asked specifically about their interest in both using and sharing common curriculum templates, course designs, individual lectures, reading lists, methods to teach/incorporate the core competencies, and examination questions. Eleven directors (78%) responded that they were very interested in a secure, inter-program system to facilitate exchange of educational ideas regarding curriculum development. The most common modalities program directors are willing to use in a web-sharing system

Table 4. Examples of teaching in the core competencies

Communicator	Public speaking, informed consent, PowerPoint presentations, teaching skills, the difficult patient, giving evaluations, breaking bad news (videotapes), medical-legal workshop
Health advocate	Osteoporosis, drugs in pregnancy, the pregnant addict, teen pregnancy, teen sexual health, resident teaching in public schools re: sexual health, domestic violence, female circumcision
Professional	Mock legal discovery, bioethics, professionalism workshop, cultural competence, resident intimidation and harassment, spirituality and caregiver grief, plagiarism
Scholar	Critical appraisal, teaching skills, writing exam questions, giving feedback
Collaborator	Clinical nurse presentation re: clinical trials, lawyer re: medical-legal issues, conflict resolution, the effective consult letter, collaboration with other specialists, teamwork workshops
Manager	Setting up an office, financial planning, MD management seminars, quality assurance seminar, health care databases

are examination-sharing (75%), competency education and evaluation (67%), and curriculum templates (50%). The most common tools that program directors are most willing to develop and *contribute to* are curriculum templates (70%) and competency education and evaluation (67%). Program directors expressed two primary concerns about participation in a shared network: whether the effort of contribution would be worth the return on investment and whether the information would be available in both English and French.

DISCUSSION

Program directors in Canadian obstetrics and gynaecology residency training programs are charged with the development of an academic protected time curriculum, alone or in collaboration with an education committee. The programs are mandated to fulfill the objectives set out by the Royal College, including instruction and evaluation in the core competencies of medical expert, communicator, collaborator, health advocate, manager, scholar, and professional. Because programs predominantly use two-year templates based on core topics and use lectures as the dominant teaching format, there may be an opportunity to integrate innovative, curriculum-sharing modalities into resident education. Over the last decade, undergraduate programs across Canada have moved away from didactic lectures toward other formats for learning, such as small-group sessions, problem-based learning, online courses, video vignettes, and tele-education. The results of this study suggest that postgraduate obstetrics and gynaecology programs have not yet made this transition.

The present study confirms a significant interest in the development of a secure, inter-program system for sharing ideas regarding curriculum development. This could include curriculum templates, course structures, teaching modules (such as those to teach the professional competencies), and examination development. Given the multiple responsibilities of program directors, it seems reasonable to

assume that a network of shared resources could aid all programs in fulfilling their educational objectives. This is an attractive concept that would enable programs to share ideas about academic formats, exam questions, reading lists, program design, and teaching methods, all of which could aid the development of academic protected time.

A computer-based network could also be expanded to provide support for program directors in areas other than curriculum development, such as resident remediation, conflict management, and career counselling. Although some issues may be site-specific, the majority will be relevant to all obstetrics and gynaecology residency programs. By sharing ideas about how to fulfill educational objectives, each program has the potential to expand its repertoire of teaching and education. The realization of such an initiative may enhance both resident education and performance and program directors' satisfaction and effectiveness.

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