Educational contracts in family medicine residency training

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SUMMARY

An educational contract for family medicine residency training and evaluation addresses many of the difficulties and challenges of current postgraduate medical education. This article identifies important principles for developing a contractual approach; describes the contract used in one program and its implementation; and discusses its theory, advantages, and limitations.

RÉSUMÉ

Le contrat éducatif appliqué à la formation et à l'évaluation des résidents de médecine familiale permet d'aborder les nombreuses difficultés et défis que soulève la formation médicale postdoctorale actuelle. Cet article identifie certains principes importants dans le développement d'une approche contractuelle, décrit le type de contrat utilisé par un programme de résidence et sa mise en application puis discute de son fondement théorique, de ses avantages et de ses limites.

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MONITORING ONE'S OWN PERformance is a defining characteristic of professional work and an ability that must be cultivated for learners to engage effectively in lifelong learning. Learning contracts enhance self-directedness and self-assessment in education.[1] They perceive the learner as mature and voluntary: someone who can participate meaningfully in developing, structuring, and evaluating learning activity.

Contract learning integrates essential principles of adult education[2] and is consequently relevant to residency training. Contract learning has been instituted to varying degrees in higher education[3] but is a relatively new concept in postgraduate medical education.

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Learning plans were used for family medicine education in Australia during the early 1980s, but the concept was never broadened to a formal educational contract nor used extensively.[4]

Contracts can help to focus on self-diagnosis of learning needs, to set goals, to prompt mutual planning, to determine individual learning strategies and resources, and to provide objective evidence of accomplishment. This individualized approach recognizes the uniqueness of human and professional growth, and by allowing individual input and control, it increases the chances of useful learning and ultimate satisfaction. The value of this approach has been recognized for learners of all ages.[5]

DEFINITION

An educational contract is a document that specifies what a student will learn, how this will be accomplished, how much time it will take, and what criteria will be used for evaluation. It consists of four major components:

- learning objectives,
- learning resources and strategies,
- evaluation of learning activities, and
- a time line for completion with provision for periodic review of progress.

Negotiating the educational contract

The contract should include a complete description of academic and professional objectives to be achieved, strategies to be used in meeting these objectives, frequency and methods of evaluation, obligations and responsibilities of the resident, as well as criteria for judging performance satisfactory. Finally, it should be signed by both parties to the agreement. It then is used both to implement and to evaluate the residency experience, stating the mutual rights and responsibilities of the learner and the program, and providing clear expectations for both in a format that can be periodically reviewed and updated.

SETTING AND RESOURCES

The educational contract we describe was designed and implemented in the family medicine residency training program at the University of Saskatchewan. The program is divided between two sites in two separate urban communities and has a total of 12 full-time family physician teachers and 40 residents. The contract was implemented as part of a general reassessment intended to bring conformity to and improve the quality and frequency of in-training evaluation in accordance with proposed national standards and accreditation guidelines.[6]

THE CONTRACT

Educational objectives

These objectives comprise the first section of the educational contract and are considered in two parts: residency training program objectives and individual resident-identified objectives.

Residency training program objectives. The objectives of the residency program are outlined in the contract under four defining principles of family medicine: the family physician as a skilled clinician, the family physician as a resource to a practice, the family physician as community based, and the effective physician-patient relationship. These four principles comprise the content basis for evaluation. Defining program objectives in this manner allows for clear knowledge, skills, and attitudes related to each principle.

The family physician as a skilled clinician: Objectives involve developing skills for managing common health problems as they occur throughout the life cycle and in various settings, as well as developing an effective clinical method and approach to the undifferentiated nature of illness as it presents in primary care.

The family physician as a resource to a practice: Objectives involve interpreting scientific literature, administering preventive care, effectively managing time and health resources, and applying concepts of primary care research to clinical practice.

The family physician as community based: Objectives involve knowledge of the community served by the physician, resources available in the community, and the various roles of the family physician in the health care system.

The effective physician-patient relationship: Objectives involve patient-centred care, continuity issues, ethics, approaches to the difficult physician-patient relationship, and learning how personal and professional needs affect interactions with patients.

Resident-identified objectives. Resident-identified objectives focus on the unique needs, characteristics, background, and interests of the individual resident, recognizing that learning is a highly individual act. This section of the contract is facilitated by a faculty advisor assigned to each resident.

The original meaning of the word "contract" comes from the Latin word contractus, meaning "to draw together." It is in this section of the contract process that a faculty advisor and resident are drawn together to promote the resident's professional growth.

Educational and research activities

The second section of the educational contract outlines the educational and research activities through which residents will learn. This includes resident rotations, formal educational sessions, half-day back, and research activities.

- A 2-year schedule of resident rotations is outlined.
- Formal educational sessions include seminars, sign-out and teaching rounds, journal clubs, chart audits, and a 75% minimum attendance requirement for all activities. Faculty attendance at each of these educational activities is also contractually agreed upon.
- Half-day back obligations are defined as an integral part of resident education, and the contract specifies that no other service obligation should take higher priority.
- Research activities support the program's instruction in the basic research skills of epidemiology and critical appraisal as well as required resident research project guidelines.

Evaluation

One important goal of the educational contract is to outline clearly the entire process of resident performance evaluation in the training program. This includes discussing in-training evaluation of all rotations; using various evaluative tools, such as videotaped and direct observations of clinical encounters, chart audits, and simulated office examinations; and identifying the frequency and procedure to be followed for each evaluative tool.

The educational contract describes both the quantitative and qualitative forms[7] of evaluation used: quantitative evaluation involves both midterm (formative) and final (summative) in-training evaluations with each resident as well as a Procedure Record Card. Qualitative evaluation uses "field notes" kept by both residents and faculty. These are descriptive narratives based on clinical incidents or "thick" descriptions that make evaluation richer and more relevant.

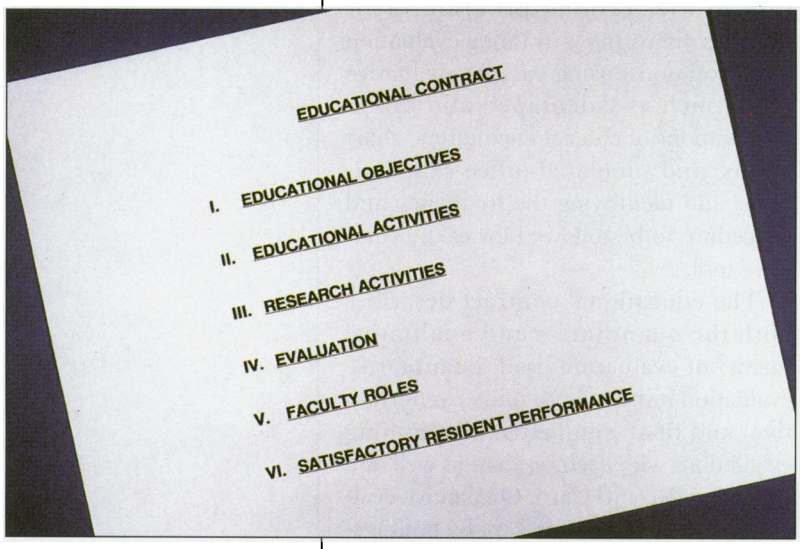
Evaluative feedback. The educational contract then clearly describes the mechanisms and procedures for providing timely formative and summative feedback to the resident. The contract stipulates that all evaluation forms be reviewed with and signed by the resident and identifies the responsible program coordinator. It further delineates how summary evaluation documentation will be forwarded to the appropriate university officers and at what frequency.

Faculty evaluation. This section outlines the importance of resident participation and input into faculty evaluation and development, and makes such participation mandatory, but allows for anonymity if desired.

Faculty roles

Three distinct roles for faculty are envisaged in the contract: preceptor or supervisor, faculty advisor, and mentor.

Preceptors and supervisors. This role encompasses all of the teaching, supervisory, and evaluative activities engaged in by faculty during a resident's training. These activities are organized on a team basis, and the individual resident works with several faculty in this role over the course of training, enhancing both opportunity for learning and validity of evaluation.



Faculty advisors. A faculty advisor is the appointed member of faculty outlined in the educational contract who takes principal responsibility for a particular resident. This individual is available to the resident on an ongoing basis throughout the residency for academic and nonacademic advice and support. He or she has a key role in acquainting and orienting the resident to the educational contract; outlining policies and procedures; and encouraging the sharing of information, strengths, and weaknesses in the process of defining resident objectives. The advisor must transmit perceived deficits in the program, disseminate particular learning needs information to other involved faculty, and act as an advocate in mobilizing needed or potential resources for learning for the resident.

Mentors. The educational contract discusses, encourages, and acknowledges the value of mentoring relationships. We hope that such relationships will flower between residents and their faculty advisors, but we also acknowledge that mentors are chosen, not appointed.

Satisfactory resident performance
The final section of the contract outlines requirements for satisfactory resident performance and policies in the event of unsatisfactory performance. The possibility of supplemental or remedial educational activities is outlined, as well as procedures to be followed and rights to and routes of appeal.

IMPLEMENTATION

The educational contract was implemented in this program during 1992, and its use is now mandatory for all residents and supervisors in the program.

We introduce the concept of the educational contract during an initial 2-week orientation period in the family medicine unit at the beginning of residency training. The content, purpose, and operation of the contract are discussed in detail in a group seminar with incoming residents, who then receive the contract outline and all pertinent objectives, evaluation forms, and documents in an accompanying residency training manual.

We pair each resident with an advisor during the orientation period, and this relationship continues throughout the 2-year training period. The contract provides for changes in faculty advisor assignments in the event of personality conflict or difficulty, but as yet no such problems have been encountered. Each faculty member acts as advisor to between six and eight residents yearly.

We schedule time for resident and faculty advisor to meet one-on-one in a series of interviews lasting 30 to 60 minutes. In the initial meeting the resident is familiarized with the contract, and an "expectations inventory" is conducted in which the resident describes expectations of the program, identifies perceived strengths and deficits, plans objectives for the upcoming interim, and identifies potential resources to meet these objectives. The contract is formalized with summary comments documented in the appropriate sections of the contract, and is then dated and signed by both parties.

Six months later, the contract is reviewed and updated at a similar scheduled nonevaluative 30- to 60-minute meeting between resident and advisor. At

these sessions issues that have arisen since the last inventory are discussed, goals and progress are reviewed, and the contract is updated in writing for the upcoming 6-month period.

DISCUSSION

Our educational contract reconciles the achievement of basic overall competencies with individual resident learner needs. While establishing program expectations and requirements, the regular review and update interviews identify and build on individual strengths and identify weaknesses as areas for growth. Residents and advisors frequently pinpoint specific procedures where more proficiency is needed or identify particular cognitive gaps. Resources can then be mobilized to fill these gaps, and other faculty are informed and recruited to facilitate when necessary. The process then acts as a catalyst for professional and skill development. In this way, the contract has helped overcome the variability of resident training and exposure, allowing our residents to build on past experiences rather than repeat them.

The role of faculty advisor was critical in implementing our educational contract. Contractual learning is known to work best in a high-trust, high-integrity environment,[8] and advisors need to establish that healthy collegial relationship from the start. Advisors first motivate residents to take advantage of contractual learning by alerting them to the purpose of the contract and its benefits. Thereafter advisors personalize the learning process and provide continuity, giving and gathering information.

The greatest challenge for advisors has been to create a climate conducive to learning, where there is opportunity to criticize, remake, improve, and constantly revitalize. Disclosure of needs must not be punished nor hiding of needs rewarded. The process must assume and demonstrate an intent to help. When the tone is otherwise, the process develops a reputation for pretence at best, and coercion and manipulation at worst. When the tone is genuine, we have found that the concern for individual and professional growth is refreshing and boosts morale.[9]

We have not attempted at all to reconcile the educational contract with other contractual service needs or obligations carried by residents, as we believe these are philosophically separate issues not to be reconciled. Nor is it clear in the literature whether an educational contract is a legal document.[10] It is clear, however, that learner participation in such contractual agreements goes a long way toward resolving ambiguity and potential legal complications.

When students assume different learning outcomes than the program, problems arise that, at best, diminish the value of the educational experience, and at worst, lead to litigation. The educational contract helps prevent such problems by establishing a mutual understanding and agreement on rights and responsibilities and setting these forth in writing. Written documentation and reporting of progress, and retaining copies, are essential aspects of monitoring our educational contract and have also frequently formed the basis for our subsequent revisions of the program and strategies for carrying them out.

Implementing the educational contract in our program has affected faculty time and workload. The greatest commitment is the scheduled protected time set aside for initial inventory interviews and regular contract updates – an average half-day every 6 months for each faculty member. When a resident is experiencing difficulty, however, the advisor-resident relationship is more intense and exacts a greater time commitment, particularly when review of the contract establishes a need for remedial work. Fortunately this occurrence is rare, and faculty advisors have thus far not felt overburdened.

In implementing the educational contract, we also found that faculty advisors need well-developed counseling skills. To foster open communication, lend creativity to identifying learning resources, and sometimes meet the realistic constraints that prevent goal achievement is not always easy.[11] We therefore undertook faculty development activity at the time of implementation. Faculty development seminars on the content and rationale for the educational contract offered practical advice and a written outline of suggested inquiries for conducting one-on-one resident interviews for the expectations inventory. Faculty agree these have been useful,

as has been our increasing experience with the contract.

Problems

Some difficulties have arisen in implementing the educational contract. Residents in their second year at the time of implementation expressed some dissatisfaction with such a change being introduced, as it were, midstream in their program. Those who began residency training with the contract already instituted have not expressed this reluctance.

First-year residents express anxiety at initial inventory interviews and sometimes demonstrate a poorly developed sense of direction or difficulty in identifying their learning needs. This reflects their level of training and, while a few remain passive or heavily dependent on the advisor for direction, most quickly take initiative and learn to use the opportunity presented by the educational contract to learn in accordance with their future career goals. It remains clear that the use of an educational contract favours those who are already self-starting and goal-oriented.

A rare resident has refused to negotiate about what constitutes appropriate learning or acknowledge any learning needs. For these residents, the educational contract failed as a mutual learning tool but still functioned effectively as a written documentation of program expectations and requirements.

CONCLUSION

An educational contract is relatively new in medical residency training. It marries basic adult education principles and current standards for in-training evaluation and accreditation. Creatively instituted, it can meet some of the current challenges of residency training programs in family medicine. Above all, it recognizes this year's student as next year's colleague.

The educational contract described can be easily implemented and adapted to other training sites. As of publication our program has used the contract for one complete resident cohort group, has a second cohort group midstream, and has a third group starting. We plan more comprehensive evaluation of its use as increasing experience allows. ■

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