Community-based program for training family medicine residents

McMaster's pilot program

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Family medicine residence training programs in Canada are expected to increase in size within the next 2 years.[1] It is anticipated that most of this training in Ontario will take place outside university medical centers. To prepare for this expected increase, the Department of Family Medicine at McMaster University implemented a pilot project in which four residents were trained in community-based physicians' offices. This article describes the rationale, planning, historical context, and early implementation of this project. This description could serve as a guide for other residency programs planning similar expansion.

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The Family Medicine Residency Program at McMaster University[2] is a 2-year program integrating relevant hospital experience and ambulatory experience. Hospital rotations for residents include 8 weeks in each of internal medicine, pediatrics, obstetrics and gynecology, and emergency medicine. Each year residents spend 4 months full time in one of the four McMaster family practice units. While the residents are involved in hospital rotations, they spend a half-day each week on ongoing patient care during the course of the 2-year program.

Behavioral science seminars are held weekly in the units, also over the course of the 2-year program. In addition, other academic sessions are incorporated into the 4 months of yearly full-time work at the family practice units. In the second year of the residency program, 2 months are provided for electives, 2 months for selective options (ie, additional training in the core disciplines), and 2 months for experience in a community family physician's practice.

In September 1987, a national invitational conference[3] was convened to consider a 50% expansion of family medicine training in Canada. To prepare for this meeting, the Residency Program Director established a task force to create a position paper for the expansion of the McMaster program from 36 to 50 residents in each year. The central recommendation was that residents in the expansion program should obtain their family medicine experience in the practices of community faculty members rather than in family practice units. Thus, no new centers would need to be established to accommodate the expansion, nor would the four established units need to increase their number of residents.

After the conference, the recommendation from the position paper was accepted by the Department of Family Medicine at McMaster University. In preparation for the anticipated increase, steps were taken to initiate a pilot project in July 1988.

Experiences with community-based education

From 1973 to 1983, family medicine residents at McMaster had the option of full-time placements in selected community physicians' practices or in the academic family practice units. The number of residents choosing community physicians' practices ranged from two in the last year of the program to 11 in the third year, with a total of 61 residents trained over 10 years of this program.

This experience gave the residents an opportunity to work with a larger patient population that was possibly more representative of the general population than the patients of the established family practice units. This experience also provided residents an opportunity to train in sites similar in size, location, and type of practice to what was anticipated for their future.

Perceived weaknesses of the program included isolation from the peer

Table 1. **CRITERIA FOR SELECTION OF COMMUNITY FACULTY**

- **Certification in the College of Family Physicians of Canada**
- **In practice 5 years**
- **Previous teaching experience**
- **Demonstrated interest in continuing medical education**
- **Well regarded by colleagues**
- **Adequate space and facilities for teaching**
- **An understanding and acceptance of the demands of teaching and problems associated with having a resident in practice**

group of residents and, more importantly, the lack of a structured academic program during their full-time community experience. Although this option appeared to give some residents valuable experience, the program was terminated in 1983. It was replaced by an obligatory 2-month community experience requirement in the second year for all trainees to ensure a more standardized experience. Community physicians with part-time faculty appointments are available throughout Ontario from Hamilton to Kenora to provide this experience. The lessons learned from these programs were used in planning for the community-based pilot project.

Planning

The coordinator of the second-year community experience requirement was appointed as director of the pilot project. It was the director's responsibility to design the program, recruit community supervisors and full-time faculty, select residents, and ensure all arrangements were satisfactory. Thus, it was necessary for the director to be familiar with and work closely with community physicians, the Residency Program Director, and other faculty.

A number of issues needed to be resolved as we planned the pilot project. Selecting supervisors and obtaining funding for the coordinator and the community supervisors were necessary early on. Criteria for selection of community faculty and recruitment and training in faculty development had to be established. The same criteria were used as had been in place for choosing supervisors for the second-year community experience requirement (*Table 1*). Community faculty with previous teaching experience were used wherever possible. Because teaching would include direct observation, chart review, and audiovisual tapes, additional equipment and supplies were needed for the selected community practices.

A plan for provision of hospital rotations and for guaranteeing academic and behavioral science program requirements had to be developed. Resources were needed for other experience requirements, such as orthopedics, dermatology, and otolaryngology. We were able to arrange for the community-based residents to have the same hospital experiences as the other residents and to have access to the same electives and selectives.

While the residents would obtain their family medicine and clinical experience in the community practice (4 months full time in each of the first and second years and a half day a week throughout their program alloted for continuity of patient care, in the same fashion as the other residents), the behavioral science and academic sessions would take place in the family practice unit with which the resident would be affiliated. The

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learning objectives and the means of achieving these objectives would be the same as for residents assigned to academic family practice units.

A full-time faculty member was appointed to act as a liaison and resource with each community resident. This faculty member would ensure that the resident would be integrated into the academic activities of the unit, and the member would be available as a resource to assist with evaluations, choosing electives, and other academic matters. Visits by this liaison faculty member to the community practice would ideally ensure smooth implementation of the program. Affiliation with a family practice unit for academic sessions and behaviorial science sessions and identification with the liaison faculty were seen as ways of addressing the isolation and academic deficiency of the earlier community program.

The allocation of residents to the project would be on the same basis as the assignment of residents to the other family practice units. After acceptance into the McMaster Residency Program, residents would rank their preference for the various full-time units or the community practice option.

Implementation

In the spring of 1988, community practices, supervisors, and liaison faculty members were recruited. All of the sites were within 25 km of the university. Community physicians chose to be part of this project because they wished to have additional academic stimulation, a challenge, a learning experience, an opportunity to keep up-to-date, and career advancement.

The community supervisors stated that they enjoyed teaching and interacting with young physicians; they were aware that community practices have something to offer to residents. The new supervisors, however, also questioned their educational ability to teach and evaluate residents appropriately; to achieve the educational standards of the full-time faculty; and to provide adequate support, especially resources, in other areas. In addition, supervisors were also concerned about practice issues, including whether they would face a loss of income due to a decrease in the number of patients seen; whether they would have adequate time, financial trade-offs, or compensation; whether their patients would object to being seen by a resident; and whether they would lose patients who objected to being seen by a resident.

An information meeting was held in June 1988 with the Department Chairman, Residency Director, community supervisors, and liaison faculty members. Residents were selected for the community training program, all of whom had selected this program as their first choice. The residents selected the pilot project location for their family medicine practice site because they felt the location would provide a realistic experience, because other residents had strongly recommended such an experience, and because they desired a one-on-one experience with their supervisor.

Upon entry into the residency program, the four residents in the pilot project were asked to rank the importance of patients, supervisors, and location in making their decision to become part of the pilot project. Residents ranked patients and supervisors as being very important; in addition, half ranked location as important.

In July 1988, the program was implemented with four residents. The residents in the community-based practices had backgrounds similar to their counterparts who chose family practice units.

Evaluation

In order to assess the program, it was necessary to develop an evaluation system. A formative program evaluation was implemented to fine tune the program. A series of questionnaires was designed for residents, community supervisors, liaison faculty members, and behavioral science faculty. These questionnaires were completed twice each year for the 2 years of the pilot project. Both the initial group of community-based residents as well as a matched control group of residents in the full-time family practice units were surveyed. These instruments

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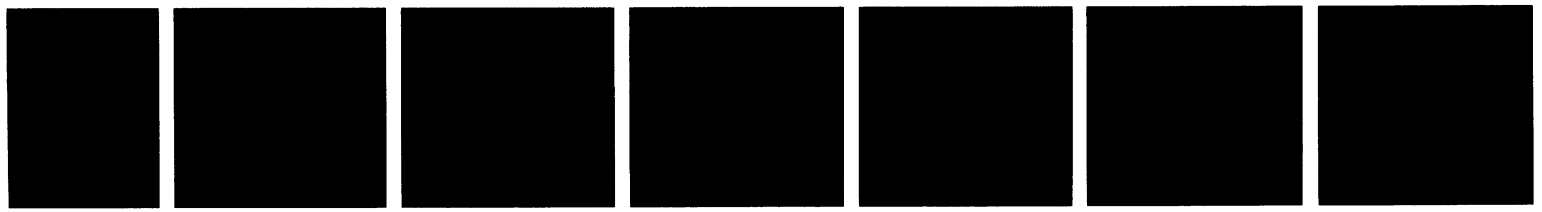

were designed to examine participant performance in as well as participant satisfaction with the program. Through the use of rating scales, the residents indicated their satisfaction with various aspects of the program and their strengths and weaknesses.

The community supervisors completed similar evaluation forms; they were also asked to indicate how much time was spent in the supervision of residents. Expenditures were also monitored and compared with the cost of the traditional residency training in the full-time family practice units.

Residents in the pilot project rated patient volume, patient variety, and supervision as being very satisfactory. According to the residents the program's strengths were the one-to-one teaching, good experience in geriatrics and internal medicine, close supervision, and excellent flexibility within the practice. Only three weaknesses were raised by residents, and each was unique to one resident. The faculty also appeared to be very satisfied with the pilot project; reservations about the project applied only to unique characteristics of the specific residents and their associated practice.

None of the reservations that the supervisors had before the start of the project were realized. Compared with residents in the academic family practice units, the supervision was as good or even better, and the residents in the pilot project were very pleased with the teaching ability of their community supervisors. Faculty in both the family practice units and the community questioned their ability to evaluate residents effectively and to give constructive feedback.

Patients did not mind being seen by a resident. For the most part, the number of patients seen in the community-based practice each week increased slightly because of the presence of the resident during the 2-year training period. Supervisors spent between 1 and 10 hours each week in administrative activities related only to the program or the resident, not to patient care.

Conclusion

The experience with the McMaster pilot project enables us to accept more residents for training, to maintain the quality of the training, and to guarantee the academic components of the program. It should be noted that residents were still perceived as part of the residency group and were included in all social and academic functions.

Several lessons have been learned.

- We have not found as many community physicians as expected who are willing to share their time, experience, and patients and to commit a significant amount of time to the teaching program.
- The obstacle of distance in providing adequate academic and hospital experiences for residents in remote practices has yet to be surmounted.
- It is crucial for the director of such a program to be familiar with the community and be able to work closely with both faculty and community physicians; he or she must be an advocate for the program and should regularly involve and update everyone, especially full-time faculty.

The program worked well, and residents were enthusiastic about their experience. In July 1990, the "pilot" part of the project was completed, and the community practices were started as regular "home base" teaching locations, along with the four family practice units. ■

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