

Benefits of Early Predoctoral Experiences in Longitudinal Patient Care

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A ten-year experience with a continuity clerkship taught to second-year medical students is described. Students enrolled in this course spend one half-day per week for nine months with a practicing family physician, attend a weekly seminar or workshop, and write a longitudinal patient care report. This comprehensive report summarizes their experience with a patient or a family and addresses pertinent medical and psychosocial issues. Forty-four of these reports were analyzed for the 1981-82 academic year. The analysis revealed that the main benefits to the students from the longitudinal experience were (1) recognizing the importance of continuity of care, (2) observing the interplay between the social environment, family, and the patient's health, (3) gaining insight into the role of the family physician, and (4) experiencing the difficulties of chronic disease management.

The last ten years have been marked by a growing recognition of the need to increase the number of primary care physicians in the United States. One approach being used to meet this need is the restructuring of predoctoral medical school curricula so that students are introduced at an early stage to primary care medicine. Student exposure to primary care in the preclinical years of medical school is considered desirable because it facilitates better informed specialty decisions.¹

An important component of primary care that is frequently neglected in medical school training programs is continuity of care. Although the benefits of continuity of care are widely recognized, most predoctoral courses are too short-lived to provide the longitudinal patient contact required

for optimal training in continuity. Several schools have set up primary care preceptorships during the first years of medical school²; however, many have been no more than an academic quarter in length.

At the University of Washington the Department of Family Medicine has developed a second-year preceptorship designed specifically to focus on the principles of continuity.^{3,4} An innovative feature of this course is its requirement that students select a patient or family who will be followed for the duration of the nine-month preceptorship.

This paper describes the course and presents evaluation results, which indicate that students receive a number of benefits from their continuity experiences.

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Course Description

The Continuity Clerkship is a second-year preceptorship in which the student spends one morn-

	Autumn Quarter (%)	Winter Quarter (%)	Spring Quarter (%)
Level of student involvement			
Primary	24	37	45
Assisted	27	28	32
Observed	49	35	23
Types of patients seen			
New	66	59	64
Ongoing	28	35	30
Longitudinal	6	6	6

ing a week over an entire academic year in the office of a community-based family physician. During this nine-month course, the student gradually assumes an increasing level of responsibility in the comprehensive and continuous care of the patients in the practice. This clinical experience is supplemented by a weekly lecture and workshop series that provides procedural skills training as well as presentations on major topics in primary care medicine. Past topics have included workshops on suturing, casting, and prescription writing, and lectures on otitis media, prenatal care, alcoholism, presentation skills, and medical records.

The goals of the Continuity Clerkship are to (1) enable students to learn a comprehensive approach to patient care in a family practice setting by providing the opportunity for longitudinal patient contact, (2) introduce the management of medical problems commonly seen by family physicians, (3) enable students to learn the application of certain clinical and procedural skills, (4) provide a practical correlation between clinical experiences and didactic materials learned in the core curriculum, and (5) introduce some aspects of family practice management.

Students maintain activity logs in which they record selected aspects of their weekly patient contacts. Data from these logs are summarized in Table 1 to provide quantitative information about student encounters with patients. The table, which summarizes approximately 2,500 patient contacts each quarter, illustrates the increase in student responsibility as the course progresses. By the

spring quarter, the most frequent type of student-patient encounter was one in which the student had the primary contact with the patient under the supervision of the preceptor.

Each patient is identified as either new to the student (new), previously seen by the student (ongoing), or designated by the preceptor for long-term care and follow-up (longitudinal). Although patients designated as longitudinal make up only a relatively small percentage of the total number of patients seen by the student, they provide one of the most valuable components of the course. Students are asked to document their experiences with these selected patients and submit reports upon completion of the course. These reports provide one of the bases for evaluating the benefits derived from longitudinal patient contacts.

Selection of Longitudinal Patients

To obtain maximum benefits from the course, it is important that as early as possible each student and preceptor identify a small group of patients who will be followed closely throughout the nine months. When the course was initiated, this often proved to be a problem. With experience, however, most of the preceptors have become adept at helping their students identify such patients early in the autumn quarter.

Selected characteristics of patients designated for long-term care and follow-up are presented in

Table 2. Characteristics of 44 Patients Given Longitudinal Care

Characteristics	Percentage
Principal presenting condition	
Pregnancy	24
Aging illnesses (consortium of problems)	16
Cerebral vascular accidents	8
Diabetes or hypertension	6
Alcoholism	6
Chronic occupational injury	6
Other	34
Sex	
Male	30
Female	70
Modal age ranges	
Males 60-69 yr	
Females 20-29 yr	
70-79 yr	

Table 2. The patients are somewhat more likely to be elderly and female, and they tend to suffer from conditions that would predict frequent contact with the medical professions. This profile thus resembles the types of patients typically seen in many community family practices.⁵

Benefits of the Longitudinal Patient Care Experience

To assess the degree to which students were benefiting from their extended patient contact, the students' longitudinal patient care reports were analyzed. Because of the qualitative nature of these reports, a content analysis method was used. In this method all evaluative sentences or phrases were extracted from the student reports, categorized, and tabulated. This analysis was performed on the 44 longitudinal patient reports of the 1981-82 class, and the results are presented in Table 3.

From the 44 reports came 95 evaluative comments. These comments generally described the insights and learning the students thought were unique to the longitudinal experience. The largest category of responses ($n = 17$) centered on conti-

Table 3. Student-Perceived Benefits From Their Longitudinal Experiences

Category	Number Reporting
Recognize the importance of continuity of care	17
Observe the interplay between the social environment and family and the patient's health	16
Gain insight into family medicine	16
Learn of the difficulty in managing certain chronic diseases, such as alcoholism, hypertension, and mental illness	10

nity of patient care. Students reported that the longitudinal experience allowed them to realize "what continuity of care means." Student insights included recognition that continuity is important for the development of a close physician-patient relationship, that continuity facilitates communication in counseling, and that only through a longitudinal relationship can a physician truly understand the complexities that often underlie a simple presenting problem. One student wrote "I think if I had seen her [the patient] only two or three times, I would have never grasped the subtlety of her personality disorder. How easy it would have been to stay with the medical complaints and treat the bronchitis, not wishing to uncover the psychodynamics." Along this same line, another student wrote: "Through longitudinal contact I've realized that the acute complaints she [the patient] brings to the clinic are the least debilitating and may simply be anxiety reactions to her very real functional losses."

A second large category of student-perceived gains focused on observing the strong interplay between the family and the patient's health ($n = 16$). Students observed how a major illness can affect the family and how the family adapts to cope with this disruptive influence. Students also reported the converse situation, in which family dynamics affect the individual's illness. For instance, one student said, "Perhaps the most significant point I have learned from my longitudinal study is the resilient and powerful influence of

a family on an individual's medical condition. A supportive family can markedly enhance a patient's recovery from illness and help him or her develop effective adaptive mechanisms for coping." Another student who made this same observation commented on the degree to which family dynamics can profoundly "affect the patient's attitude and perception of an illness."

A third group of evaluative comments described how well the clerkship provided an understanding of family medicine and the family physician's role in the health care system (n = 16). Students commented on the dynamics of the physician-patient relationship, and noted that the physician was a source of continuity. Many students gained insight into the role of the family physician as the health care director who "pulls everything together." One student found that the "family physician has the advantage of knowing the big picture, and, seeing the effect of each subpart on the whole, can more carefully orchestrate the total care of the person as specialists are needed."

Students also reported that the exposure to family medicine in this clerkship was helpful in their decision concerning medical specialty. The majority of students who took the course were already leaning toward family medicine and found the clerkship reaffirmed their inclinations. Several students who were still undecided reported becoming committed to family medicine as a result of their longitudinal experience.

Other student insights included experiencing the difficulty of managing chronic conditions (eg, alcoholism and the problems of aging) and of instituting beneficial lifestyle changes in the patient (n = 5), learning about medical office procedures and the teamwork among health professionals (n = 4), and becoming aware of the uniqueness of the continuity clerkship (n = 4).

Conclusions

From the information presented above, several conclusions can be reached concerning the usefulness of the longitudinal patient experience and the Family Medicine Continuity Clerkship:

1. Students learn about the importance of continuity of care through their longitudinal patient contacts.

2. The longitudinal experience is an ideal opportunity to learn about family dynamics in illness and health.

3. The clerkship, by being community-based, provides an excellent exposure to the practice of family medicine.

4. Almost all of the students enjoyed the clerkship and found that it increased their awareness and interest in family medicine.

The Continuity Clerkship in Family Medicine has been offered as an elective for the past ten years, and during this time its enrollment has grown from 20 to almost 50 students. The University of Washington recently gave recognition to the importance of family medicine training for all students by instituting a requirement that all students must complete a clinical experience in family medicine prior to graduation. The continuity clerkship was included as one of three options for satisfying this requirement. Thus, it can be anticipated that increasing numbers of students, including many not inclined toward careers in family medicine, will soon be enrolling in the course. The evaluation material described in this paper suggests that the longitudinal patient experiences offered in this course constitute an effective vehicle for highlighting many of the important elements of family medicine for all medical students.

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