

Practice Management Training in Family Practice Residencies

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Recent surveys have suggested that practice management instruction in family practice residency programs is inadequate. The majority of third-year family practice residents graduating in 1980 felt inadequately trained in nearly all aspects of practice management.¹ Thirty-five percent of these residents noted that their residency programs offered no regularly scheduled time for practice management training. Results of four family practice residency graduate follow-up surveys showed that no fewer than 25 percent and, often, 60 to 80 percent of graduates felt underprepared in most areas of practice management.²⁻⁵

Methods

In November and December 1981, a survey of family practice residency directors listed in the *Guide to Family Practice Residency Programs* was undertaken to determine (1) attitudes toward practice management instruction, (2) designation of a specific residency practice management education coordinator, (3) format of instruction, and (4) practice management topics considered most important for inclusion in residency training. One hundred ninety-five program directors were randomly selected to complete a brief questionnaire. One hundred fifty questionnaires were returned after one mailing for a response rate of 77 percent. Telephone calls were made to five randomly selected nonresponders to determine whether their lack of response indicated a lack of interest in practice management instruction. Four of five

programs contacted included practice management instruction in their programs. These five responses were included for statistical evaluation for a total response of 155 programs, a total response rate of 79 percent. The data were entered onto punched cards and evaluated by standard statistical methods.

Results

The distribution of respondents was representative of the types of residency programs in the country. There were no significant differences in instruction based on type of program, geographical location, year the program was established, or population of the community in which the program was located.

Seventy-eight percent of respondents strongly agreed and 20 percent of respondents agreed that practice management was an appropriate content area of a family practice residency curriculum. One hundred twenty-six (81 percent) of responding programs had designated a specific educator to coordinate their practice management curriculum. Educators who were designated as specifically responsible for coordination of residency practice management training included the program director (23 percent), other faculty members (32 percent), residency business managers (31 percent), and others, such as professional business consultants and hospital administrators (9 percent).

One half (49 percent) of responding programs offered both didactic courses and "experiential" training (such as working the office front desk) as part of their training program. Thirty-six percent of the programs offered a structured didactic course only. Nine percent offered experiential training only. Five percent of responding programs offered no practice management instruction.

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	Percent Response
Fees, billing systems, credit collections	75.4
Personnel (hiring and management)	73.9
Economics of starting a practice	66.7
Practice location decisions	47.1
Third-party payers (Medicare, Medicaid)	46.4
Medical record keeping systems	44.9
Patient flow schemes, scheduling, telephone use	42.0
Practice organization (solo, group, HMO, etc) and income distribution plans	37.7
Selecting professional services (accountant, attorney, business manager, etc)	34.8
Legal aspects of medical practice	33.3
Building an office, leasing, office layout	21.7
Personal finance	20.3
Career alternatives in family practice (private, academic, government service, etc)	14.5
"Building" a practice	13.0
Computers in private practice	6.5
Buying medical equipment and supplies	5.8
Insurance	5.8
Buying waiting room and business office equipment and supplies	3.6
Investments	2.9
Other	2.2

Of 132 programs offering a structured didactic course of instruction, 72 percent required resident participation and 26 percent offered the instruction on an elective basis. When offered as an elective, over 50 percent of residents chose to participate. When compared with programs offering elective participation, programs that required resident participation offered relatively more hours of didactic instruction ($P < .01$).

Only 7 percent of residency programs offering structured formats provided over 60 hours of didactic instruction. Sixteen percent offered 31 to 60 hours, 40 percent offered 16 to 30 hours, and 33 percent offered 1 to 15 hours of didactic course

work. Four percent of programs did not specify the number of hours devoted to didactic instruction. Didactic instruction was most commonly provided by professional business consultants, the residency business manager, and family practice faculty members.

In programs with structured didactic instruction, participant combinations included third-year residents only (34 percent), second- and third-year residents (32 percent), and first-, second-, and third-year residents (30 percent).

Ninety programs (58 percent) offered some form of experiential training in practice management. This most commonly involved observing or working in the residency business office or a private practice office during a medical rotation. Some residencies also allow residents to participate in day-to-day decision making regarding certain residency office operations. A few residencies offer self-instructional material in practice management. Practice management seminars sponsored by the American Academy of Family Physicians, American Medical Association, and private business firms were required by 13 percent of residencies, encouraged by 49 percent, and allowed by 33 percent.

Table 1 shows the program director's perception of the relative importance of potential topic areas as indicated by the percentage of total responses. Fees, billing systems, hiring and management of personnel, and economics of starting a practice were indicated as most important in over 50 percent of responses. Less than 10 percent of responses indicated that computers in private practice, buying medical equipment and supplies, insurance, buying waiting room and business office equipment and supplies, and investments were the most important topic areas.

Comment

Results of this survey indicate that the majority of family practice residency programs offer some form of practice management training. However, there are several indications that present training is inadequate.

In its "Proposed Special Requirements for Residency Training in Family Practice" the Residency Review Committee suggests offering at least 60

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K-Lyte® DS (Each effervescent tablet in solution supplies 50 mEq potassium as bicarbonate and citrate.)

K-Lyte® (Each effervescent tablet in solution supplies 25 mEq potassium as bicarbonate and citrate.)

Description: K-Lyte DS and K-Lyte are oral potassium supplements. Each K-Lyte DS tablet in solution provides 50 mEq potassium as supplied by 2.5 gm potassium bicarbonate and 2.7 gm potassium citrate with 2.1 gm citric acid, saccharin, artificial flavor and color. Each K-Lyte tablet in solution provides 25 mEq potassium as supplied by 2.5 gm potassium bicarbonate and 2.1 gm citric acid, saccharin, artificial flavor and color.

Indications and Usage: All K-Lyte® products are used for therapy or prophylaxis of potassium deficiency. They are useful when thiazide diuretics, corticosteroids, or diarrhea cause excessive potassium loss; and when dietary potassium is low. These products may also be useful when potassium therapy is indicated in digitalis intoxication.

Contraindications: Potassium supplements are contraindicated in patients with hyperkalemia since a further increase in serum potassium concentration in such patients can produce cardiac arrest. Hyperkalemia may complicate any of the following conditions: chronic renal impairment, metabolic acidosis such as diabetic acidosis, acute dehydration, extensive tissue breakdown as in severe burns or adrenal insufficiency. Hypokalemia should not be treated by the concomitant administration of potassium salts and a potassium-sparing diuretic (e.g., spironolactone or triamterene), since the simultaneous administration of these agents can produce severe hyperkalemia.

Warnings: In patients with impaired mechanisms for excreting potassium, the administration of potassium salts can produce hyperkalemia and cardiac arrest. This occurs most commonly in patients given potassium by the intravenous route but may also occur in patients given potassium orally. Potentially fatal hyperkalemia can develop rapidly and may be asymptomatic. The use of potassium salts in patients with chronic renal disease, or any other condition which impairs potassium excretion, requires particularly careful monitoring of the serum potassium concentration and appropriate dosage adjustment.

Precautions: *General precautions*—The diagnosis of potassium depletion is ordinarily made by demonstrating hypokalemia in a patient with a clinical history suggesting some cause for potassium depletion. When interpreting the serum potassium level, the physician should bear in mind that acute alkalosis *per se* can produce hypokalemia in the absence of a deficit in total body potassium, while acute acidosis *per se* can increase the serum potassium concentration into the normal range even in the presence of a reduced total body potassium. Therefore, the treatment of potassium depletion requires careful attention to acid-base balance and appropriate monitoring of serum electrolytes, the ECG, and the clinical status of the patient.

Information for patients—To minimize the possibility of gastrointestinal irritation associated with the oral ingestion of concentrated potassium salt preparations, patients should be carefully directed to dissolve each dose completely in the stated amount of water.

Laboratory tests—Frequent clinical evaluation of the patient should include ECG and serum potassium determinations.

Drug interactions—The simultaneous administration of potassium supplements and a potassium-sparing diuretic can produce severe hyperkalemia (see Contraindications). Potassium supplements should be used cautiously in patients who are using salt substitutes because most of the latter contain substantial amounts of potassium. Such concomitant use could result in hyperkalemia.

Usage in pregnancy—Pregnancy Category C—Animal reproduction studies have not been conducted with any of the K-Lyte products. It is also not known whether these products can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. They should be given to a pregnant woman only if clearly needed.

Nursing mothers—Many drugs are excreted in human milk and because of the potential for serious adverse reactions in nursing infants from oral potassium supplements, a decision should be made whether to discontinue nursing or discontinue the drug, taking into account the importance of the drug to the mother.

Usage in children—Safety and effectiveness in children have not been established.

Adverse Reactions: The most common adverse reactions to oral potassium supplements are nausea, vomiting, diarrhea and abdominal discomfort. These side effects occur more frequently when the medication is not taken with food or is not diluted properly or dissolved completely. Hyperkalemia occurs only rarely in patients with normal renal function receiving potassium supplements orally. Signs and symptoms of hyperkalemia are cardiac arrhythmias, mental confusion, unexplained anxiety, numbness or tingling in hands, feet or lips, shortness of breath or difficult breathing, unusual tiredness or weakness and weakness or heaviness of legs (see Contraindications, Warnings and Overdosage).

Dosage and Administration: *Adults*—One (1) K-Lyte DS tablet (50 mEq potassium) completely dissolved in 6 to 8 ounces of cold or ice water, 1 to 2 times daily, depending on the requirements of the patient. One (1) K-Lyte tablet (25 mEq potassium) completely dissolved in 3 to 4 ounces of cold or ice water, 2 to 4 times daily, depending on the requirements of the patient.

Note: It is suggested that all K-Lyte products be taken with meals and sipped slowly over a 5 to 10 minute period.

How Supplied: K-Lyte® Effervescent Tablets (orange or lime flavors) are available in cartons of 30, 100 and 250. K-Lyte® DS effervescent tablets (orange or lime flavors) are available in cartons of 30 and 100. Each tablet is individually foil wrapped.

hours of instruction in practice management.* The proposed requirements do not specify that the instruction be didactic. Nevertheless, it is important to note that of programs currently offering didactic instruction, only 7 percent provide more than 60 hours of teaching.

Although the proposed requirements suggest that the family practice center should be considered the primary classroom for teaching practice management, only 58 percent of programs offer experiential training (such as working at the office front desk, insurance office, etc). Only one half of the programs surveyed offered both didactic and "experiential" training.

Family medicine has encouraged educational goals that coincide with the realistic needs of practicing physicians. Much learning occurs in the day-to-day functioning of the family practice center that will later be applicable to private office management (especially handling telephone messages and medical office record keeping). Overall, however, it appears that practice management instruction in family practice residency programs is currently underemphasized. A more structured approach to practice management training seems desirable and necessary.

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*The Residency Review Committee consists of representatives of the American Academy of Family Physicians, the American Board of Family Practice, the Council on Medical Education of the American Medical Association, and a family practice resident, and is based at the American Medical Association offices in Chicago, Illinois.