Educational Implications of the National Study of the Content of Family Practice

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Since its inception, family practice has purposefully designed its residency curriculum to provide the skills that a family physician will need in practice. The curriculum, based on analyses of the problems seen in actual practice, was a departure from traditional residency training in many specialties in which the content depended almost totally on the diseases and types of problems that presented to a referral teaching hospital. Modern educational methods in primary care require that an accurate assessment be made of the problems encountered by primary care physicians and that a concerted effort be made to ensure exposure to these problems in training so skills can be developed to manage them properly in practice.

The Virginia Study, first published in *The Journal of Family Practice* in 1976,[1] was the "gold standard" used to confirm or modify the residency curriculum in the early days of family practice. One problem with the Virginia Study, as identified by Rosenblatt et al in this issue,[2] is that it was a regional study and did not necessarily represent the spectrum of problems seen throughout the nation. The best national study of practice content is the National Ambulatory Medical Care Survey (NAMCS), conducted annually since 1975 by the Department of Health and Human Services. However, NAMCS, like the Virginia Study, is of limited value in designing a residency curriculum in family practice, as it does not include hospitalized patients. In addition, published descriptions of the NAMCS data have not been focused on the practices of family physicians, but include physicians in all specialties who see patients in an office practice.

The study featured in this special issue[2] is, then, the first national study to develop both an inpatient and an outpatient profile of family physicians' practices. This new study can be a useful yardstick to help measure the relevance of a curriculum based upon analysis of practice needs. It could become the new "gold standard." A shortcoming of the USC survey is that it was not yearlong, but was concentrated during the late summer and early fall months. Its validity is strengthened, however, when in spite of this limitation, it was found to be similar to the year-round NAMCS data.

Hospital Practice

The strength of the early curriculum in family practice was its emphasis upon those outpatient problems unlikely to be encountered in the traditional teaching hospital setting. The concept of a model family practice office to teach the continuing care of problems encountered in outpatient practice was a significant departure from traditional residency training in other disciplines. Nevertheless, the question has remained: How much residency time should be devoted to skills

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required to manage a seriously ill patient in the hospital, and how much should be devoted to managing ambulatory problems?

This study helps to place the inpatient-outpatient problem into better perspective. It is apparent that family physicians do devote a considerable amount of their time to managing patients in the hospital. It was found that 99.5 percent of residency graduates admit patients to a hospital, a significant and somewhat startling figure. Even when the older (non-residency-trained) physicians are included, many of whom practice in communities where no hospital is available, all but 3.6 percent of family physicians cared for patients in hospitals. With one quarter of a family physician's time devoted to hospital care (23.1 percent of all patient encounters were in a hospital setting), inpatient skills must remain an important part of residency training. This may change as greater pressure is applied to decrease health care costs by shifting inpatient care to the outpatient sector whenever possible.

It is interesting that the proportion of family physicians having hospital privileges and the amount of hospital use were not substantially lower in urban areas, where the number of competing specialists might be expected to limit the hospital privileges of family physicians. Critics of family practice would like to paint an unflattering image of family physicians, practicing in rural communities without hospitals and spending their spare time fishing, as compared with internists, who practice in the cities, have large hospital practices, and, supposedly, spend their spare time attending concerts.[3] Hospital practice and hospital privileges will continue to play a prominent role in family practice and be a source of constant satisfaction and stimulation for the practicing family physician, who is unlikely to be content with a completely ambulatory practice.

Two of the most interesting tables in this report (Tables 8 and 15) permit comparison of the kinds of problems seen in the inpatient and the outpatient setting. It is obvious that the problems encountered are quite different and that less overlap occurs than expected. This strengthens the need to design a residency curriculum that reflects the skills needed in both settings and underlines the folly of a primary care residency program which relies totally on patients seen in the hospital setting.

Obstetrics

Clearly, the trend of physicians to discontinue obstetrics as they grow older will be offset by the increasing number of young family physicians eager to do obstetrics. It is no surprise that the likelihood of doing deliveries dwindles as physicians and their patients grow older and that physicians approaching retirement begin slowing down by discontinuing obstetrics. However, the enthusiasm of young family physicians for obstetrics should result in an increase in the number of deliveries by family physicians. In addition, more women are entering family practice, and, if present trends continue, 75 percent of their practices will be women, suggesting that they could attract more obstetrical patients than could their male colleagues. Obstetrics will continue to be a significant part of family practice, especially in the central and western United States. These trends increase the importance of family-centered obstetrics in residency programs and may increase the competition with obstetrician-gynecologists.

Dr. Brooks Ranney, president of the American College of Obstetrics and Gynecology, has said that 80 percent of American women now receive their primary care from obstetrician/gynecologists.[4] His definition of primary care may be considerably different from that of the rest of the world, but if his statement is true, those obstetricians are providing the primary care following a residency that is not designed to teach skills in diagnosing and managing primary care problems, such as depression, back pain, or hypertension.

Psychiatry

Apparently residency-trained family physicians take more time with their patients, do more counseling, and do more inpatient psychiatry than do non-residency-trained physicians.[2] Since the Graduate Medical Education National Advisory Committee (GMENAC)[5] indicates that one of the few specialties in which more physicians will be needed is psychiatry, it then becomes obvious that family physicians are going to have to fill much of that need, especially since the other primary care disciplines include little psychiatry and do not

emphasize training in individual or family counseling during their residency programs.

I disagree, by the way, with the GMENAC projection that family physicians will have reached 105 percent of the number needed by 1990. This projection assumes that other disciplines will answer the primary care needs that cannot be met by family physicians. Training in these disciplines is not designed to teach many of the skills necessary for good primary care, among which are counseling and basic psychiatric skills.

Geriatrics

Although geriatric medicine is a popular subject today, and there is little question that it must be emphasized in residency training, the study suggests that early in a medical career geriatric skills will not be needed as frequently as skills in obstetrics, counseling, and care of the seriously ill hospitalized patient. A young physician is more likely to have a youthful practice that grows old with him. Consequently, continuing education perhaps should be geared toward providing the physician with improved skills in geriatrics as his practice ages. Greater importance could be given to geriatrics in the American Board of Family Practice recertification examination, while the certification examination concentrates on problems of younger people and developing families.

Regional differences indicate, however, that some physicians, even early in their practices, will have a significant number of elderly people to care for. Family physicians in the Northeast and in states such as Iowa and Florida see more patients over 64 years old than those practicing in the West. In all areas of the country the elderly population is increasing faster than any other age group.

Diagnostic Tests and Procedures

From the early days of family practice, experienced family physicians have been urged to become teachers in residency programs. Even though these physicians emphasize avoidance of unnecessary testing and have a practice experience similar to the older physicians in this study, residency programs still produce graduates who rely more and more on diagnostic testing. Younger physicians are less likely than their older counterparts to give an injection or prescribe drugs, but are three times more likely to use cultures in their office practices. Younger physicians care for a different spectrum of problems and are probably more likely to use such equipment as tympanography, cryotherapy, flexible sigmoidoscopy, and suction curretage, though data supporting this belief are not available from this study. It is particularly unfortunate that neither sigmoidoscopy nor stool testing for occult blood were included as discrete items on the original data collection instrument. Colorectal cancer is the second leading cause of death from cancer in the United States, and the stool guaiac is the most useful and cost-effective test for its early detection.

Since group practices provide greater access to more expensive equipment, residency programs also need to purchase this equipment, and the faculty must become proficient in its use in order to teach residents. The American Board of Family Practice has developed a list of minimal procedures in which each resident should be proficient at the time of graduation. Methods must be found to monitor and certify that a resident has become competent in these procedures.

The trend among recent graduates is toward group practice. In this study over 55 percent of those under 45 years of age had selected a group practice, and most of these younger physicians preferred single-specialty (family practice) groups. The diminishing popularity of solo practice indicates that methods of teaching practice management may need to be modified. Less emphasis, for example, could be placed on pegboard and other systems designed for solo practice, and more attention could be directed to computerized scheduling, billing, and record keeping.

Future Needs

It is clear from this study that family practice is not a homogeneous discipline. Where a physician

practices may have more influence on the nature of the practice and the procedures performed than either residency training or age; therefore, considerable attention must be given to regional characteristics. (For example, almost one half of all family physicians of all ages include obstetrics in their practice, yet only 6 percent of the family physicians in the Northeast do obstetrics.) If family physicians are to be prepared to deliver the best possible care in their practices, then the curriculum must not only be designed to teach those skills but must be flexible enough to adjust to the region in which the physicians will practice and the type of patient problems that they will encounter in that particular setting.

The *Essentials for Residency Training in Family Practice* should continue to be modified according to the changing practice needs of new graduates. Comparing residency- and non-residency-trained family physicians, as was done in this study, will be inappropriate for future curriculum design, since virtually all family physicians will be residency trained. However, continuing studies that accurately identify the skills needed in practice are vital to maintaining excellence in patient care. There must be ongoing assessment and reassessment; today's analysis may not be appropriate for tomorrow's practice.

It is obvious the practice profile of young family physicians is somewhat different from that of older physicians who trained in a different manner and whose patients may also be older and have different expectations. Analyses of practice content in the past have frequently focused on the profiles of these older physicians. Future curricula must accurately reflect the practice profiles and skills of the younger physicians. At the same time, however, the value of the older physicians' practice experience should not be forgotten. Data indicating that younger physicians spend more time per patient and order more laboratory tests (cultures) may not mean these physicians are more interested in communicating with their patients or are more up to date technologically. It may simply be that they are less experienced or perhaps less busy and see fewer patients by choice or circumstance.

Another indication the practices of family physicians are changing is that 23.2 percent of this sample had faculty appointments.[6] Part-time teaching by practicing family physicians will not only help residency programs remain in touch with the skills needed in practice, but will also serve as an educational stimulus for practicing physicians. Even those in rural practice are likely to be within an hour of a teaching program and able to contribute a half-day or more per month. What better way to continue learning than to be challenged by eager and inquiring young minds?

Medical education is a dynamic process and must be continually redesigned to remain current with changing patient care needs. The insight provided by accurate practice profiles will continue to be the nucleus around which academic efforts are built. They must be incorporated into all aspects of the educational program: the undergraduate curriculum, graduate (residency) training, and postgraduate (continuing education) programs. The basic education principles established by the American Academy of Family Physicians and the American Board of Family Practice have served the specialty well during its first decade. Continued review, analysis, and revision of education programs in family medicine are needed to insure that physician skills resulting from this educational process remain relevant to the needs of patients.

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