A Quality Assurance Program for Graduate Education in Family Medicine

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A Quality Assurance Program has been developed by the Department of Family Medicine at the College of Medicine and Dentistry of New Jersey to help its affiliated community hospitals* monitor the quality of the educational experience they offer their family practice residents. Through this program, which is intended to be self-sustaining three years after implementation, the clinical knowledge, skills, and attitudes of the participating residents will be reviewed and their learning progress tracked.

With no nationally accepted criteria upon which the Quality Assurance Program could be based, an arbitrary decision was made to use the Competency-Based Objectives for Family Medicine developed by Baker and Gordon.[1] These objectives define the traits which the authors considered to be appropriate characteristics of the adequate family physician. The clinical performance of the family physicians who supervise the residents during their training will also be reviewed against these objectives to help them identify and maximize their clinical strengths, and to further develop their academic competencies in the areas of educational planning, research, and teaching.

Phase I of this program will provide the residents and faculty with baseline data on their (1) cognitive medical knowledge, (2) awareness of psychosocial aspects of patient care, and (3) clinical problem-solving skills. This will be accomplished through the use of validated tests of medical knowledge,[2,3] personality inventories,[4,5] patient management problems,[6] chart audits,[7] practice profiles, and verbal and behavioral assessments of videotaped encounters with simulated and real patients.

During the simulated patient interactions the physicians' interviewing skills will be monitored by three observers: a family physician, a clinical psychologist, and a medical social worker. From the perspective of their individual disciplines, these observers will provide the physicians with feedback on their interviewing techniques. To avoid the tendency to draw global conclusions based on one incident or fact, such as the physician's personality or the accuracy of his final diagnosis, a standardized checklist has been developed which will be used to facilitate objective, consistent feedback of the physician-patient interaction. It will also enable the degree of interrater reliability to be determined.

At the conclusion of the interview with the simulated patients, the physicians who were observed will participate in an informal discussion with both evaluators and simulated patients to gain further insight into their patient interview behavior. In addition, the physician will be able to play back the videotapes of the consultations and review them himself with the assistance of the written and verbal feedback received from the observers and simulated patients. In this review of his videotape he will receive support from one of the Medical School faculty members who will be responsible for assisting the physician to strengthen his interview behavior throughout the year. A cross-check on several dimensions of family practice training in the affiliated hospitals will also be made by comparing the competencies of the family practice resident group with those of residents in other primary care training programs.

When using formal testing devices of the type mentioned above a major limitation must be recognized. That is, performance on such tests is only predictive of performance in similar test situations. There is no available test of medical knowledge or clinical performance which has been shown to have predictive validity for clinical competence outside of the test situation. The best one can do is to make the testing device approximate as closely as possible the normal clinical situation. This helps to close the gap between the test situation and actual clinical performance and allows one to take a "leap of faith" in predicting performance outside of the testing milieu. A cross-check will therefore be made on the method of assessment. This will be done by comparing the faculty's assessment of the residents' day-to-day performance with the program's assessment of each resident to see if any correlation exists between the two and, if so, to what degree. Nevertheless, such data should be used only with great discretion, keeping in mind the considerable limitations in the application of the data.

In addition, we plan to assess whether or not the residents participating in this Quality Assurance Program are a representative sample of the population of all medical school graduates. If the program participants prove to be representative, we would have some indication that the detailed observations made among them could be expected to be seen among other medical school graduates. If the Quality Assurance Program participants are not representative of the total group of medical students, it is possible that they may represent the total group of

*The community hospitals affiliated with the College of Medicine and Dentistry of New Jersey-Rutgers Medical School are Hunterdon Medical Center, Flemington, New Jersey; John F. Kennedy Medical Center, Edison NJ; Monmouth Medical Center, Long Branch, NJ; and Somerset Hospital, Somerville, NJ.

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family practice residents. If they do not typify either group this will considerably limit any generalization of the observations beyond the immediate participant group.

Phase II will include a cumulative diagnostic feedback to the residents and faculty of their identified strengths and weaknesses in each of the areas reviewed along with assistance in further defining the factors preventing their mastery of a specific skill. Once the physicians have more accurately and narrowly defined their areas of weakness, *Phase III* will focus on the development of individual and group programs designed to help the physicians strengthen their skills. This three-stage approach to quality assurance will be "recycled" each year to determine whether or not the educational needs identification and educational programs have helped the physicians to add to their baseline clinical skills.

The *outcomes* anticipated from this program include: (1) an overview of the professional growth which occurs during the three years of the residency program, (2) a critical assessment of the Competency-Based Objectives as a framework for a family practice residency program, (3) the production of program graduates and faculty who are known to have attained mastery level proficiency in the skills and attitudes essential to the competent delivery of family medicine, and (4) the establishment of a working model for upgrading the teaching competence of clinical faculty.

Finally, it must be recognized that the scope of the family physician's responsibilities is generally determined for him by the needs of his patient population. This Quality Assurance Program is expected to produce family physicians who are willing and able to seek methods of objectively assessing the adequacy of their formal training in view of their patients' needs and are comfortable with the process of upgrading their professional skills, rather than "making do" or ignoring the possibility that they might not be sufficiently skilled in some areas.

Acknowledgement

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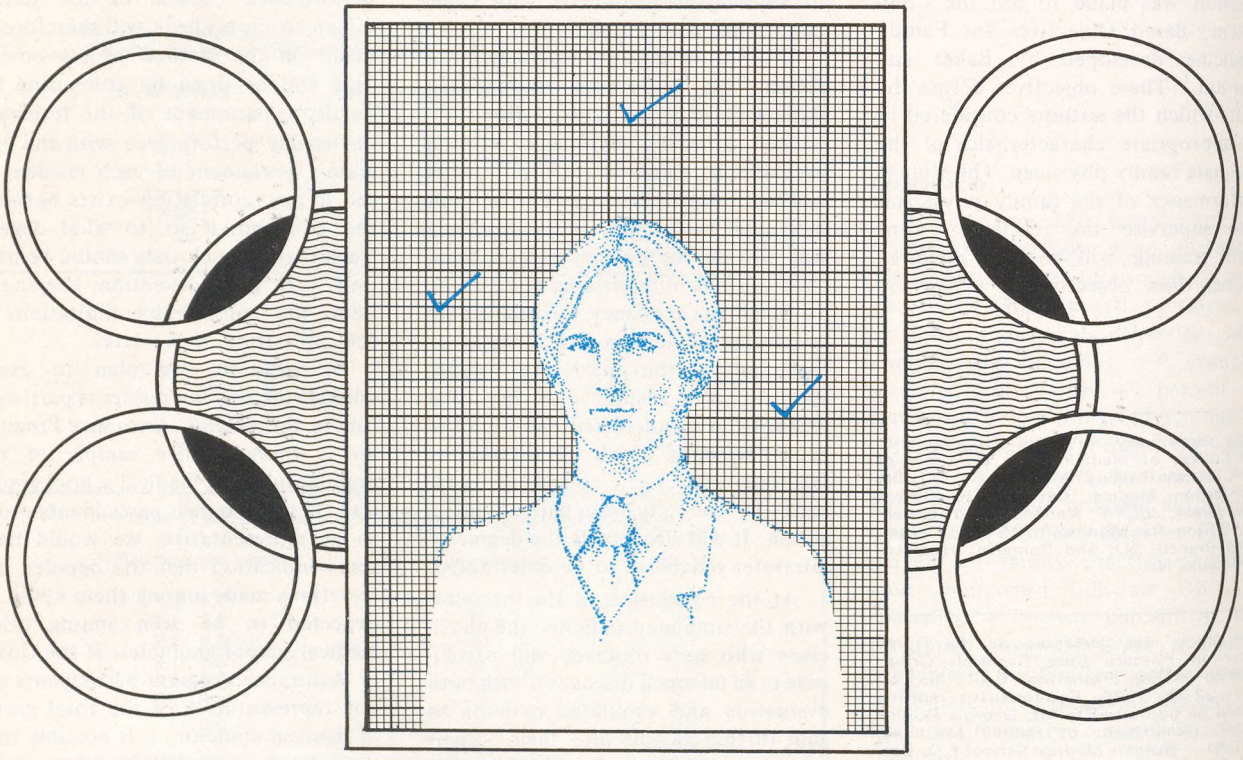

Books Received

Books received by *The Journal of Family Practice* are acknowledged in this column. Those that appear to be of particular interest to our readers will be reviewed as space permits.

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CORTISPORIN® OTIC SUSPENSION Sterile
(Polymyxin B-Neomycin-Hydrocortisone)
DESCRIPTION: Each cc contains:
Aerosporin® brand
Polymyxin B Sulfate ..... 10,000 Units
Neomycin sulfate ..... 5 mg
(equivalent to 3.5 mg neomycin base)
Hydrocortisone ..... 10 mg (1%)
The vehicle contains the inactive ingredients cetyl alcohol, propylene glycol, polysorbate 80, purified water and thimerosal (preservative) 0.01%.
INDICATIONS: For the treatment of superficial bacterial infections of the external auditory canal caused by organisms susceptible to the action of the antibiotics, and for the treatment of infections of mastoidectomy and fenestration cavities caused by organisms susceptible to the antibiotics.
PRECAUTIONS: This drug should be used with care in cases of perforated eardrum and in longstanding cases of chronic otitis media because of the possibility of ototoxicity caused by neomycin.

CORTISPORIN® OTIC SOLUTION Sterile
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Aerosporin® brand
Polymyxin B Sulfate ..... 10,000 Units
Neomycin sulfate ..... 5 mg
(equivalent to 3.5 mg neomycin base)
Hydrocortisone ..... 10 mg (1%)
The vehicle contains the inactive ingredients glycerin, hydrochloric acid, propylene glycol, purified water and potassium metabisulfite (preservative) 0.1%.
INDICATIONS: For the treatment of superficial bacterial infections of the external auditory canal caused by organisms susceptible to the action of the antibiotics.
PRECAUTIONS: This drug should be used with care when the integrity of the tympanic membrane is in question because of the possibility of ototoxicity caused by neomycin.
ADVERSE REACTIONS: Stinging and burning have been reported when this drug has gained access to the middle ear.

CONTRAINDICATIONS, WARNINGS, PRECAUTIONS AND ADVERSE REACTIONS COMMON TO BOTH PRODUCTS
CONTRAINDICATIONS: These products are contraindicated in those individuals who have shown hypersensitivity to any of the components, and in herpes simplex, vaccinia and varicella.
WARNINGS: As with other antibiotic preparations, prolonged treatment may result in overgrowth of nonsusceptible organisms and fungi. If the infection is not improved after one week, cultures and susceptibility tests should be repeated to verify the identity of the organism and to determine whether therapy should be changed.
When using neomycin-containing products to control secondary infection in the chronic dermatoses, such as chronic otitis externa, it should be borne in mind that the skin in these conditions is more liable than is normal skin to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as a failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.
PRECAUTIONS: If sensitization or irritation occurs, medication should be discontinued promptly. Patients who prefer to warm the medication before using should be cautioned against heating the solution above body temperature, in order to avoid loss of potency.
Treatment should not be continued for longer than ten days. Allergic cross-reactions may occur which could prevent the use of any or all of the following antibiotics for the treatment of future infections: kanamycin, paromomycin, streptomycin, and possibly gentamicin.
ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. There are articles in the current literature that indicate an increase in the prevalence of persons sensitive to neomycin.

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