

***REPORT ON THE GENERAL MEDICAL AND SURGICAL COMPONENTS OF  
PODIATRIC RESIDENCY TRAINING IN CALIFORNIA:  
A Report to the Medical Board of California and the Board of Podiatric Medicine in  
California***

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During a major portion of 1993, we conducted a study of podiatric residency training in California. Residency programs representative of the various types of institutions sponsoring these programs (by size, geographic location, private or government owned, “teaching hospital” or not, etc.) were selected.

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- I. Council on Podiatric Medical Education – Residency Program Review Process: A Brief Summary.
- II. Council on Podiatric Medical Education – Residency Program Evaluation Form.

## **I. Purpose of Review:**

To examine the training of podiatric residents in the general medical and surgical (non-podiatric) specialties, including subspecialties.

To offer recommendations to strengthen the training of podiatric residents in general medical and surgical specialties, including subspecialties.

## **II. Types of Programs Reviewed:**

Rotating Podiatric Residency (RPR: 12 months) -- This is a general training program that requires the following non-podiatric specialties: a) general medicine, b) radiology, c) pathology and d) surgery/orthopedics. Training in anesthesia is required as part of the surgical rotation. Training in other medical and surgical specialties is determined by the individual program director.

Podiatric Orthopedic Residency (POR: 12 months) -- This is a specialty training program that requires the following non-podiatric specialties: a) general medicine, b) radiology, c) pathology and d) physical medicine and rehabilitation. In the parlance of allopathic medicine, this rotation is more in the nature of physical medicine and rehabilitation than orthopedics.

Podiatric Surgical Residency (PSR: 12 months) – This is a specialty program that requires the following non-podiatric specialties: a) general medicine, b) radiology, c) anesthesiology, d) pathology and e) surgery/orthopedics. Training in other medical and surgical specialties is determined by the individual program director. (Note: Some program directors require the completion of an RPR before entry and in these situations the resident does not repeat training in anesthesiology, pathology and radiology but is expected to receive additional training in medicine and surgery including subspecialties.

Podiatric Surgical Residency (PSR: 24 months) – This is a specialty training program that requires the following non-podiatric specialties: a) general medicine, b) radiology, c) anesthesiology, d) pathology, e) surgery/orthopedics and f) emergency medicine. Training in other medical and surgical specialties is determined by the individual program director. (Note: Some program directors require the completion of an RPR before entry and in these situations the resident does not repeat training in anesthesiology, radiology, and pathology but is expected to receive additional training in medicine and surgery, including subspecialties each year of training.

### **III. General Protocol for Site-Visit:**

A phone call was made by Dr. Medio to the individual program directors to request their participation in the study. The purpose, goals and objectives of the study were described. He also explained that this was a joint effort of the Medical and Podiatric Boards but was not associated in any way with the Council on Podiatric Medical Education (CPME) or their approval status. If the program director agreed to participate, she/he was asked to obtain the approval of the Chief Executive Officer of the sponsoring institution. Upon receiving the CEO's approval, Dr. Medio arranged the date for the site-visit with the program director. Residency programs were assured of anonymity in this report.

Dr. Medio and/or Dr. Nelson then spoke with the program director and explained whom we wished to interview during our visit. It was again pointed out that this was not an evaluation of the program but an opportunity to speak with non-podiatric faculty members about the general medical and surgical aspects of the training program and to observe training sites and methods of supervision.

Drs. Nelson and Medio conducted interviews with the non-podiatric faculty members, with or without the program director present (it was their choice), for about 15 to 30 minutes. In addition, interviews were held with the director of medical education, chief operating officer of the sponsoring institution, podiatric residents and the podiatric residency program director.

The interviews focused on the faculty members' roles and responsibilities in training the podiatric residents and their overall impressions of the residents. More specifically, they were asked about the teaching methods used, the type and extent of supervision employed, the methods of evaluating the residents and handling of "problems" with resident performance, the degree of "hands-on" responsibility given to the residents, the volume and scope of clinical pathologies seen by the residents and when applicable, podiatric residents' interactions with other residents and other types of students (i.e. medical students, physical therapy students, etc.) Each faculty member was also queried about their participation in the CPME on-site review process as well as any recommendations or suggestions to improve the podiatric resident's training in general medicine and surgery. Several faculty members candidly discussed barriers they perceived on the part of medical and surgical colleagues that prevented the podiatric residents from achieving greater participation in non-podiatric clinical areas.

### **IV. Types of Institutions Visited:**

Colleges of Podiatric Medicine -- A.) The California College of Podiatric Medicine (CCPM) in San Francisco is the only school granting the DPM degree in the State. It produces the majority of podiatric residents for the State and provides basic education in general medicine and the sciences basic to medicine. The College also sponsors several residency programs. B.) The Scholl College of Podiatric Medicine in Chicago, representing an out-of-state podiatry college furnishing residents to California programs, was also visited.

The purpose of visiting these undergraduate programs was not to evaluate them but rather for us to better learn about the education in general medical and surgical subjects and the basic sciences. This information provided a better understanding of the depth and level of medical knowledge with which podiatric residents start training.

California College of Podiatric Medicine/USC –Los Angeles County General Hospital -- This facility serves as the major clinical teaching site for the College's Southern Campus for a group of fourth year students as well as sponsoring the largest RPR program in the State. The USC Medical School sponsors residency programs in a broad spectrum of specialties and subspecialties at this medical center.

Department of Veterans Affairs Hospitals -- Two VA hospitals, one in Northern California and one in the Chicago area were selected. Each offered a PSR-12 program, were affiliated as "Dean's Hospitals" with a university medical school and offered other medical and surgical residency programs.

Kaiser Hospitals -- One facility in Northern California was selected. The Kaiser method of operation and financing differs greatly from the other facilities visited. These facilities offer PSR-24 programs.

Community-Based Hospitals -- Two community hospitals in Southern California were selected. Each hospital sponsored only a podiatric residency program, one a single PSR-24 and the other both a PSR-12 and a PSR-24. One of these hospitals was small (less than 99 beds) and the other was medium (200-300 beds.) These are representative of 15 residency programs in the State. In addition, Dr. Nelson audited an accreditation site visit of a community hospital conducted by the Council on Podiatric Medical Education.

Teaching Hospitals and Correctional Facility -- Two teaching hospitals in Northern California and a State correctional facility that are part of the

CCPM residency programs and its undergraduate clinical teaching program were selected.

Also while on the Scholl College visit, we reviewed two residency programs based in University Medical School owned hospitals and one in a teaching hospital closely affiliated with both a medical school and the Scholl College.

## V. Findings:

### A. Character of institutions in which programs are based:

There are two major kinds of institutions sponsoring residency programs in podiatric medicine. These differ in the nature and scope of the training that residents receive in the general medical and surgical content of their programs:

One kind is conducted in large teaching hospitals. These may be Veterans' Administration "Dean's Hospitals," county hospitals affiliated with medical schools, university owned medical centers and some of the hospitals in the Kaiser system. Although not reviewed, the military general/teaching hospitals also would be of this type. These institutions have other medical and surgical residency programs as well as the podiatry program.

The other kind is the small to medium size (i.e. less than 300 bed) community hospital in which Podiatry represents the most significant or even only teaching program in the hospital. Frequently in these hospitals, podiatric surgery represents much of all surgery done in the hospital and therefore the Podiatric Service contributes significantly to the economic well being of the hospital. It also enhances income to the physician members of the hospital staff who receive referrals from the podiatrists or act as co-attendings with them on hospitalized patients.

### B) Expectations, knowledge level and clinical teaching methods:

In all types of settings and programs, we found that first-year residents are expected to function as "members of the health care team." Most attendings and program directors described their functioning and duties as being like that of a junior or senior medical student or as a first year medical resident. It is our impression after talking with many physician and surgeon attendings that the level of knowledge of these first-year residents on beginning a service is that which is expected of a fourth year medical student.

From our own review of two colleges of podiatry, we were not surprised that beginning residents are found to function at a level expected by their physician instructors of third or fourth year medical students. Clearly the basic science instruction in podiatry colleges is very similar to that of a medical school in content and depth. Clinical instruction in the junior and senior years has been quite different. The practical aspects of physical diagnosis is learned in most part by practice on fellow students. This is usually also the case in medical colleges to start but then is reinforced and amplified during clinical clerkships by seeing actual pathology. In podiatry colleges, general medicine and surgical subjects are taught mostly in a didactic manner. However, in the two podiatry colleges we visited, the method instruction in these subjects is changing. Both have been able to make affiliation agreements with major teaching hospitals permitting their students in clinical years to take clinical clerkships in general medicine, surgery and some other clinical areas. These clerkships began in July 1993. We do not have information about the extent to which these changes are occurring in the other five podiatry medical colleges in the United States. As a result of these changes, we anticipate that over the next several years the beginning level of functioning of first year podiatry residents (at least for graduates of the two colleges we visited) will be at a higher level than is now the case. As might be expected, clinical instruction in obstetrics, gynecology and urology is minimal in these colleges. Also, we believe that instruction in the behavioral sciences (psychiatry) is insufficient for graduates to recognize and handle situations that will occur in a podiatric practice.

Particularly in the large teaching hospitals, the first year podiatric residents, rather quickly after an initial orientation and experience on a general medical or surgical service, begin to function in a manner similar to first year medical residents. The podiatric resident becomes a full member of the patient care team and fits well into the hierarchy of medical students, residents at various levels, fellows and attendings. He/she performs histories and physical examinations on assigned patients. On inpatient services, they attend work and teaching rounds with more senior residents and attendings. The podiatric resident presents his patients, reviews and reports on laboratory and X-ray findings and makes daily follow-up notes. When functioning as a first year medical resident on an inpatient service, the podiatric resident usually writes orders in the chart which are counter-signed by a senior resident or attending.

In outpatient services related to a teaching hospital, the podiatric resident functions very much like a junior or senior medical student. He/she usually makes the first contact with the patient, does a complete or at times focused history and physical examination, formulates a diagnosis and management plan and then presents the patient to an attending

physician who reviews the findings, makes suggestions and approves an agreed upon management plan. Prescriptions may be written by the podiatric resident but are signed by the licensed physician attending.

In the teaching hospital, the podiatric resident when assigned to a general medical or surgical service has a number of clinical conferences and other didactic sessions which he is expected to attend and fully participate in. Additionally she/he is expected to make a "presentation" when assigned. In fact, many faculty commented on the teaching contributions made by podiatric residents, both formally and informally. Frequently these are contributions to them and the medical residents and students about topics in podiatry.

In the community hospital programs, we found the expectations and level of functioning more variable than in the teaching hospitals. This was true even between services and supervising physicians within the same hospital. Instruction in core medical and surgical subjects occurs mostly through mentoring by a small number of dedicated, voluntary physician/instructors, who are in private practice. Instruction in the limited subspecialties and subjects more distantly related to podiatry such as obstetrics and gynecology occurs through the process of consultations between subspecialists and the mentoring primary care physicians or podiatrists. Instruction on ambulatory patients frequently occurs outside of the hospital in the mentor's private office. Unlike the teaching hospital setting, there is likely to be less "hands-on" and more observation in the interactions with the patients.

The one-on-one mentoring relationships that occur between the resident and a primary care physician lead to instruction that is individually tailored to the level of knowledge and skill of the resident. This relationship also promotes accurate evaluation of the resident's capabilities. However, in this situation, there can be wide differences in the skills and time devoted to teaching by the mentors. Few didactic patient conferences except for those which are one-on-one with the mentor are available. The spectrum of patient diagnoses seen is limited by the individual's practice and is not equal to those seen in a large teaching hospital. Interaction between students and residents of various disciplines is absent in the community hospital setting with only a podiatric medicine residency. Interaction with other residents (usually podiatric) may only occur during weekly or monthly lectures or journal club seminars jointly sponsored by several institutions.

C) Supervision and Evaluation:

A special interest expressed by members of both the Medical and Podiatric Boards in the supervision being received by podiatric residents led us to pay much attention to the methods and effectiveness of the supervision being exercised by the M.D. and D.O. physicians. In all programs which we reviewed, we found that there was an M.D. or D.O. attending physician responsible for each patient's general medical care. In large teaching hospitals on non-podiatric services, supervision of care by podiatric residents was exercised in a manner identical to that used with medical students or, in a few cases, first year medical residents. Attending physicians made periodic (usually daily) rounds with the housestaff, including podiatric residents, on the service. More immediate supervision on inpatient services was usually given by senior medical and surgical residents. In outpatient situations such close supervision was exercised by either senior residents or attendings. In both inpatient and outpatient situations, histories, physical findings and recommended management, prescriptions, etc. were reviewed and approved by a licensed physician.

When participating in general surgery or other manipulative procedures, the podiatric residents were under the direct observation and control of a licensed physician, who was responsible for the case.

In at least one program in a large teaching hospital, we felt that supervision of the podiatric resident on an emergency service was unnecessarily restrictive to point of being detrimental by limiting the resident's learning and could affect the future safety of the public.

In the community hospital programs, the mentoring process which is the usual method of clinical instruction in non-podiatric subjects also includes supervision. Histories and physical findings are being reviewed and checked by an attending or mentoring physician. The resident's actual "hands-on" management and treatment of patients tends in these hospitals to be less than in the larger, teaching hospitals. The same is also true in the mentoring physicians' private offices where much of the instruction on ambulatory patients occurs. Therefore, there is less concern that a resident will make an error in commission or omission thru lack of supervision. However, in some instances the supervision appeared overly restrictive, possibly inhibiting the resident's learning.

In the large teaching hospitals, there is one physician who is designated as the Director of Medical Education (DME) (or an equivalent title.) This individual is responsible for monitoring all of the graduate medical education programs (including the podiatric medicine residency.) Each residency program director is directly responsible for monitoring the

quality of instruction and supervision given to their residents as well as their residents' performance (both academic and non-academic.) The procedures for: a) evaluating the performance of podiatric residents and b) handling discipline and academic problems of residents (i.e. "due process") must be included as part of the podiatric resident's contract (according to CPME requirements.)

When a podiatric resident is assigned to a non-podiatric medical staff member for a training rotation, that staff member is directly responsible for supervising the podiatric resident. If that individual delegates some supervisory responsibility to a senior resident, the staff member is still responsible. It appears that any problems that occur with the quality of supervision of the podiatry resident are handled between the podiatric medicine residency director and the medical staff member or the department chairperson. However, the DME remains the final arbitrator if necessary.

In hospitals where there was no DME, it was not clear how an unresolved dispute of this nature would be rectified.

#### D) Overall Perceptions of Performance:

Program directors, physician faculty, and hospital directors of professional education were almost unanimous in their positive opinion of residents' performance while on medical and surgical services. Repeatedly we heard statements such as "they perform much better than expected", "they try harder", "we can rely on them", "they teach us things we need to know." We did not encounter, nor were we told about any department or faculty member who had ceased training podiatric medical residents because of problems with the residents or their performance. When as part of our interview, we inquired of chiefs of services about responsibility for and methods of discipline, a frequent reply was "we have never had a problem with a podiatric resident; discipline has never been needed."

These statements plus our own impressions from interviewing residents led us to the conclusion that they indeed do try very hard to make a good impression and many times therefore go beyond what is required or expected. Thus they may at times work longer hours than is optimum for their learning and well-being.

#### E) Research Training:

Compared to most medical and surgical residency programs, exposure to a research environment and interaction with teachers conducting research is non-existent in the community hospital podiatry residency programs we

visited. Probably in most cases this is due to a combination of lack of: a) interest or qualification on the part of the faculty and b) support by hospital administration.

Even in the large teaching hospital setting and in those residency programs associated with the Podiatry College, where research is being conducted by faculty, research exposure is minimal. This is true even for residents in advanced levels of surgical training.

In general, there appears to be a paucity of research in podiatric medicine. However, the emphasis in residency training appears to be on graduating practitioners. We believe this is appropriate for first and second year programs but not for those programs giving advanced levels of surgical training. Except for some scholarships given by the American Podiatric Medical Association for support of podiatrists in graduate school, to our knowledge there are no special graduate programs to train researchers in podiatric medicine.

F) Stipend Support:

Resident stipends vary widely in amount among the programs. In most cases, they are considerably below the mean for medical and surgical residents in the same geographic area. This is true even where podiatric residents carry the same duties and responsibilities (e.g. patient work-ups, on-call, etc.) as first year medical residents in the same institution. An unfortunate consequence of this situation may be that resident applicants are tempted to select programs because of economic rather than academic considerations. However, most of the residents we interviewed denied that salary considerations took precedence over academic considerations for themselves personally. Some residents are leaving podiatry school with large debts and the predominance of low paying programs are making a bad situation worse.

**VI. Recommendations:**

1) Work toward all first-year podiatric residents having a significant portion of their general medical and surgical training in academic health centers and large teaching hospitals which are involved in education for a broad spectrum of disciplines. We believe that the establishment of consortia between podiatric services in community hospitals and general medical and surgical services in teaching hospitals is the most practical means of accomplishing this recommendation if the present number of resident positions are to be maintained in California. The two programs we visited in the Chicago area, where the podiatry training and the general medical and surgical instruction, are entirely given within academic medical centers impressed us with their quality as well as

the exposure of the residents to a research environment and faculty doing research.

- 2) Require all first year podiatric residents to have an emergency room rotation: We believe that for the protection of the public, future practicing podiatrists and more senior podiatric residents should be able to handle potential emergencies that may occur in the office and elsewhere and before other help can be obtained. We make this recommendation being aware that podiatrists are licensed to use local anesthetics and other medications with potential serious side effects. Their presence in hospitals and nursing homes may also result at times in their being the first professional on the scene of critical events of all types.
  
- 3) Increase training in the medical areas of pediatrics, neurology and women's health. Although most practicing podiatrists are caring for women and children, their training includes a paucity of exposure to the special needs and unique medical conditions seen in these patients. This is true during both undergraduate and graduate education in podiatric medicine. Clinical training in neurology, in most cases, tends to be included only incidentally during an internal medicine rotation.
  
- 4) Increase training in the behavioral sciences and certain aspects of psychiatry. Education in the psycho-social aspects of practice appears to us to be deficient at the podiatry college level and not addressed in any formal manner during podiatric medicine residency training. We are not recommending instruction in severe psychiatric illness or a rotation in a mental hospital. What we believe is needed are the skills to recognize mental aberration as well as social, emotional and environmental factors that impede effective treatment and management of ambulatory patients whether they have an illness which is podiatric or affecting other areas of the body. We also believe that this training will serve to enhance communication with patients, in general.
  
- 5) Identify a Director of Medical Education at each training institution who is responsible for resolving problems between the Podiatric Residency Director and the general medical departments.
  
- 6) Increase stipends for podiatric medicine residents which will reflect their duties and responsibilities in patient care. This is not only a matter of fairness vis-à-vis residents in other disciplines, but even more is needed to lessen financial considerations for resident candidates making program choices. Accomplishing this recommendation will require program directors and hospital administrators to seek funding support from multiple sources including GME funding available through the Social Security Act. Some of the programs visited already have stipends equal to those of medical residents in the same institution.

7) Increase involvement of podiatric faculty and podiatric residents in research activities at training sites. The Board of Podiatric Medicine might consider making its approval of three and more year Podiatric Surgical Residencies in the State contingent on the inclusion of research training as part of the curriculum. Institutions sponsoring residency programs in podiatric medicine need to be encouraged to provide support for faculty and resident research. Consideration should also be given to the development of a state-side conference devoted to research in podiatric medicine and where podiatric residents can present their research.

8) Recognize the efforts of the many volunteer Program Directors in the State by encouraging the establishment of paid positions which are commensurate with the time and other demands of the position. We believe that Program Directors have such great responsibilities to the trainees' education and in monitoring quality of training that a salary is needed to assure a full measure of their time and attention. This recommendation is not made because we noted any neglect of duties by the Director of any programs we visited but rather to recognize their efforts in comparison to other medical and surgical program directors.

9) Both Boards receiving this report should encourage the development of mechanisms which will ensure reasonable comparability in content and quality of training in Podiatric Residency programs in California. Already in place are the standards and accreditation procedures which are applied on a national level. In addition, periodic meetings of Program Directors for the purpose of comparing program content, training methods and discussion of new developments and ideas might be sponsored by a professional organization in California. We recommend that the California Program Directors as a body consider the development of an *in-service training examination* to be given on a statewide basis unless such an examination is developed meanwhile at the national level. This in-service examination should be designed to provide feedback to individual residents and program directors with no relationship to licensure or completion of the training program.

## **VII) Conclusion:**

Overall most of the programs reviewed are doing a very good job within the resources available to them. Program directors and faculty (both podiatric and non-podiatric) are conscientious and highly aware of their responsibility to ensure practitioners who will be safe to the public. There is not necessarily one best way to accomplish the objectives of residency training and therefore some of the variability seen in podiatry programs is not a detriment. In their general medical and surgical experiences, the residents are being exposed to appropriate clinical situations that should lead to the majority of graduates being able to recognize general medical conditions likely to affect their management of foot conditions. In general, residents in their general medical and surgical clinical activities are being effectively directed, instructed and supervised by knowledgeable and

conscientious physicians. There is not such a thing as too much education in our opinion and therefore podiatric education could incorporate even more instruction in general medicine and surgery as well as other specialties. The question therefore becomes how far to go? Podiatric medical education would not have to go too much further than where it is in some cases with some individuals now to be the equivalent of the basic education of a physician. There are many analogies between Podiatry as it now stands and Dentistry (especially Oral Surgery), Clinical Psychology, Optometry, and Nursing (as presented by graduate level nurses trained to be nurse practitioners, midwives and anesthetists). Other than for the specific recommendations we make in Section VI for podiatric medical education, the degree to which education in these provisions should be extended and broadened and to approach the education leading to the M.D. or D.O. degree raises policy questions that are beyond the scope of this report but worthy of consideration.

Respectfully submitted:

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