# Integrated Residency Training in Family Medicine and General Practice Dentistry

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General practice dental training and family practice medical training can be combined into one effective integrated program. This combination benefits the patients in a family practice model unit, enhances family practice resident education, and will ultimately benefit patient care delivery. This paper describes the experience of such an integrated program which is now well established.

In the early 1950s, one of the authors (RHL) began a group practice of medicine with three partners in a small town in eastern Washington. The four partners shared one unit of their building with a dentist for whom they had built the usual ubiquitous rental space. Although the arrangement was initially understood to be financial, the partners discovered very early, as did the dentist, that the majority of patients had problems that involved both professions: football injuries, farm accidents, automobile accidents, developmental problems—the list requiring mutual care seemed to go on endlessly. There was never any format as to which professional was called first, and after a year they decided to practice jointly. Cutting a door between the medical and dental units, the two professions proceeded to work together as an early, though undesignated, "interdisciplinary" team. Their dentist soon had them convinced that dental injuries in football were a lifetime disability, often much more disabling than knee and ankle injuries. Through the years of athletic physical examinations, the clinic staff turned down more students because of dental problems than every type of medical disability combined. Yet as much fun and as educational as the sharing of knowledge was for the physicians, the patients were the ones who received the lasting benefits of such integrated care.

When the decision was made to leave private practice to become the director of the Providence Family Practice Residency Program in 1974, the previously mentioned author, (RHL), had an opportunity to use these past experiences in developing a program for joint training of family physicians and dentists.

## Background

Established in 1974, Providence Family Medical Center and Residency Program was the fifth in the University of Washington network of eight family medicine residency programs. A goal of that network has been for each of its residencies to provide unique training possibilities. Because Providence Medical Center itself lies in the very heart of the inner city of Seattle, the obvious task was to create an urban training model. The faculty spent two years developing curriculum, designing a model unit, getting the residency accredited, and obtaining a federal family practice training grant. It was possible to pull together the ideas of a joint program of medicine and dentistry training. Plans were begun then, also, on a model dental unit in space contiguous to the Family Medical Center,

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bringing the unit to 8,400 sq ft. The office, reception, and waiting room spaces were central, and the medical "side," consisting of 12 examining rooms, a clinical laboratory, offices, and consultation rooms, were to the east. The new 1,200 square feet, consisting of a three-chair dental unit and new business offices, were the west "side."

Beyond the enthusiasm of the faculty team at Providence, the full support of the University of Washington Department of Family Medicine was constant. The administration of Providence Medical Center provided not only its support, but the extra space needed for the dental unit. Funding was sought and received from the federal government in the form of a Special Projects Grant.

From the first contact with the University of Washington School of Dentistry, the enthusiasm was great for an affiliated general practice residency in a community hospital. The current national ratio of family medicine residencies to general practice dental residencies is 310 to 256. This latter figure represents a tremendous leap in numbers when one realizes that it was only in 1962 that provision was finally made for general practice residencies in dentistry. The aim of these programs is to prepare residents to manage total oral health care by providing instruction, education, and delivery of care in a wide range of ambulatory and hospitalized patients.

After discovering the relatively recent expansion of general practice dental residencies, the staff surveyed the prevalence of integrated medical/dental health care. A brief questionnaire was devised in the fall of 1976 which was sent to the 285 family medicine residency programs established at that time. Responses were received from 90 percent of them. They were asked if any of them were involved with dentistry in any way; only 30 of the 285 programs replied affirmatively. When asked if any of those had any coordinated dental programs involved in their units, only 15 said they did. In contacting all of those 15 again, it was found that none of the models was similar to the integrated unit that had been developed at Providence.

A similar questionnaire was not sent to any dental residencies because the American Dental Association, in May 1977, confirmed that there were no other integrated family medicine and general practice dentistry residencies operational in the country.

## Description of Integrated Program

What does integrating medical and dental training mean in practical terms? How is it financially possible in the first place? As mentioned above, physical space (in this case, 1,200 square feet) with all ancillary services (heat, light, water, telephone, janitorial services), must be provided by the hospital. Federal grant support is needed for remodeling, equipment, initial supplies, and initial personnel costs. Dental insurance contracts must be negotiated, just as medical insurance contracts are. Medicaid (welfare) does pay for certain dental services. Decisions also must be made about what level of dental care will be provided. The staff jointly decided upon primary and secondary care, preferring to refer patients having major restorative and operative needs. With all of the very expensive work being done elsewhere, huge dental laboratory bills could be avoided. A surprising number of dental patients have some form of dental insurance, and from the figures accumulated in the first six months of operation, projections show that in two years, when the grants run out, the dental unit could be self-supporting.

The billing system has been integrated as well. A new encounter form was designed (Figure 1) so that both medical and dental charges could be coded into the Providence Medical Center computer. Statements show diagnostic codes for medicine and/or dentistry and a clear statement of charges for one or both services.

Another change was made in the medical records. The use of a family folder in which each family member has a chart was continued, but the page sequence was altered to include dental records and progress notes. In addition, the master problem-list page and medication page are used by both family practice and dental residents.

A new patient is able to initiate a chart through either medicine or dentistry. After six months of operation, it was found that half of the dental patients were new to the Family Medical Center and were often referred by the dental residents to the family practice residents for medical care. Thus, referrals work both ways, as had been discovered before in private practice.

All of these modifications were accomplished with minimal personnel increases. By using the central common waiting room, reception area, billing office, and records, it was possible for the unit

**Providence Family Medical Center** 1715 E. Cherry / Seattle, WA 98122 / Phone 326-5581

**ITEMIZED STATEMENT and INSURANCE**
CPT Code 4th Edition

| PFMC No. | Patient Last Name | First | Middle | Birthdate | Age | Sex | Race | Date |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

| Patient Social Security No. | Home Phone | Message Phone | Doctor | # | FC |
|---|---|---|---|---|---|
| | | | | | |

| Guarantor | Social Security No. | Address |
|---|---|---|
| | | |

| Employment | City | State | Zip |
|---|---|---|---|
| | | | |

| Insurance | Group No. | Membership No. |
|---|---|---|
| | | |

| Accident Place | Date | Explanation |
|---|---|---|
| | | |

ASSIGNMENT AND RELEASE: I hereby authorize my insurance benefits be paid directly to Providence Family Medical Center and I am financially responsible for non-covered services, I also authorize the physician to release any information required.

KCM (05) MEDICARE (01) DSHS (02) L & I (40) CHAMPUS (57) BLUE CROSS (04) SELF INS (48) NO INS (00) PRIVATE INS (18) WDS (87) OPEN DOOR (34)

TAX ID # 91-037-3400

Signed

BY

| NEW PT. VISITS | | SPEC. PROCED. | | OFFICE LAB | | DENTAL | | DENTAL | |
|---|---|---|---|---|---|---|---|---|---|
| Init. visit | 90000 | PPD | 86580 | CBC | 85010 | Initial exam | 00011 | Composite 2 surf | 00231 |
| Extended | 90010 | Tine | 86585 | WBC | 85030 | Emerg exam | 00013 | Temp restoration | 00298 |
| Complete | 90015 | EKG tracing | 93005 | HCT | 85055 | Full mouth | 00021 | Endo fill 1 canal | 00331 |
| EST. PT VISITS | | Irrig. ears | 69210 | Retic | 85640 | Panorex | 00033 | Endo fill 2 canals | 00332 |
| Short | 90030 | Audiogram | 92500 | ESR | 85650 | Bitewings | 00028 | Endo fill 3 canals | 00333 |
| Routine | 90040 | Vitalor | 94160 | UA | 81000 | Panorex & Bitwings | 00021 | " over/denture canal | 00516 |
| Intermediate | 90060 | Tonometry | 92100 | Mono test | 86300 | Single film | 00022 | Soft Reline | 00598 |
| Extended | 90070 | Liquid Nitrog. | 17340 | Preg. test | 83160 | Additional film | 00023 | Extr perm single | 00711 |
| Complete | 90088 | Inj. soft tiss. | 20550 | Cult. throat | 87080 | Pt. education | 00133 | Extr each add | 00712 |
| COUNSELING | | Inj./major jt. | 20610 | Cult. urine | 87110 | Prophy adult/arch | 00111 | Extr prim single | 00711 |
| 15 min. | 90820 | Sigmoid | 45300 | Cult. GC | 87080 | Prophy child | 00112 | Extr prim add | 00712 |
| 25 min. | 90801 | I and D | 10060 | Sensitivities | 87120 | Ultrasonic/arch | 00499 | Surg ext erupt | 00721 |
| 50 min. | 90800 | Excis. lesion | 114 _ _ | Wet mount | 87010 | Curettage/quad | 00402 | Soft tissue impac | 00722 |
| AFTER HOURS | | Laceration | 12 _ _ _ | KOH prep. | 87010 | Occl adj limited | 00405 | Part bony impac | 00723 |
| Routine | 90560 | OB care | 59400 | Gram stain | 87000 | Amal 1 surf pri | 00211 | Compl bony impac | 00724 |
| HOME VISIT | | | | Occult blood | 82270 | Amal 2 surf pri | 00212 | Root rec simple | 00725 |
| Routine | 90350 | | | Drawing fee | 99000 | Amal 3 surf pri | 00213 | Root rec diff | 00725 |
| NURSING HOME | | | | R/A | 86360 | Amal 1 surf perm | 00214 | Biopsy oral soft tiss. | 00780 |
| Routine | 90150 | | | CPR | 86140 | Amal 2 surf perm | 00215 | I & D ABS-intra | 00751 |
| | | | | Cold ag glut. | 86150 | Amal 3 surf perm | 00216 | $N_2/O_2$ anal/hr | 00932 |
| | | | | Rh | 86200 | Retentive pins | 00262 | Pal pain Rx | 00910 |
| | | | | Rubella | 86100 | Composite 1 surf | 00230 | Proc visit | 00999 |

DIAGNOSTIC CODES

| DIAGNOSES | CODE NUMBER | N/R | DIAGNOSES | CODE NUMBER | N/R |
|---|---|---|---|---|---|
| | Z | | | Z | |
| | Z | | | Z | |
| | Z | | | Z | |
| | Z | | | Z | |

PATIENT INSTRUCTION

GENERAL INSTRUCTION

MEDICATIONS

Nurse Signature

014-157 **Family Clinic Registration Billing**

MEDICAL RECORDS

Figure 1. Integrated Medical-Dental Patient Encounter Form

manager, receptionists, secretaries, and biller to handle the increased load. Initially, the dental faculty member was hired (a half-time position); he was responsible for unit design and operation, curriculum development and teaching, and supervision. The other half of his time was spent at the University of Washington School of Dentistry. The dental assistant and the dental resident were hired shortly thereafter, and the dental unit was opened.

These changes in program design and the development of a dental training curriculum naturally meant some modification in the family practice curriculum. The faculty's main aim was to train both the dental and medical residents by having them see patients together in actual practice situations in the model unit and in the hospital, and not by increasing the number of lectures and didactic sessions they attended.

In the first year of the residency, the four family practice residents and the dental resident spend the first four weeks together in the model unit. They work with the senior residents and in the first week begin to take over the practices of those graduating residents. During those four weeks, they also spend at least one half-day working with and doing the job of every type of employee in the center, where every employee is considered "faculty," and therefore should teach his/her role in patient care to the residents.

Following these first four weeks, a dental resident, over the course of a year, will have a month of anesthesiology and will then work in the model dental unit four days a week, with a day free for attending various seminars and classes at the University of Washington Dental School. The dental resident will also share night and weekend emergency calls with the University of Washington general practice dentistry residents. He/she is also expected to attend the weekly Tuesday afternoon family medicine didactic programs with the family practice residents. Along with the dental faculty member, the dental resident produces a portion of these programs throughout the year. The dental resident can also undertake special projects, for example, the dental examination of every patient admitted to the rehabilitation center was done for a month in the summer. The dental resident is also available for inhouse hospital consultation requiring a dental opinion. In addition, the Emergency Room refers possible jaw fracture patients for which consultation and special x-rays are needed, available with the Panorex unit.

Both the dental and family practice faculty teach their disciplines to other students from the University of Washington. The Interdisciplinary Grant involved the Schools of Dentistry, Nursing, Medicine, Pharmacy, and Social Work, and enabled the Providence program to obtain full-time a medical social worker and a nurse practitioner, and a clinical pharmacist half time. Students arrive as a team that has been trained together to work with the team assembled at Providence Family Medical Center. This paper deals only with the medicine and dentistry aspects of the team.

## Discussion

Integrating the two professions has provided substantial benefit for all the residents and for the patients as well. The patient population in the central city area was more desperately in need of dental than medical care. The dental unit appointment schedule is already filled weeks in advance. Plans are underway to add a dental hygienist this year and to double the dental residency program within the next year.

Patients appreciate the easy accessibility of more comprehensive health care at the Providence Family Medical Center. The central point of this adventure, however, has been to improve the training of the family practice residents. At the end of the first year of operation, the program seems to be a success. It is improving the quality of training of both professions and the delivery of care to the patients. The only patients unhappy with the change are the children who no longer receive suckers for good behavior.

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