

Gary Shumway's Programming of the Financial Portion of a Dental School Computer System

Between 1978 and the late 1980s, Gary Shumway was the programmer who in concert with me, the Associate Dean of Finance and my assistant, programmed the financial portion of a comprehensive Dental School computer system.

The financial functionality included budgeting, patient accounts receivable, patient billing, insurance billing and corresponding receipt of payment on account. The budgeting software was used to create and manage yearly budgets for the academic and clinical departments, travel funds budgeting and expenditures, creating, printing, and tracking disbursements and producing various reports in support of the School's budgeting process. The budgeting software interfaced with the patient A/R, billing, and cashiering functions such that the debiting and crediting of cost centers and object codes were via specific service codes minimized accounting errors. The comprehensive patient accounts receivable system tracked all dental procedures provided to the patients by the students and the receipt of funds in payment for those procedures. Patient and insurance billing was an integral part of the system we developed where patient payments were collected by cashiers in the clinic. The insurance billing was facilitated via the programmed Clinic Accounts Notebook which tracked financial transactions and agreements-to-pay. Paper billing of various insurance companies was automated with EDI (Electronic Data Interchange) billing of Denti-Cal patients.

The dental school system started with three terminals on a time-shared system with less than one megabyte of data in 1978 to a system in 1995 which supported 70 simultaneous jobs with 140+ operators and some 300 students able to directly access the system. Through the years, the system resided on increasingly capable Data General mini-computers and was written in progressive versions of MIIS, a dialect of MUMPS. Gary was the primary and often sole programmer and co-architect with school personnel during the growth and development of the system and provided on-going support thereafter until 1995.



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