homes, helping their owners in a variety of ways. from keeping track of checking accounts to monitoring lawn sprinkler systems. A key factor in the popularity of the computers is the ease with which they can be "talked to" using a readily understood, high-level computer language known as BASIC.\* This language uses words and phrases which are entered into the computer via a typewriter-like keyboard. This makes it possible for anyone to operate a computer without knowledge of traditionally esoteric computer languages.

The use of a microcomputer to transmit the family care center patient schedule over the hospital television system has proved to be a real aid to communication. The system provides continuous. up-to-the-minute information for the residents, informing them when patients have arrived and are ready to be seen. It even "calls" the resident at the appropriate time. Messages can be relayed to residents, and the midday conference topic displayed via the computer. Those using the system

\*BASIC—Beginner All-Purpose Symbolic Instruction Code

feel it to be beneficial in helping patient flow and time budgeting.

A computer can be purchased for under \$1,000, with peripheral hardware costing approximately \$500-600. An additional cost is involved to connect the computer to the hospital television system.

Since its introduction, it has become increasingly clear that the computer will have a number of other applications in the family care center, including data retrieval and research. The system is adaptable to any hospital with a television system, and its low cost and varied uses make it an attractive addition to a residency.

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## An Improved Encounter Card for Documentation of Clinical Experience

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For previous reports of clinical experience recorded by medical students at Duke University Medical Center, 1,2 the data were collected using E-cards.<sup>3</sup> For computerization the information was coded and transferred to data summary sheets from which keypunching was performed. For the past two years students have been using an improved encounter card from which keypunching is done directly, thus simplifying the process by eliminating the time-consuming summary sheet.

The new encounter card (Figure 1) measures 3×5 inches and is printed on both sides. For each patient seen, the student fills out the left-hand half of the front and back. The cards are submitted at intervals and coded by clerks on the right-hand side. Then keypunching is done directly from the coded cards. A similar card which includes procedures done, as well as problems seen, is available

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DUKE ENCOUNTER CARD (STUDENT)	Side 1	Do Not Use Th	nis Space
Patient's Name(If hospital inpatient, date of last visit)	EN DT	IC ID	1-4
Name of Place Discipline	LOC	D	ISC 13-17
Patient ID or SS —	ID		18-26
Birthdate —	BD		27-34
Sex ———		SEX	RACE 35-36
Race —	1		
Student's Name		STUD ID	37-39
Student Role: Active			ROLE 40
If Hospital Inpatient, Total Number of	ENCO	ENCOUNTERS 41-43	
i Hospital inputiont, 20 th 1 th 1		(continued on back)	
Days Visited	Side		
DUKE ENCOUNTER CARD (STUDENT)			
DUKE ENCOUNTER CARD (STUDENT)  Type of Facility: Hospital: Inpat  Office — Nur. H. — Outpat. Cl  Home — On Job — Delivery  Pub. Health Cl. — Nur			
DUKE ENCOUNTER CARD (STUDENT)  Type of Facility: Hospital: Inpat  Office — Nur. H. — Outpat. Cl  Home — On Job — Delivery -		2 Do Not Use	This Space
DUKE ENCOUNTER CARD (STUDENT)  Type of Facility: Hospital: Inpat  Office Nur. H. Outpat. Cl  Home On Job Delivery -  Pub. Health Cl. Nur  Mental Health Cl ICU -  Other (describe) ER -		2 Do Not Use	This Space
DUKE ENCOUNTER CARD (STUDENT)  Type of Facility: Hospital: Inpat  Office — Nur. H. — Outpat. Cl  Home — On Job — Delivery -  Pub. Health Cl. — Nur  Mental Health Cl — ICU -  Other (describe) — ER -	V OLD	2 Do Not Use	This Space
DUKE ENCOUNTER CARD (STUDENT)  Type of Facility: Hospital: Inpat.  Office Nur. H. Outpat. Cl.  Home On Job Delivery  Pub. Health Cl. Nur.  Mental Health Cl ICU  Other (describe) ER  PROBLEMS NEV	V OLD	2 Do Not Use	This Space  44-45  N/O 46-51
DUKE ENCOUNTER CARD (STUDENT)  Type of Facility: Hospital: Inpat.  Office Nur. H. Outpat. Cl.  Home On Job Delivery  Pub. Health Cl. Nur.  Mental Health Cl ICU  Other (describe) ER  PROBLEMS NEV  1	V OLD	2 Do Not Use	This Space  44-45  N/O 46-51 52-57
DUKE ENCOUNTER CARD (STUDENT)  Type of Facility: Hospital: Inpat  Office — Nur. H. — Outpat. Cl  Home — On Job — Delivery  Pub. Health Cl. — Nur  Mental Health Cl — ICU  Other (describe) — ER  PROBLEMS NEV  1	V OLD	2 Do Not Use	This Space  44-45  N/O  46-51  52-57  58-63
DUKE ENCOUNTER CARD (STUDENT)  Type of Facility: Hospital: Inpat.  Office Nur. H. Outpat. Cl.  Home On Job Delivery  Pub. Health Cl. Nur.  Mental Health Cl ICU  Other (describe) ER  PROBLEMS NEV  1	V OLD	2 Do Not Use	This Space  44-45  N/O 46-51 52-57

for use by family medicine residents, faculty, and practitioners.

Three types of computer analysis are available:

- 1. Patient analyses, which provide information concerning demographic characteristics;
- 2. Problem analyses, which concern the profile of patient problem contacts experienced; and
- 3. Encounter analyses, which describe work load, provider role, and location of activity. Further information concerning programming for these computer applications can be obtained by contacting the author.

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