

N-2347/1-HHS

CLAIMS LINE-ITEM SERIES

Volume 1: CODEBOOKS FOR FEE-FOR-SERVICE CLAIMS

C. E. Peterson, M. Nelsen, D. L. Wesley, E. S. Bloomfield, S. M. Polich

June 1986

HEALTH INSURANCE EXPERIMENT

Rand
SANTA MONICA, CA.

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PREFACE

The codebooks in this volume describe the contents of data files from the Health Insurance Experiment (HIE), a large social experiment conducted by The Rand Corporation from 1974 to 1982 under a grant from the U.S. Department of Health and Human Services, Washington, D.C. The HIE is issuing a number of tape data files concerning the experiment, grouped in series, with associated documentation. Release of documentation is expected to continue through 1986.

This volume is the first of three volumes in the claims line-item series. The codebooks in this volume document service and charge information collected in the "line items" of HIE insurance claim forms submitted by providers or HIE participants for fee-for-service (FFS) medical and dental services, drugs, and supplies. This primary-variable information has been categorized into 14 files--by type of medical or dental service rendered--to facilitate study of the use and costs of such services in the fee-for-service sector.

Primary data concerning the use of a health maintenance organization (HMO) by an experimental and a control group are found in Volume II of the series. Fee-for-service data for use in comparisons of FFS and HMO usage are found in Volume III.

The codes used in the present volume (and in all claims files) are listed and defined in *HIE References: Codes Used in HIE Claims--Diagnoses, Symptoms, Procedures, Drugs, and Supplies*, The Rand Corporation, N-2349/1-HHS, May 1986.

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I. INTRODUCTION

This section presents an overview of the Health Insurance Experiment (HIE) and its data collection and file development efforts. It provides essential background for understanding the contents of this codebook. Section II describes the fee-for-service claims line-item files. Sections III-XVI present the file codebooks.

EXPERIMENTAL DESIGN

The Rand Corporation conducted the HIE from 1974 to 1982 in six sites across the United States: Dayton, Ohio; Seattle, Washington; Fitchburg and Franklin County, Massachusetts; and Charleston and Georgetown County, South Carolina.¹ The main purpose of the experiment was to assess how varying patients' cost of health services affected their use of services, their satisfaction with health care, the quality of their care, and the state of their health. A related purpose was to study how those outcomes were affected by the mode of delivery--fee for service or health maintenance organization (HMO).²

Over the course of the experiment, information of some kind was obtained for 26,148 persons. A total of 24,340 persons were administered a baseline interview (*baseline participants*³), of which 7,700 were ultimately enrolled.⁴ An additional 554 persons were enrolled later, all but a few of them newborns or adopted children

¹The sites were chosen to represent the four census regions of the country and both urban and rural areas. They also differed in the amount of delay to obtain an appointment, reflecting different degrees of stress on the ambulatory medical care system. Site selection is described in Philip J. Held, *Site Selection Criteria for the Health Insurance Study*, The Rand Corporation, N-2266-HHS, May 1985.

²For a discussion of the purposes and design of the HIE, see Joseph P. Newhouse, "A Design for a Health Insurance Experiment," *Inquiry*, Vol. 11, 1974, pp. 5-27. HIE is also called HIS, Health Insurance Study. The terms are synonymous.

³This and other distinctive HIE terms are defined in the Glossary at the end of this document.

⁴The 15,411 persons who did not enroll are called *baseline-only participants*.

under one year of age. Those 8,254 *insured enrollees* were assigned to an experimental health insurance treatment, and data on their use of health services were collected throughout their period of participation.⁵ Another 2,483 *adjunct enrollees* were not assigned to an insurance treatment but resided with insured enrollees or were members of a short-lived control group in Dayton.

Selection of Enrollees

Persons offered enrollment in the experiment represent a random sample from each site, subject to certain eligibility restrictions.⁶ They were chosen by a two-stage baseline selection process. In each site an areawide probability sample of dwelling units was drawn. Their occupants were interviewed for eligibility, and those found eligible were questioned in depth about their socioeconomic characteristics and experience with health care.

Eligibility criteria excluded those whose health care delivery systems differed from options available to the general population. The following groups were excluded:

- Those who were eligible for Medicare or would become so during the experiment, i.e., those 62 years of age and older, or younger than 62 but with a Medicare-eligible condition such as end-stage renal disease.
- Those with family incomes over \$25,000 (1973 dollars).
- Those institutionalized (jail, long-term hospital).
- Veterans with service-connected disabilities.
- Those in the military and their dependents.⁷

⁵Note that "insured" in HIE terminology means only "assigned to an experimental treatment." By the same token, "uninsured" applies only to a participant not so assigned, not necessarily someone lacking health insurance altogether.

⁶Subject also to slight oversampling of low-income families in Dayton, Massachusetts, and South Carolina.

⁷Details of HIE eligibility requirements are in Lorraine Clasquin and Marie E. Brown, *Rules of Operation for the Rand Health Insurance Study*, The Rand Corporation, R-1602-HEW, May 1977, Sec. II.

Project staff verified the accuracy of the information given by baseline participants with employers and insurance companies.

In the second selection stage, HIE staff drew a representative sample of eligible persons to be offered enrollment and assigned each family to one of the insurance plans described below. A sophisticated technique assured that, across plans, families closely resembled each other in 24 health and socioeconomic characteristics.⁸

Experimental Treatments

Sixteen experimental treatments distinguished among coinsurance rates, delivery systems, and maximum out-of-pocket expenditures. All but one of the treatments were health insurance plans, listed below as A-0. Enrollees who had gone through the baseline selection process were assigned to one of the plans. The remaining treatment involved a control group in Seattle, chosen separately.

Insurance Plans. Plans A-N entailed different degrees of cost sharing under the fee-for-service system. Within each cost-sharing group, listed below, plans also differed by the ceiling placed on maximum expenditure. Plan 0 involved participation in a prepaid group practice, a traditional type of HMO.

- A. Free care (0% coinsurance) (one plan).
- B-D. Family pays 25% of its medical bills (25% coinsurance) (three plans).
- E-G. 50% coinsurance (three plans).
- H-J. 50% coinsurance for dental and outpatient mental health services and 25% coinsurance for all other services (three plans).
- K-M. 95% coinsurance (three plans).

⁸The logic and techniques used to determine optimal sample sizes and to assign individual families to experimental plans are described in Carl N. Morris, "A Finite Selection Model for Experimental Design of the Health Insurance Study," *Journal of Econometrics*, Vol. 11, 1979, pp. 43-61.

- N. 95% coinsurance on outpatient services; 0% on hospital care (one plan).⁹
- O. 0% coinsurance if care was received at a Seattle HMO, Group Health Cooperative of Puget Sound; 95% coinsurance if care was received outside the HMO (one plan).

Plans requiring coinsurance (B-N) placed a ceiling on annual out-of-pocket expenditures, above which care was free.¹⁰ In all but one case (N), the ceiling was a specified percentage of the family's income or a dollar limit, whichever was less. The percentage varied with family income and the dollar limit varied with the plan, as indicated below:

<i>Plan</i>	<i>Percentage of Family Income</i>	<i>Dollar Limit</i>
B-D	5, 10, or 15	1000/750 ¹¹
E-G	5, 10, or 15	1000
H-J	5, 10, or 15	1000/750
K-M	5, 10, or 15	1000
N	--	150 per individual; 450 per family

HMO Control Group. A random sample of existing members of the Group Health Cooperative (subject to HIE eligibility requirements) was drawn as a control group for the HMO experimental group assigned to

⁹During the experiment's first year in Dayton, the provisions of plans A-N differed in two ways: Only plan A covered dental services for adults; and the coinsurance rate on plans K-N was 100 percent instead of 95 percent.

¹⁰During the experiment's first year in Dayton, expenditures for outpatient mental health care did not apply toward the ceiling.

¹¹In plans B-D and H-J the \$1000 limit applied during the first two years of enrollment for Dayton families who enrolled from November 1974 to February 1975; and during the first year of enrollment for Seattle families who enrolled from January to September 1976. The \$750 limit applied during subsequent enrollment years for the aforementioned families, and during the entire enrollment period for all other families.

plan O. The control group was formed to compare HMO use by those who had *chosen* that delivery mode (i.e., members of the control group) with use by those experimentally *transferred* to an HMO from the fee-for-service system (i.e., members of the experimental group). Enrollees in the HMO control group continued with the Group Health Cooperative under their prior arrangements but provided the same data as HMO experimental members.

Services Provided

Plans A-O provided the same comprehensive benefits, including hospital, physician, dental, mental health, visual, and auditory services, drugs (including over-the-counter drugs for certain chronic conditions), and supplies. Services of nonphysician providers, such as audiologists, chiropractors, clinical psychologists, optometrists, physical therapists, and speech therapists, were also covered. The only noteworthy exclusions were nonpreventive orthodontic services, cosmetic surgery for preexisting conditions, and outpatient mental health visits exceeding 52 per year.

Enrollees were able to choose the physicians and other persons who provided their health care. However, if those in the HMO experimental group sought care outside the HMO that was available within, they were responsible for 95 percent of the cost. (For covered services, such as dental or chiropractic, that were unavailable at the HMO, members of the experimental HMO group were fully reimbursed.)

Enrollees in the HMO control group retained whatever benefit package they or their employer had purchased from the HMO. Members of both control and experimental groups were reimbursed 5 percent of the cost of care obtained outside the HMO to encourage the reporting of non-HMO care.

Terms of Enrollment

Families who accepted the insurance plan offered from plans A-O were enrolled in the experiment for either three or five years, the term randomly assigned. All members of the HMO control group were enrolled for five years.

Enrollees assigned any benefits from their existing health insurance policies to the HIE during the time they participated. No family was financially penalized by HIE enrollment. Enrollees were reimbursed for the cost of maintaining their policies, and if their HIE plan could, under any conceivable set of circumstances, provide less coverage than their private policies, they were paid the maximum difference.¹²

Table 1 indicates the timing of enrollment in the experiment and number of enrollees insured immediately after the baseline selection process in each site.

DATA COLLECTION

Over the course of the experiment, extensive data were collected on participants' demographic and economic characteristics, health status, and use of health services. Background information was obtained on local health care costs, providers, and types of services rendered. The data collection instruments are described in Table 2.

Table 2 shows the amount and types of data gathered from the various participant groups. The most extensive data, especially longitudinal data on the use of health services, are available from the 8,254 insured enrollees, who participated in the experiment longest. The 15,411 baseline-only participants provided much demographic and socioeconomic data, as well as information on health status, experience with health care, and health-related attitudes. Limited data were obtained for the 2,483 adjunct enrollees.

Several subcontractors to Rand participated in the data collection effort. Until March 1975, Mathematica, Inc., supervised data collection, administered the insurance plans, and processed claim forms. Thereafter, National Opinion Research Center managed data collection and Glen Slaughter and Associates handled insurance administration and claim processing. American Health Profiles, Inc., conducted the medical

¹²Calculation of the maximum difference is described in Appendix A.

Table 1
HIE ENROLLMENT PERIODS

Site	Number of Enrollees ¹	1974	1975	1976	1977	1978	1979	1980	1981	1982
Dayton	1137	Nov.							Feb.	
3-year	533								Feb.	
5-year	604									
Seattle	3112		Jan.						Sept.	
3-year	1500								Sept.	
5-year	1612									
Fitchburg	723		July						Oct.	
3-year	547								Oct.	
5-year	176									
Franklin Co.	889		July						Oct.	
3-year	649								Oct.	
5-year	240									
Charleston	779		Nov.						Feb.	
3-year ²	571				Nov.					
5-year	208									
Georgetown Co.	1060		Nov.						Feb.	
3-year ³	800				Nov.					
5-year	260									
Total	7700									

NOTE: Timelines mark the month and year in which the first person enrolled in the experiment and the month and year in which the last person left the experiment. Data on use of health services continued to be collected from several groups after the end dates shown here: one year afterward for the Dayton 5-year group and Seattle, Fitchburg, and Franklin County 3-year groups; six months afterward for the Dayton 3-year group.

¹Numbers refer to enrollees insured immediately after the baseline selection process. An additional 554 persons were enrolled and insured later, nearly all of them newborns or adopted children under 1 year of age. Figures for Seattle include the HMO control group.

²Some of these enrollees were also members of a preenrollment group between November 1976 and February 1979. An additional 339 persons participated in the preenrollment phase but did not formally enroll in the experiment.

³Some of these enrollees were also members of a preenrollment group between November 1976 and February 1979. An additional 213 persons participated in the preenrollment phase but did not formally enroll in the experiment.

Table 2

PRINCIPAL HIE DATA COLLECTION INSTRUMENTS

Instrument	Topics Covered	Data Collected			From
		How	When		
1. Screening questionnaire [1]	Demographic information to establish basic eligibility	Interview	Beginning of HIE operation in site	Occupants of representative sample of dwelling units on geographic clusters in site	
2. Baseline questionnaire	Income, employment Family composition Health status Health care experience and insurance coverage Satisfaction with medical care	Interview Self-administered	4-6 months before enrollment 4-6 months before enrollment	Baseline participants Baseline participants	
3. Enrollment verification form	Changes in family composition, economics, or insurance coverage since baseline questionnaire	Interview	Between administration of baseline questionnaire and enrollment date	Baseline participants determined eligible	
4. Medical history questionnaire (MHQ), 3 versions by age group: 0-4 years 5-13 years 14+ years	Form A: health status, attitudes, habits Form B: specific medical disorders	Administered by self or parent [2]	Just before enrollment and exit [3]	Insured enrollees	1 ∞ 1
5. Medical screening examination, 3 versions by age group: 0-2 years 3-13 years 14+ years	Physiologic tests	Paramedical personnel	Just before enrollment and exit	Sample of insured enrollees at enrollment; all exiting enrollees	
6. Health report	Use of medical or dental services and time spent obtaining them; any restricted activity or bed disability	Administered by self or parent	Biweekly during period of participation	Insured enrollees [4]	
7. Health care questionnaire, 3 versions by age group: 0-4 years 5-13 years 14+ years	Health status, attitudes, habits (subset of MHQ)	Administered by self or parent	Each anniversary of enrollment except at exit	Insured enrollees	

For footnotes, see p. 10.

Table 2 (cont.)

Instrument	Topics Covered	Data Collected		
		How	When	From
8. Annual income report	Amount and sources of family income, taxes paid	Self-administered	Annually (April)	Head of insured family
9. Periodic employment report	Wages, hours worked, family payments for care of children or elderly, government program benefits received	Self-administered	Semiannually	Enrollees (head and family members 16 and older)
10. Assets and debts questionnaire	Family assets and liabilities	Self-administered	Exit	Head of insured family
11. Knowledge of coverage questionnaire	Details of HIE insurance plan	Self-administered	Specified intervals [5]	Insured enrollees
12. Insurance abstraction	Details of selected insurance policies	Abstraction	At time of knowledge of coverage questionnaire	Insurance company brochures
13. Chronic condition questionnaire	Status of condition, correctness of diagnosis, adequacy of treatment	Physician interview	At exit medical screening examination	Sample of insured enrollees found to have certain chronic conditions [6]
14. Evaluation questionnaire	Perceptions and attitudes about HIE and health care system	Self-administered	Exit	Head of insured family
15. Health notice	Use of medical or dental services	Administered by self or parent	Biweekly during preenrollment phase (South Carolina); 6 months-1 year after exit (other sites)	Preenrollees (So. Carolina), insured enrollees who have exited (other sites)
16. Medical expense report (MER)--fee-for-service claim form, 4 types: Doctors' services and supplies Dental care Hospital and extended care Pharmacy	Each use of medical or dental service, drugs, and equipment; reason or diagnosis; treatment	Administered by self or parent	Time of occurrence	Insured enrollees and providers/suppliers

For footnotes, see p. 10.

Table 2 (cont.)

Instrument	Topics Covered	Data Collected		
		How	When	From
17. Services rendered report (SERR)--HMO equivalent of MER [7], 2 types: Doctors' services and supplies Hospital and extended care	Each use of medical service provided by HMO; reason or diagnosis; treatment	Abstraction	Annually to cover entire previous year	HMO records for insured enrollees in HMO experimental and control groups
18. Factor price survey	Wages and benefits of selected hospital personnel [8], average daily inpatient population	Phone and mail	Semiannually	Sample of local hospitals
19. Consumer price index	Prices of selected nonmedical products in the six HIE sites	Phone and inspection	Semiannually	Sample of local retailers
20. Physician capacity utilization survey (PCUTS)	Availability of services [9]	Phone	Annually	Sample of local physicians [10]
21. Dentist capacity utilization survey (DCUTS)	Similar to PCUTS	Phone	Annually	Sample of local dentists [11]

1. Administered as a separate questionnaire only in Dayton; part of baseline questionnaire in the other sites.
2. When "parent" appears in this column, a parent was asked to provide data for children 13 and younger.
3. "Exit" refers to normal departure from the experiment after completing the assigned enrollment period, three or five years. Those who "attrited," or voluntarily left the experiment early, received an "attrition" MHQ that was identical to the exit MHQ.
4. In the first year of the experiment in Dayton, the health report was administered weekly to a random half of Dayton enrollees. In the first year of the experiment in Massachusetts and South Carolina, 25 percent of enrollees were exempted to measure the reporting requirement's effect on the use of health services. Also at one point virtually all participants stopped filling out health reports, for budgetary reasons.
5. Intended intervals were enrollment, 18 months, 3 years, and 5 years after enrollment (the last only for the 5-year participants). Actual mailings approximated those intervals in Massachusetts and South Carolina; the first mailing was 2-1/2 years and 1 year after enrollment in Dayton and Seattle, respectively.
6. Hypertension, diabetes, thyroid diseases, chronic heart diseases, chronic lung diseases, joint diseases, ulcers, cerebrovascular disease.
7. Pharmacy data were obtained directly from an HMO-supplied computer tape. Dental care was not available through the HMO; HMO participants reported claims for dental care and other non-HMO services on the MER.
8. Categories of personnel: registered nurses (general-duty), medical technicians, licensed professional nurses, nursing aides, kitchen helpers, general stenographers, and maids or porters.
9. Waiting time for appointments; appointments per hour; patients seen in office, home, and hospital; weekend office hours; office staffing; cost of office visit; whether new patients accepted.
10. Physicians (M.D. or D.O.) specializing in general practice, internal medicine, and pediatrics.
11. Except in Fitchburg, Franklin County, and Georgetown County, where all dentists were surveyed.

screening examinations at enrollment (October 1974 through January 1977); CompuHealth administered those examinations at exit (October 1977 through December 1981).

FILE DEVELOPMENT

Subcontractors sent the collected data to Rand, either in hardcopy form or as cleaned data tapes. At Rand the hardcopy data were encoded for machine readability and subjected to computerized checks for logical consistency and adherence to specified response ranges; outliers were checked only for fidelity to the original response and otherwise left unchanged. Limited cross-checking was done to assess logical consistency among a respondent's answers. All identifiers permitting information to be linked to a specific respondent were replaced twice to protect respondents' privacy.¹³ The cleaned records were then arranged in the HIE version of standard computer file format, and the resulting files of *primary variables* made available for HIE analyses.

When an analyst needed information that required manipulation of primary data, *derived variables* were constructed. The analyst and a programmer determined a suitable way of obtaining the information by extracting, aggregating, or transforming primary data, and the programmer wrote the appropriate logic. With the analyst's approval, the new variable was entered on the master file.

Both primary and derived variable files are being issued to the public in a number of topical series. Appendix B provides a complete list of the files to be issued.

The machine-readable tape for each file includes data in both SAS¹⁴ (Statistical Analysis System) and character formats, and an index of character-format variables.¹⁵

¹³The first conversion was known only to the subcontractor, the second only to Rand. Neither institution could make the full link from the respondent's name to his or her identifier on the analytic files.

¹⁴A registered trademark of the SAS Institute, Inc.

¹⁵This is the content of all files issued by Rand. Other institutions (e.g., National Archives) will distribute these files and may alter their contents.

A codebook is provided for each file. This volume contains the codebooks for the fee-for-service claims line-item files, which are primary-variable files in the claims line-item series. Section II describes the files; Secs. III-XVI present the file codebooks.

II. THE FEE-FOR-SERVICE CLAIMS LINE-ITEM FILES

The fee-for-service (FFS) claims line-item files document primary data taken from insurance claims submitted by FFS medical and dental providers¹ for services, drugs, and supplies rendered to HIE participants. Each instance of a billed service, drug, or supply on a claim form is called a "line item." Line-item data and other relevant data from the claim forms were combined to compose the records found in these files; there is one record for each line item. The line-item records were organized into 14 files according to the type of medical or dental service involved. Thus, a claims line-item file contains all the instances of a certain kind of health service. Table 3 gives a brief overview of the FFS claims line-item files and highlights some of the variables in each file.

INSTRUMENT DESIGN AND LOGIC

Specially designed insurance claim forms called MERs (Medical Expense Reports) were the principal source of information concerning all billed services rendered to HIE participants. There were four main types of MERs, reflecting the four basic kinds of services for which participants could make a claim:²

- MER A - Physicians, Doctors, Suppliers and Outpatient MER
- MER B - Pharmacy MER
- MER C - Inpatient Hospital and Skilled Nursing Care MER
- MER D - Dental Service MER

On each MER, providers were asked to itemize all services, and for each give the date, the amount charged, and other related information.

¹"Providers" include hospitals, clinics, physicians, laboratories, pharmacies--in short, any person, institution, or organization who provided medical or dental services, drugs, or supplies to an HIE participant.

²A fifth MER, Prenatal Service Medical Expense Report, was designed to capture only services provided during noncharge prenatal visits; information received on the fifth MER was used to clarify information about prenatal care received on MER A.

Table 3
FFS CLAIMS LINE-ITEM FILES

File	Sample	Variables
(01) Inpatient Services Billed by Institutions	Hospital claims related to an inpatient stay in a hospital or nursing facility	Diagnoses, categories of hospital service, charges, noncovered charges
(03) Inpatient Physician Procedures Billed by Institutions	Hospital claims for hospital-employed physician procedures and services	Physician services, charges, noncovered charges, diagnoses, referral physicians
(04) Drugs Prescribed by Physicians	Drug prescriptions or suggestions written by a physician or independent health specialist	Prescribed drugs, generic codes, symptoms, diagnoses, treatment history/status (no charges)
(05) Supplies Prescribed by Physicians	Supply prescriptions or suggestions written by a physician or health specialist	Supplies, symptoms, diagnoses, treatment history/status (no charges)
(06) Services Rendered by Physicians	Claims by independent physicians and health professionals for inpatient and outpatient services	Services and diagnoses, symptoms, referral physicians, treatment history/status, charges, noncovered charges
(08) Drugs Sold by Physicians	Physician or health specialist claims for drugs sold to the patient by physician or specialist	Drugs, generic codes, symptoms, diagnoses, dosage instructions, treatment history/status, charges, noncovered charges
(09) Supplies Sold by Physicians	Physician or health specialist claims for supplies sold to the patient by physician or specialist	Supplies, symptoms, diagnoses, treatment history/status, charges, noncovered charges

Table 3 (cont.)

File	Sample	Variables
(10) Injections Administered by Physicians	Physician or health specialist claims for injections administered	Injected drugs, generic codes, symptoms, diagnoses, treatment history/status, charges, noncovered charges
(11) Outpatient Services Billed by Institutions	Hospital claims for outpatient services	Diagnoses, services, symptoms, treatment history/status, charges, noncovered charges
(12) Services Rendered by Dentists	Claims for dental services rendered	Symptoms, treatment plan, dental services, charges, noncovered charges
(13) Drugs Prescribed by Dentists	Drug prescriptions or suggestions written by a dental provider	Drugs, generic codes, treatment plan, symptoms (no charges)
(15) Drugs Purchased	Claims for drugs purchased other than from a physician or specialist (e.g., at pharmacy)	Drugs purchased, dosage instructions, generic codes, charges, noncovered charges
(16) Supplies Purchased from Pharmacies	Claims for supplies purchased primarily at pharmacies (eyeglasses and hearing aids not included)	Supplies purchased, diagnoses, charges, noncovered charges
(18) Supplies Purchased from Nonpharmacy Suppliers	Claims for supplies purchased primarily from opticians and nonpharmacy suppliers (includes eyeglasses and hearing aids)	Supplies purchased, diagnoses, charges, noncovered charges

Also, each MER type collected the same identifying information (patient's name, date of the service, provider information, etc.). Some MERs collected information common to other MERs (for example, diagnosis information was collected on physician and hospital MERs but not pharmacy MERs), and each MER collected information unique to itself.

For example, examine MER A, the physician, doctor, supplier and outpatient MER shown in Fig. 1.³ The line items are entered under Item 20. Note that the form allows for multiple dates of service; thus, multiple visits may have been recorded on a single MER. Related information includes the place of the service, the type of office visit, and the treatment or problem for which the service was rendered. Charges for drugs or supplies prescribed are not requested on MER A because such charges are normally rendered at the pharmacy and would show up on a pharmacy claim (MER B). However, because the prescription is part of the charged services of the physician, it is considered a line-item service. Drugs or supplies sold directly to the participant by the physician are listed and charged in Item 20.

THE CLAIMS CODING PROCESS

Information concerning each line item was hand-copied onto data entry coding sheets. Information regarding the payment of the claim was added (e.g., the amount not covered, and the amount reimbursed by the HIE). Also added was supplemental coding information derived from existing coding systems: diagnosis codes from the *Hospital Adaptation of the ICDA (HICDA)*⁴; medical reason-for-visit codes from the *National Ambulatory Medical Care Survey: Symptom Classification (NAMCS)*⁵; physician procedure/service codes from the 1974 revision of the *California Relative Value Studies (CRVS)*⁶; dental procedure codes from

³MERs B, C, and D are presented in Appendixes E, F, and G, respectively.

⁴Commission on Professional Hospital Activities, *Hospital Adaptation of the ICDA (International Classification of Diseases Adapted for Use in the United States)*, 2nd Edition, Ann Arbor, MI, May 1973.

⁵National Center for Health Statistics, Washington, D.C., May, 1974. Reprints available from National Technical Information Service, Springfield, VA (Document Number TB-289-245).

⁶California Medical Association, *California Relative Value Studies*, San Francisco, CA, 1975.

FAMILY HEALTH PROTECTION PLAN

PHYSICIANS, DOCTORS, SUPPLIERS AND OUTPATIENT MEDICAL EXPENSE REPORT

(Use this form for all outpatient charges: clinics, surgery, emergency, etc.)
MAIL TO: FAMILY HEALTH PROTECTION PLAN, P.O. BOX 2076, Oakland, CA, 94604

PART 1 PARTICIPANT TO FILL IN ITEMS 1 THROUGH 14 PLEASE PRINT OR TYPE									
1. Last Name of Patient		First		M.I.	2. Sex	3. Age	4. Patient's Family No.		
5. Patient's Address		City, State, Zip Code					6. Patient's Individual No.		
7. What Was The Major Reason or Symptom For This Visit To The Doctor?				8. Was Illness or Injury Employment Related? YES <input type="checkbox"/> NO <input type="checkbox"/>		9. Was Illness or Injury Accident Related? YES <input type="checkbox"/> NO <input type="checkbox"/>		10. Date of Injury or Accident <div style="border: 1px solid black; width: 100px; height: 20px; margin: 5px;"></div>	
11. Describe how and where accident occurred				12. Name of Doctor, Supplier or Outpatient Facility		13. Has the Patient Ever Visited This Doctor, Supplier or Outpatient Facility Before? YES <input type="checkbox"/> NO <input type="checkbox"/>			
14. I authorize any holder of medical or other information about the patient to release to the Family Health Protection Plan or its intermediaries any information needed for this or related medical reports. I permit a copy of this authorization to be used in place of the original. In conformance with the Family Health Protection Plan Enrollment Agreement, all health care benefits covering the Patient are hereby assigned to the Family Health Protection Plan.									
<div style="display: flex; justify-content: space-between;"> <div style="width: 40%;">SIGN HERE </div> <div style="width: 30%;">Signature of <u>Adult Participant</u> or <u>Guardian of Minor Participant</u></div> <div style="width: 20%;">Print Adult's Name</div> <div style="width: 10%;">Date Signed</div> </div>									

PART 2 DOCTOR OR SUPPLIER TO FILL IN ITEMS 15 THROUGH 29 PLEASE PRINT OR TYPE																																																			
15. Full Name of Referring Doctor: <u>IF NONE, WRITE NONE.</u>					16. Full name(s) of Provider(s) to Whom You Referred Patient for Consultation, Lab Tests, or Other Services: <u>IF NONE, WRITE NONE.</u>																																														
17. Describe the Primary Problem or Diagnosis Which Brought the Patient to Your Office and Any Other Problem(s) for Which You Supplied Treatment. Please List Primary Problem or Diagnosis on Line A.						18. Type of Problem (check one)		19. Treatment History (omit if well care or pregnancy)																																											
A.						<input type="checkbox"/> Acute Well Care (or pregnancy) <input type="checkbox"/> Flare-up of Chronic Chronic (not flare-up)		<input type="checkbox"/> Initial Visit for this episode <input type="checkbox"/> Repeat Visit for this episode																																											
B.						<input type="checkbox"/> Acute Well Care (or pregnancy) <input type="checkbox"/> Flare-up of Chronic Chronic (not flare-up)		<input type="checkbox"/> Initial Visit for this episode <input type="checkbox"/> Repeat Visit for this episode																																											
C.						<input type="checkbox"/> Acute Well Care (or pregnancy) <input type="checkbox"/> Flare-up of Chronic Chronic (not flare-up)		<input type="checkbox"/> Initial Visit for this episode <input type="checkbox"/> Repeat Visit for this episode																																											
D.						<input type="checkbox"/> Acute Well Care (or pregnancy) <input type="checkbox"/> Flare-up of Chronic Chronic (not flare-up)		<input type="checkbox"/> Initial Visit for this episode <input type="checkbox"/> Repeat Visit for this episode																																											
KEY Place of Service Codes: O = Doctor's Office, IL = Independent Laboratory, H = Patient's Home, IH = Inpatient Hospital, NH = Nursing Home or SNF, ER = Emergency Area, OH = Outpatient Hospital, including Hospital Clinic and Outpatient Surgery, SC = School Clinic, CC = Company Clinic, OL = Other Location, including Other Non-Hospital Clinic. Type of Visit Codes: 1 = Minimal Service, 2 = Brief Examination, 3 = Limited Examination, 4 = Intermediate Examination, 5 = Extended Examination. S = Comprehensive Examination, 7 = Unusually Complex Examination. SEE DETAILED INSTRUCTIONS ON REVERSE SIDE. For Inpatient Services, Omit 18, 19, and 21.																																																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">20</th> <th style="width: 10%;">A. Date Of Service</th> <th style="width: 10%;">B. Place of Service Use code above</th> <th style="width: 30%;">C. Describe Each Medical or Surgical Procedure and Other Service or Supplies Furnished For Each Date, including Specific Lab Tests and the Specific Name of Any Drug Injected.</th> <th style="width: 10%;">D. Type of Office Visit Use code above</th> <th style="width: 10%;">E. Relate Treatment to Problem by Ref. to 17 A, B, C or D above</th> <th style="width: 10%;">F. Charge</th> </tr> </thead> <tbody> <tr><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>2</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>5</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>										20	A. Date Of Service	B. Place of Service Use code above	C. Describe Each Medical or Surgical Procedure and Other Service or Supplies Furnished For Each Date, including Specific Lab Tests and the Specific Name of Any Drug Injected.	D. Type of Office Visit Use code above	E. Relate Treatment to Problem by Ref. to 17 A, B, C or D above	F. Charge	1							2							3							4							5						
20	A. Date Of Service	B. Place of Service Use code above	C. Describe Each Medical or Surgical Procedure and Other Service or Supplies Furnished For Each Date, including Specific Lab Tests and the Specific Name of Any Drug Injected.	D. Type of Office Visit Use code above	E. Relate Treatment to Problem by Ref. to 17 A, B, C or D above	F. Charge																																													
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22. Name and Address of Doctor or Supplier				23. Social Security or Provider Tax ID Number		24. TOTAL CHARGE		21. Were Any Drugs Prescribed? Were any Supplies Prescribed or Suggested? <input type="checkbox"/> Yes <input type="checkbox"/> No																																											
Telephone Number				25. AMOUNT PAID, IF ANY		26. BALANCE DUE		A. If yes, specify drug(s) and/or supply(ies): B. Relate to Problem by Reference to 17 A, B, C or D above																																											
27. I hereby certify that the services and/or supplies listed above have been provided on the date(s) shown.								Date Signed																																											
PROVIDER'S SIGNATURE																																																			
28. I hereby authorize payment directly to the above-named provider of the benefits otherwise payable to me but not to exceed the charges shown. I understand that I am financially responsible for any charges not covered by the Family Health Protection Plan.								Date Signed																																											
ADULT PARTICIPANT'S SIGNATURE																																																			

HIEI #971 REV. 1-77 15M 8/78

MAIL TO FHPP

Fig. 1 -- Physicians, Doctors, Suppliers and Outpatient MER

the American Dental Association (ADA) procedures list⁷; drug identification codes from the *National Drug Code Directory*⁸; and drug therapeutic class codes from *AMA Drug Evaluations, 1973*.⁹ For some types of data, HIE researchers developed their own coding systems (e.g., supply codes) or added categories to existing coding systems (e.g., diagnosis codes). Codes and definitions for all existing and supplemental codes used in the claims files are combined in one reference volume.¹⁰

THE SAMPLE

Records in these files consist of line-item data taken from claims filed for reimbursement for health services provided to enrolled participants. If a participant used no health services during the experiment, there will be no record for that person in the claims line-item files. The number of records per person in these files vary according to the number of line items on submitted claims.

All the records for participants enrolled in the FFS insurance plans are found on these files and comprise the majority of the records. Some FFS records for participants enrolled in the HMO insurance plan or the HMO control group¹¹ are also found on these files: (1) Dental and chiropractic care (not available at GHC) were covered by the HIE for the GHC experimental group and reimbursed 100 percent; (2) FFS services not covered by GHC were reimbursed 5 percent for the GHC experimental and control groups. FFS claims covered by GHC are found on the HMO claims line-item files.¹²

⁷"Code on Dental Procedures and Nomenclature," *Journal of the American Dental Association*, Vol. 85, October 1972.

⁸Public Health Service, U.S. Dept. of Health and Human Services, Washington, D.C. 20204, June 1972.

⁹Second edition, Publishing Sciences Group, Inc., Acton, MA.

¹⁰M. Nelsen and C. A. Edwards, *HIE References: Codes Used in HIE Claims--Diagnoses, Symptoms, Procedures, Drugs, and Supplies*, The Rand Corporation, N-2349/1-HHS, May 1986, hereafter referred to as *Codes Used*.

¹¹As mentioned above, the HMO was Group Health Cooperative (GHC) of Puget Sound, a large prepaid group practice located in Seattle, Washington.

¹²Some of these claims were also included in the FFS claims line-item files. They have a value of 48 in DEI5560 (Reason for noncoverage) and are duplicates of records on the HMO line-item files.

USING THE FFS CLAIMS LINE-ITEM FILES

Time Frame

The primary time units for economic analysis of claims data are the "contract years," the 12-month periods during which medical expenditures covered by the HIE insurance plans were counted toward the Maximum Dollar Expenditure (MDE) of the family. The MDE was the maximum yearly out-of-pocket expense that was to be paid by an HIE-insured family before health care was free. The amount depended on the family's assigned insurance plan and the family's income.

The contract year began on the enrollment date and ended on each anniversary of the enrollment date. There were several enrollment dates at each site, but each member of a given family shared the same enrollment date. Each contract year may span two calendar years. The possible enrollment dates for each site are listed in Table 4.

Table 4

ENROLLMENT DATES

Dayton	Seattle	Massachusetts	South Carolina
11-01-74	01-01-76	07-01-76	11-01-76 (5 yr.)
12-01-74	02-01-76	08-01-76	12-01-76 (5 yr.)
01-01-75	03-01-76	09-01-76	12-31-76 (5 yr.)
02-01-75	04-01-76	10-01-76	01-31-77 (5 yr.)
	05-01-76		11-01-78 (3 yr.)
	06-01-76		12-01-78 (3 yr.)
	07-01-76		01-01-79 (3 yr.)
	08-01-76		02-01-79 (3 yr.)
	09-01-76		

NOTE: The three-year and five-year groups enrolled at the same times in the locations above, and thus exited two years apart. In South Carolina, the three-year and five-year groups enrolled two years apart and exited at the same time.

Detailed information concerning an individual's coverage is available in the eligibility-family changes file¹³ of the master sample series. This file provides information on the proportion of time the individual was eligible for HIE coverage in each year.

The Insurance Family

The HIE had a number of ways of grouping participants into families, each designed to meet a particular analytical need. For the claims series and most of the economic analyses of claims, the relevant family unit was called the "insurance family." Insurance policies were issued to these insurance families rather than to individuals. The insurance family concept is important because it was the out-of-pocket expenditures of all insurance family members that were counted toward the MDE. However, *the claims line-item files are linked only to individuals*. Family and household identification numbers that connect individuals with their insurance families are found in the eligibility-family changes file¹⁴ of the master sample series.

Reconstructing Patient Histories

It is important to remember that *every line item in the line-item files can be linked to its original MER by its claim number*, and linked to other concurrent line items by their common dates of service, participant numbers, and provider numbers. Analysts can link MERs for analysis by using participant or provider numbers. Thus, claims can be reconstructed and linked in whatever detail is desired. As noted above, a single MER may have documented several visits; thus, line items with the same claim number may be from more than one visit to that provider. Users should observe dates of service to identify multiple visits from a single claim.

¹³S. M. Polich and C. d'Arc Taylor, *Master Sample Series, Vol. I: Codebook for Eligibility-Family Changes File*, The Rand Corporation, N-2264/1-HHS, May 1986.

¹⁴Ibid.

Also, because one correctly completed MER could result in entries in several different line-item files, it may sometimes involve considerable tracking to obtain a clear picture of what was rendered to a patient during one visit. Refer again to Table 3, FFS Claims Line-Item Files, to observe the following hypothetical situation:

A patient visited a physician as an outpatient, the patient received an injection, the physician prescribed some medicine, and the physician obtained a Pap smear which was sent to a laboratory for analysis. That could result in various records on several line-item files: One record on the physician services file (File 06) would indicate the charge for physician services and another would indicate the laboratory charges if the laboratory billed the participant directly. Note that the laboratory charge might be billed at a later date than the office visit because of the time required to perform the lab analysis. The injection charge would appear in File 10, and the records for any drugs the physician prescribed would show up in File 04. File 15 would contain the information indicating when and where the prescription was filled and how much it cost. If the same situation occurred in a hospital emergency room, with the private physician meeting the participant there, a record for the hospital emergency room charges would also exist in File 11.

The complexity and variety of records were also the result of differences in billing practices. For example, some hospitals bill separately for a delivering mother and her newborn, while others provide only one bill. An inpatient surgical procedure may call forth three bills: one from a hospital, a second from a private surgeon, and a third from the private anesthesiologist. The same surgery taking place in a county hospital with house staff may result in only one bill, the hospital's. In addition, analysts should be aware that some hospitals also submitted more than one bill over the course of a participant's hospital stay, i.e., separate inpatient MERs that were recorded and paid separately. Similar billing variations exist for outpatient services, as in the example of laboratory billing given above.

Line-item files will provide a true reconstructive picture only when the analyst and the programmer combine them with care, taking into account variations in medical practice and billing practice. Analysts will often have to look at many files to obtain a complete picture of services rendered on a given date by a particular provider.

RELATED FILES

HMO Claims Line-Item Files

The HMO claims line-item files¹⁵ are similar to the FFS claims line-item files. They contain data concerning the health services, drugs, and supplies provided to GHC experimental and control group participants by GHC. Because GHC does not bill its participants, line-item information was abstracted from GHC records and charges were imputed for these participants.

Claims from *FFS providers* that were *completely reimbursed* by GHC were treated as GHC-provided services and included in the HMO claims line-item files, with their charges also imputed.¹⁶

Seattle FFS-Claims-for-HMO-Comparison Files

Because of planned similarities in the Seattle FFS and HMO populations, Rand researchers were able to use the Seattle FFS participant data for comparison of health services utilization with that of the HMO group.¹⁷ However, because of a great many differences in types and valuations of medical services within the FFS and HMO systems, the line-item data from the Seattle FFS and HMO claims line-item files required intermediate analytic steps to render them comparable. The

¹⁵To be issued as part of HIE documentation. See Appendix B for order information.

¹⁶Some of these claims were included in the FFS line-item files by mistake. On the FFS line-item files, they have a value of 48 in DEI5560 (Reason for noncoverage) and are duplicates of records on the HMO line-item files.

¹⁷For detailed information on the Rand analysis, see W. G. Manning et al., *A Controlled Trial of the Effect of a Prepaid Group Practice on the Utilization of Medical Services*, The Rand Corporation, R-3029-HHS, September 1985.

Seattle FFS claims-for-HMO-comparison files¹⁸ represent Seattle FFS data that have been adjusted for this comparison. The major comparison step involved imputing the line-item charges for Seattle FFS participants using the same imputation method as was used for the HMO system. Users who compare FFS and HMO usage should consult the Seattle FFS claims-for-HMO-comparison files for further information concerning the steps necessary in such comparisons.

Aggregated Claims Series

Derived-variable files were created by aggregating the primary-variable claims line-item data in different ways to suit varied research purposes. Some of these derived-variable files may be of help to researchers for preliminary analyses because they represent a great number of calculations and aggregations that have already been made. In the aggregated claims files, expenditures for health care were aggregated by participant contract year, by covered visits for health care, and by episodes of treatment. Table 5 presents the files in the aggregated claims series, with a brief summary of the variables contained in each file or set of files.¹⁹

Master Sample Series

To select analytic subsamples using particular demographic and eligibility criteria, reference to the master sample series will be necessary. Volume I, the eligibility-family changes file, provides data concerning eligibility and family changes among enrollees.²⁰ Volume II, the full sample demographic file, presents demographic data for all enrollees and anyone considered for enrollment.²¹ Volume III, the supplemental data file, includes information about people who refused enrollment, Seattle participants who moved, and mothers of newborns.²²

¹⁸To be issued as part of HIE documentation. See Appendix B for order information.

¹⁹For order information concerning these files, see Appendix B.

²⁰Polich and Taylor, op. cit.

²¹S. M. Polich and C. d'Arc Taylor, *Master Sample Series, Vol. II: Codebook for Full Sample Demographic File*, The Rand Corporation, N-2264/2-HHS, May 1986.

²²To be issued as part of HIE documentation. The contents of this volume have not been finalized. See Appendix B for order information.

Table 5
AGGREGATED CLAIMS SERIES

File	Sample	Variables
FFS annual expenditures and visit counts	All insured FFS participants; one record per person per year	Annual totals for inpatient, outpatient, mental, and dental expenditures; annual counts of hospitalizations, physician visits, nonphysician visits, mental health visits, and dental visits.
HMO annual expenditures and visit counts (includes Seattle FFS)	All insured Seattle FFS and HMO participants and HMO control group in Seattle; one record per person per year	Annual totals for inpatient, outpatient, mental, and dental expenditures; annual counts of hospitalizations, physician visits, nonphysician visits, mental health visits, and dental visits.
FFS visits -inpatient -outpatient -dental	Claims for health services for FFS-insured persons only; dental file includes claims for all insured persons; one record per person-provider-date of service	Covered expenses, visit type, diagnosis, procedure codes.
HMO and Seattle FFS visits -inpatient -outpatient	Claims for health services for insured Seattle FFS and HMO participants; one record per person-provider-date of service	Imputed expenses, visit type, diagnosis, procedure codes.
FFS treatment episodes and annual episode counts	Episode of treatment for insured FFS participants; one record per episode	Covered expenses summed by episode of treatment, diagnosis, episode type, amount of maximum dollar expenditure (MDE) remaining at beginning and end of episode.
	Episode counts and expenditures for insured FFS participants; one record per person per year	Annual episode counts and expenditures summed by type: acute, chronic, well care, outpatient, dental, and hospital.

THE CODEBOOKS

Organization

Each file in this volume has two main parts:

- Introduction: information on the data sources for the file, and notes concerning variables that require explanation.
- The file codebook: variable descriptions of each variable on the file.

The variable descriptions form the core of the codebook. They are arranged in boxes, as in Fig. 2:

VARIABLE DEI5556	(Variable Name)	FFS FILE 01
		(File Label)
Accommodation	(Variable Label)	
CODES:	(Variable values and their definitions)	
1 - 1 bed	(private)	
2 - 2 bed	(semi-private)	
3 - 3 plus beds	(ward)	
4 - Intensive Care Unit	or Coronary Care Unit	
5 - Intermediate care unit		
6 - Nursery		
7 - Isolation		
8 - Mental health ward	or unit	
9 - Skilled nursing facility,	semi-private	
DEI5556 defines the accommodations	provided by	
the hospital.	(Explanation)	

Fig. 2 - Example of Codebook Format

Each box provides a basic description of the variable, including:

- Variable name, a unique letter-number combination beginning with DEI, for "data element indicator." In the above example, DEI5556 is the variable name.

- Variable label, a capsule description.
- Variable values and their definitions, if necessary.
- Explanation of the variable.

Below the boxes appear essential explanatory notes, if any. For most variables, at the right of each box will be a table of response frequencies (not shown in the example) which will indicate (1) response codes, (2) frequencies, (3) cumulative frequencies, (4) percentage of the frequency, and (5) cumulative percentage of the frequency. For continuous variables such as charges, the table will show statistics including (1) minimum and maximum values, (2) mean values, and (3) standard deviation. Some variables, such as "Provider" or "Person Identifier" do not have tables of frequencies because there are too many values for concise presentation.

Identifying Variables

Five identifying variables precede the variables on every file in the claims codebooks: FILENAME, PERSON, SITE, INSTAT, and CONTYR.

FILENAME denotes the particular file. PERSON identifies each respondent, permitting data to be gathered for a certain person across all files. SITE contains codes to identify each site. INSTAT indicates a person's HIE insurance status:

- INSTAT = 1 indicates participants who were ever insured under the HIE, including the HMO experimental group.
- INSTAT = 2 identifies members of the Seattle HMO control group who were enrolled in the study but not insured under the HIE.
- INSTAT = 3 indicates participants who were never insured under the HIE.

Thus, for the FFS claims line-item files, INSTAT equals 1 (insured participants) or 2 (HMO control group members with FFS claims).

CONTYR (Contract Year) identifies the participant's contract year of coverage for which the medical or dental claim was filed: 1-3 for three-year participants (except in South Carolina), and 1-5 for five-

year participants. In South Carolina, it was decided to have the three-year and five-year participants exit at the same time. Consequently, the three-year group was not enrolled until the third participation year. Their contract years are noted as P1 - P3, enabling researchers to identify and use them according to preference, considering them either as years 1-3 of the study, or years 3-5.

Codebook Use

Variable directories that list the variables in each file and their page locations in the text are found at the beginning of each codebook. File dictionaries containing the hardcopy versions of the tape dictionaries supplied with each file are found in Appendix C. The dictionaries provide (1) basic identifying data concerning the file, and (2) a listing of the variables by location.

To avoid unnecessary repetition and to make reference easier, explanations of variables that are used in most or all of the file codebooks are provided at the end of this section. Variables pertinent to certain files are explained in the relevant file introductions as they occur.

SPECIAL NOTES

- **The number of claims or visits should never be inferred from the frequencies.** In statistical analysis of these files, it is important to remember that the frequencies of the variables do *not* represent the number of claims or visits; they represent the number of line items. An example would be a physician who gave four injections. The physician identifier appears on four line-item records but represents only one visit and one claim. The frequencies are provided as a way for the user to verify that the HIE-provided tape has been properly read.
- **Users should not attempt to compare FFS and HMO claims line-item data directly.** Such data require intermediate analytic steps to render the data samples comparable. FFS/HMO comparison data should be drawn from the Seattle FFS/HMO Claims Comparison File, where such data have already been processed by Rand staff.

- Claims were generally not filed for certain kinds of visits and tend to be underreported. Individual claims were not submitted regularly for visits considered part of a lump sum billing, and such visits appear only rarely in the FFS files. Noncovered visits may also be underreported because claims were generally not filed for such visits.
- The values of variables relating to dates were not edited for accuracy beyond the data collection form itself, and thus there may be logical inconsistencies in some dates.
- Most variables perform the same functions in each file; *however, a few have specialized uses within some files.* For example, DEI5602 is called "Number of injections" in File 10 and is called "Amount sold" in the files where supplies were sold (Files 09, 16, 18). Although both variables record the number of units of a supply rendered to the participant, they refer to different types of supplies. Before pooling variables from various files, users should check to ensure that the definitions and functions of the pooled variables are the same. *Any differences in variable functions are noted in the file introductions.*

EXPLANATION OF COMMON VARIABLES

Provider

As stated earlier, a provider is any person, organization, or institution that provided services, drugs, or supplies to an HIE participant. DEI5502, Provider number, refers to different types of providers in different files. The types of providers generally associated with each line-item file are listed below:

<i>File</i>	<i>Type of Provider</i>
01	Hospital that billed for hospital services
03	Hospital that billed for staff physician services
04-10	Physician or health professional
11	Hospital or clinic that billed for outpatient services
12-13	Dentist
15-16	Pharmacy from which drugs or supplies were purchased
18	Nonpharmacy supplier

The staff physicians on File 03 are identified in DEI5515 (Admitting physician number), DEI5508 (1st attending physician number), and DEI5509 (2nd attending physician number). In Files 15, 16, and 18, the provider who prescribed or suggested the drug or supply is listed in the variable DEI5604 (Prescriber/suggester identifier). Further information about each provider can be found in the provider file of the HIE reference series.²³

Diagnoses

HICDA codes are used to classify diagnoses.²⁴ Supplementary diagnosis codes were added under the direction of a Rand HIE physician to describe diagnoses not adequately reflected by any existing HICDA code. All HICDA and supplementary diagnosis codes used in the following files, with their definitions, are found in Sec. I of *Codes Used*. Because diagnosis codes are used throughout the claims files, there are too many possible values for presentation; thus, diagnosis frequencies are not presented.

A maximum of four diagnoses were allowed on inpatient and outpatient MERs. Diagnoses are listed in the order they appeared on the MER; in Files 01 and 03, the discharge diagnosis is listed first. Each diagnosis is defined by three variables: (1) an actual diagnosis, (2) a diagnosis qualifier, and (3) an associated diagnosis. The possible qualifiers are "and, rule out, possible, probable, or question of, with or due to, not, or."

An example of a diagnosis would be "cold with fever" where "cold" is the actual diagnosis, "with" is the qualifier, and "fever" is the associated diagnosis. Occasionally, a physician could not make a diagnosis with certainty, and listed only an associated diagnosis. In such cases, coders left the diagnosis space blank and entered only the physician's qualifier and the associated diagnosis code, attempting to reproduce the physician's wording as closely as possible.

²³To be published as part of HIE documentation. See Appendix B for order information.

²⁴Op. cit.

In medical terminology, "rule out" is an implied command to the physician which means *try to rule out* or *prove it's not*. For example, a diagnosis might be written as "influenza rule out pneumonia." This means the physician is considering the possibility that pneumonia may exist, but cannot yet conclude if it is "ruled in" or "ruled out." Therefore, he or she must make further efforts to rule it out as a possibility. Although "rule out" is a variation of "possible, probable, or question of," it was used to reproduce the physician's wording as closely as possible.

Charges and Reasons for Noncoverage of Charges

All charges and monetary amounts are expressed in dollars and cents, unadjusted for inflation. Variables relating to line-item charges and reasons for noncoverage of such charges are shown below.

<i>Variable Name</i>	<i>Variable Label</i>	<i>Definition</i>
DEI5558	Line-item charge	Charge billed to the HIE by the provider
DEI5559	Noncovered charges	Amount not covered by the insurance plan
DEI5560	Reason for noncoverage	Reason line-item charge was not covered in full
DEI5562	Other noncovered charges	A second amount not covered by the insurance plan
DEI5563	Other reason for noncoverage	A second reason the line-item charge was not covered in full
DEI5561	Reimbursement	Amount paid by the insurance plan

In most cases, there was only one reason for noncoverage. In those cases, DEI5559 lists the amount the participant was obliged to pay and DEI5560 gives the reason. The two major reasons were (1) a service for which the participant was not eligible (e.g., elective orthodontia) and

(2) coinsurance that the insured was obligated to pay. Another noncovered charge variable (DEI5562) and reason for noncoverage variable (DEI5563) were used on three files to explain cases where some services were only partially covered. In such cases, a participant would have to pay for the noncovered portion of the service and also the coinsurance on the balance of the remaining charge (i.e., the second reason for noncoverage would be the participant's coinsurance obligation). Partially covered services appear on File 01, Inpatient Services Billed by Institutions, with the most common case being use of a private room. The other two files, File 09, Supplies Sold by Physicians, and File 18, Supplies Purchased from Nonpharmacy Suppliers, contain records where the participant exceeded his insurance plan's limit with respect to eyewear or hearing aids.

Claim Number

The variable DEI5553 (Claim number) contains an identifying number that can be used to link the line items from a given MER.

Reason/Symptom for Visit

Three variables, DEI5503, DEI5505, and DEI5565, indicate up to three reasons/symptoms for the participant's visit. Reasons/symptoms were coded from the *National Ambulatory Medical Care Survey: Symptom Classification* (NAMCS).²⁵ If the symptom did not appear on the NAMCS list, a code was assigned by the HIE according to the category of the symptom. The reason-for-visit codes used in the claims line-item files are listed and defined in Sec. IV of *Codes Used*.

Treatment History/Status

A treatment history/status variable exists for each of the four possible diagnoses. Each treatment history/status variable indicates the nature of the participant's diagnosis/problem (i.e., chronic, acute, health maintenance, or pregnancy) and, in the case of a chronic or acute problem, whether this was an initial or repeat visit for the condition. The treatment history/status was filled in by the provider, but was

²⁵Op. cit.

incorrect or omitted on occasion, particularly if the patient had switched providers. For these reasons, coding clerks inspected all treatment history/status codes and changed them when necessary.

III. INPATIENT SERVICES BILLED BY INSTITUTIONS FFS FILE 01

INTRODUCTION

This codebook documents primary variables concerning basic inpatient services in hospitals or skilled nursing facilities. The overwhelming majority of these claims come from hospitals. Specific information provided in this file includes dates of admission and discharge, the diagnoses provided by the hospital, the type of hospital service provided, the charge for each service, and the first date the service was rendered. Other variables indicate the identifiers of the admitting and attending physicians, whether the hospitalization was accident- or employment-related, and the discharge destination of the participant.

The units of observation for this file are line items representing hospital charges for services.¹ For an explanation of common variables used in this codebook, see the final subsection of Sec. II. Below we provide explanations for specific variables in this file and discuss computing hospital charges and inpatient visits (hospitalizations).

CATEGORY OF HOSPITAL SERVICE

The variable DEI5557, Category of Hospital Service, indicates the type of inpatient hospital service rendered for the charge shown in DEI5558, Line-item Charge, and also indicates if that charge is a specific charge, an averaged charge, or a lump sum charge. A specific charge refers to an itemized charge for a single instance of a service (e.g., operating room fee) or the daily charge for a service (e.g., room and board). Such charges were itemized by the hospital and therefore are repeated in the file according to the number of instances of the service or number of days of the hospitalization. Unless otherwise noted in the value definition, the service listed in this variable refers to a specific charge.

¹Analysts should note that the statistical frequency of a variable in this file represents the number of times it occurs in relation to the unit of observation, *not* the number of claims on which it appears.

Averaged charges are noted in the value definitions. These occurred because some hospitals would not or could not itemize services or charges. For example, some used all-inclusive billing, a uniform daily rate for all services. Others used aggregated billing, where a total charge is presented for each service category without a day-by-day breakdown. Whenever possible, lump sum charges were averaged to obtain a daily rate, and the averaged charges are repeated in the file according to the number of days of the hospitalization, i.e., there is one record for each hospital day.

If it was impossible to obtain an average of charges, a category of service was assigned which states that the rendered services are part of a lump sum charge. Exclusions from the lump sum are noted (for example, code value 28 is "Lump sum daily charge, excluding professional fee").

The services noted in this variable are hospital services only, and do not include physician services, except certain hospital-based professional services such as pathology and radiology. The majority of private physicians bill independently, and their claims are found in File 06, Services Rendered by Physicians. Records of services rendered by resident or staff physicians are found in File 03, Inpatient Physician Procedures Billed by Institutions. Physician services and procedures are defined using codes created by the *California Relative Value Studies* (CRVS).² However, if a procedure billed by an institution was *not* codable by CRVS, it was recorded here as a Category of Hospital Service.

Categories of hospital service were established with the needs of eventual economic analysis in mind. The major categories are room and board charges, pharmacy charges, radiology (x-ray) charges, laboratory charges, and miscellaneous hospital supply charges; other categories include charges for more specialized services.

²California Medical Association, *California Relative Value Studies*, San Francisco, CA, 1975. For an explanation of CRVS codes, see the introduction to File 03.

COMPUTING HOSPITAL CHARGES

To compute the total charge of a hospital's bill, the analyst may have to combine data from Files 01 and 03. To compute the total charge of a *hospital stay*, including physician charges, the analyst will often need to include data from File 06, and perhaps other files as well. The analyst should also check to see whether more than one hospital claim was submitted during the course of a hospitalization.

COMPUTING HOSPITAL VISITS

In HIE analyses, a hospital inpatient visit (hospitalization) is defined as a unique combination of person, provider, and date-of-admission/discharge variables. Analysts who use such a method for defining inpatient visits should note that a few cases exist in this file where the person and admission/discharge date variables are linked with more than one provider. These have been shown to be cases where a hospital used an outside laboratory for laboratory services, and the laboratory billed the participant directly, rather than billing the hospital.

To avoid double-counting hospital visits, users may wish to note any back-to-back hospitalizations that occur. Back-to-back hospitalizations are defined as those in which the second admission was within one day of discharge from the first admission, was at the same hospital, and was for the same or a related illness or condition. In HIE analyses, back-to-back hospitalizations were collapsed and considered to be one visit. Users may want to consider a similar counting procedure for their own analyses.

CODEBOOK FOR FFS FILE 01
INPATIENT SERVICES BILLED BY INSTITUTIONS

DIRECTORY OF VARIABLES - FFS FILE 01
INPATIENT SERVICES BILLED BY INSTITUTIONS

VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK	VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK
FILENAME	Name of file	39	DEI5557	Category of hospital service	48
PERSON	Person identifier	39	DEI5558	Line-item charge	49
SITE	Site	39	DEI5559	Noncovered charges	50
INSTAT	Insurance status	40	DEI5560	Reason for noncoverage	51
CONTR	Contract year	40	DEI5562	Other noncovered charges	53
DEI5553	Claim number	41	DEI5563	Other reasons for noncoverage	54
DEI5502	Provider number	41	DEI5561	Reimbursement	56
DEI5513	Admission date	41	DEI5522	1st diagnosis	56
DEI5515	Date of service	42	DEI5523	1st diagnosis qualifier	57
DEI5514	Discharge date	42	DEI5524	1st associated diagnosis	57
DEI5520	Discharge destination	43	DEI5525	2nd diagnosis	58
DEI5521	Discharge institution	43	DEI5526	2nd diagnosis qualifier	58
DEI5515	Admitting physician number	44	DEI5527	2nd associated diagnosis	59
DEI5508	1st attending physician #	44	DEI5528	3rd diagnosis	59
DEI5509	2nd attending physician #	45	DEI5529	3rd diagnosis qualifier	60
DEI5519	Patient status	45	DEI5530	3rd associated diagnosis	60
DEI5511	Accident related	46	DEI5531	4th diagnosis	61
DEI5512	Employment related	46	DEI5532	4th diagnosis qualifier	61
DEI5556	Accommodations	47	DEI5533	4th associated diagnosis	62

FILENAME	VALUE	FREQ	CUM FREQ	%	CUM %
	PE01AA	72008	72008	100.00	100.00

SITE	VALUE	FREQ	CUM FREQ	%	CUM %
	1	17662	17662	24.53	24.53
	2	13757	31419	19.11	43.63
	3	9117	40536	12.66	56.29
	4	8353	48889	11.60	67.89
	5	8271	57160	11.49	79.38
	6	14848	72008	20.62	100.00

VARIABLE FILENAME FFS FILE 01

Name of file

FILENAME is a 6-character code that uniquely identifies the file. This file name is PE01AA.

VARIABLE PERSON FFS FILE 01

Person identifier

PERSON is an 8-character alphanumeric code that uniquely identifies the participant in the HIE to whom the following data refer. The 2nd character of PERSON designates in which site a participant resided during enrollment in the HIE: A=Dayton; B=Seattle; E=Fitchburg; F=Franklin County; G=Charleston; H=Georgetown County.

VARIABLE SITE FFS FILE 01

Site

CODES

1 - Dayton, Ohio
2 - Seattle, Washington
3 - Fitchburg, Massachusetts
4 - Franklin County, Massachusetts
5 - Charleston, South Carolina
6 - Georgetown County, South Carolina

SITE identifies the participant's place of residence when enrolled.

INSTAT				
VALUE	FREQ	CUM FREQ	%	CUM %
1	71783	71783	99.69	99.69
2	225	72008	0.31	100.00

CONTYR				
VALUE	FREQ	CUM FREQ	%	CUM %
P1	3805	3805	5.28	5.28
P2	5237	9042	7.27	12.56
P3	5868	14910	8.15	20.71
01	12608	27518	17.51	38.22
02	14829	42347	20.59	58.81
03	13606	55953	18.90	77.70
04	8094	64047	11.24	88.94
05	7961	72008	11.06	100.00

VARIABLE	INSTAT	FFS FILE	01
Insurance status			
CODES			
1 - Ever insured (includes HMO experimental group)			
2 - Ever assigned to HMO control group			
3 - Never insured			
INSTAT describes the participant's insurance status in the Health Insurance Experiment.			

VARIABLE	CONTYR	FFS FILE	01
Contract year			
CODES			
P1 - First year (South Carolina 3 year enrollees)			
P2 - Second year (South Carolina 3 year enrollees)			
P3 - Third year (South Carolina 3 year enrollees)			
01 - First year			
02 - Second year			
03 - Third year			
04 - Fourth year			
05 - Fifth year			
CONTYR identifies the participant's contract year of coverage for which the claim was filed under the HIE. A three-year South Carolina enrollment group also served as an uninsured control group for two years prior to the beginning of its contract period; P1 - P3 identify the medical insurance contract periods for this group. Thus, P1 indicates the first contract year for this group, but is the third contract year of the study.			

VARIABLE	DE15553	FFS FILE 01
Claim number		
	DE15553 indicates a claim identifier which is used to link the line items from a given MER.	

VARIABLE	DE15502	FFS FILE 01
Provider number		
	DE15502 is an 8-character code which refers, in this file, to the hospital, nursing facility, or any other health care facility in which the participant was an inpatient. For further information on the provider, this number can be linked to information in the provider file.	

VARIABLE	DE15513	FFS FILE 01
Admission date		
CODES		
	19741201 to 19820127 - Range on this file (YYYYMMDD)	
	DE15513 indicates the participant's hospital admission date.	

VARIABLE	DEI555	FFS FILE 01
	Date of service	
	CODES	
	19741201 to 19820201 - Range on this file (YYYYMMDD)	
	DEI555 indicates the initial date that the	
	hospital service was rendered.	

VARIABLE	DEI5514	FFS FILE 01
	Discharge date	
	CODES	
	19741205 to 19820201 - Range on this file (YYYYMMDD)	
	DEI5514 indicates the participant's hospital discharge	
	date.	

DE15520	VALUE	FREQ	CUM FREQ	%	CUM %
1	1	5791	64313	97.13	97.13
2	2	64313	64388	0.11	97.24
3	3	75	64911	0.79	98.03
4	4	523	64980	0.10	98.13
6	6	69	65003	0.04	98.17
7	7	23	65003	0.04	98.17
		1214	66217	1.83	100.00

VARIABLE DE15520 FFS FILE 01

Discharge destination

CODES

1 - Not applicable, missing

2 - Home

3 - Home, with home health care

4 - Hospital

5 - Skilled nursing facility

6 - Child care institution

7 - Intermediate care facility

DE15520 states the destination of the patient upon leaving the hospital.

VARIABLE DE15521 FFS FILE 01

Discharge institution

CODES

blank - Not applicable, missing

DE15521 indicates the identifier number of the participant's discharge destination if the participant was discharged to an institution (DE15520 = 3 through 6).

VARIABLE	DE15515	FFS FILE 01
	Admitting physician number	
	CODES	
	blank - Not applicable, missing	
	DE15515 indicates the admitting physician's identifier number. The admitting physician has primary responsibility for the patient's care while the participant is in the hospital. For more information on the physician, this number can be linked to information in the provider file.	

VARIABLE	DE15508	FFS FILE 01
	1st attending physician number	
	CODES	
	blank - Not applicable, missing	
	DE15508 indicates the attending physician's identifier number. It was used only when the admitting physician (see DE15515) did not continue as the primary physician. For more information on the physician, this number can be linked to information in the provider file.	

VARIABLE	DE15509	FFS FILE 01
	2nd attending physician number	
	CODES	
	blank - Not applicable, missing	
	DE15509 indicates the second attending physician's identifier. It was used when the admitting physician (see DE15515) and the first attending physician (see DE15508) did not continue as the primary physician. For more information on the physician, this number can be linked to information in the provider file.	

VARIABLE	DE15519	FFS FILE 01
	Patient status	
	CODES	
	1 - Discharged	
	2 - Deceased	
	3 - Inpatient	
	DE15519 describes the patient's hospital status at the time the claim was submitted.	

DE15519	VALUE	FREQ	CUM FREQ	%	CUM %
	1	65005	65005	90.28	90.28
	2	1334	66339	1.85	92.13
	3	5669	72008	7.87	100.00

VARIABLE	DEI5511	FFS FILE 01
Accident related		
CODES		
1 - Yes		
2 - No		
DEI5511 states whether the illness or injury was accident related.		

DEI5511	VALUE	FREQ	CUM FREQ	%	CUM %
1		4850	4850	6.74	6.74
2		67158	72008	93.27	100.00

VARIABLE	DEI5512	FFS FILE 01
Employment related		
CODES		
1 - Yes		
2 - No		
DEI5512 states whether the illness or injury was employment related.		

DEI5512	VALUE	FREQ	CUM FREQ	%	CUM %
1		592	592	0.82	0.82
2		71416	72008	99.18	100.00

DE15556	VALUE	FREQ	CUM FREQ	%	CUM %
	1	53377	2690	14.44	14.44
	2	2690	13358	57.26	71.70
	3	10668	14544	6.37	78.06
	4	1186	1561	5.46	83.52
	5	1017	15670	0.59	84.11
	6	109	17078	7.56	91.66
	7	1408	17095	0.09	91.76
	8	17	17890	4.27	96.02
	9	795	18631	3.98	100.00
		741			

VARIABLE	DE15556	FFS FILE 01
Accommodations		
CODES		
1	- Not applicable, missing	
2	- 1 bed (private)	
3	- 2 bed (semi-private)	
4	- 3 plus beds (ward)	
5	- Intensive Care Unit or Coronary Care Unit	
6	- Intermediate care unit	
7	- Nursery	
8	- Isolation	
9	- Mental health ward or unit	
	- Skilled nursing facility, semi-private	
DE15556 defines the accommodations provided by the hospital.		

NOTE: Code value #9 and code value #2 were used to record the same information, although #9 was used to record primarily nursing home data.

VARIABLE	DE15557	FFS FILE 01	DE15557 VALUE	FREQ	CUM FREQ	%	CUM %
Category of hospital service							
CODES							
1 - Room and board			1	18534	18534	25.74	25.74
2 - Pharmacy			2	5822	24356	8.09	33.82
3 - X-ray			3	2234	26590	3.10	36.93
4 - Lab			4	6556	33146	9.11	46.03
5 - Miscellaneous hospital supplies			5	6500	39646	9.03	55.06
6 - Special lab, non-invasive			6	1398	41044	1.94	57.00
7 - Operating room, recovery supplies and anesthesia			7	1524	42568	2.12	59.12
8 - Professional: Hospital-based therapeutic services and related supplies			8	1524	44092	2.12	61.24
9 - Professional: hospital-based pathologist			9	2955	47047	4.10	65.34
10 - Professional: hospital-based radiologist			10	46	47093	0.06	65.40
11 - Professional: hospital-based radiologist			11	162	47255	0.23	65.63
12 - Professional: hospital-based other - medication administration fee			12	538	47793	0.75	66.38
13 - Kidney dialysis			13	6	47799	0.01	66.39
14 - Hospital-based professional in Emergency Room			14	174	47973	0.24	66.63
15 - Emergency Room			15	453	48426	0.63	67.26
16 - Special duty nurse			16	13	48439	0.02	67.28
17 - Blood, packed cells, etc.			17	132	48571	0.18	67.46
18 - Take-home drugs			18	143	48714	0.20	67.66
19 - Personal (e.g., TV, phone, etc.)			19	1972	49906	2.74	70.40
20 - Special lab, invasive (procedures and supplies)			20	105	50011	0.15	70.55
21 - Mental health procedures and supplies - mental health unit day care, electroconvulsive shock			21	62	50073	0.09	70.64
22 - Pharmacy (hospital's total charge for this category, divided by the length of stay)			22	6968	56941	9.68	80.32
23 - X-ray (hospital's total charge for this category, divided by the length of stay)			23	2488	59429	3.46	83.78
24 - Laboratory, regular (hospital's total charge for this category, divided by the length of stay)			24	4082	63511	5.67	89.45
25 - Miscellaneous hospital supplies (hospital's total charge for this category, divided by the length of stay)			25	4089	67600	5.68	95.13
26 - Special lab, non-invasive (hospital's total charge for this category, divided by the length of stay)			26	775	68375	1.08	96.21
27 - Therapeutic service (professional) (hospital's total charge for this category, divided by the length of stay)			27	1631	70006	2.27	98.48
28 - Lump sum daily charge, excluding professional fees			28	153	70159	0.21	98.69
29 - Lump sum daily charge, including professional fees			29	506	70665	0.70	99.39
			30	67	70732	0.09	99.48
			31	244	70976	0.34	99.82
			32	48	71024	0.07	99.89
			33	10	71034	0.01	99.90
			34	34	71068	0.05	99.95
			35	1	71069	0.00	99.95
			36	68	71137	0.09	100.00
			37	531	71668	0.74	
			38	317	71985	0.44	
			39	3	71988	0.00	
			40	9	72000	0.01	
			41				

VARIABLE DE15557 (cont.)

30 - Miscellaneous, blood transportation charge, ambulance, cot for mother
31 - Lump sum daily charge, excluding room and board
32 - Hyperalimentation - supplies and service
33 - Special surgical supplies (including cardiac pacemaker, Hunter tendon graft)
34 - Lump sum daily charge - nursery
35 - Insurance surcharge ("verticare")
36 - Dental clinic: hospital-based
37 - Anesthesia: professional (including anesthesia administration, anesthesia service, spinal block, etc.)
38 - Operating room/anesthesia supplies
39 - Anesthesia not otherwise specified
40 - Emergency Room, including professional fee
41 - Special blood procedures (including plasmaphoresis)
DE15557 categorizes each hospital service rendered to a participant while in the hospital. Unless otherwise noted, the category refers to a single instance of the service or a daily charge for the service. Excluded are most physician services except for certain hospital-based physician services (radiology, pathology, etc.).

DE15558	NUMBER OF OBSERVATIONS	72008
	NUMBER OF MISSING	0
	MEAN	53.10
	MEDIAN	25.35
	MINIMUM VALUE	0.00
	MAXIMUM VALUE	4831.00
	STANDARD DEVIATION	80.07
	COEFFICIENT OF VARIATION	150.80
	SKEWNESS	10.03
	KURTOSIS	311.71

VARIABLE DE15558	FFS FILE 01
Line-item charge	
DE15558 indicates the charge submitted to the HIE by the provider or participant for payment of the inpatient service referred to in DE15557.	

DEI5559	NUMBER OF OBSERVATIONS	15184
	NUMBER OF MISSING	56824
	MEAN	22.79
	MEDIAN	6.77
	MINIMUM VALUE	0.00
	MAXIMUM VALUE	1560.00
	STANDARD DEVIATION	48.45
	COEFFICIENT OF VARIATION	212.61
	SKEWNESS	9.21
	KURTOSIS	177.70

VARIABLE	DEI5559	FFS FILE 01
Noncovered charges		
CODES		
. - Not applicable, missing		
DEI5559 represents an amount of charged services in DEI5558 not covered by the insurance plan.		

VARIABLE	DEI5560	FFS FILE 01	VALUE	FREQ	CUM FREQ	%	CUM %
Reason for noncoverage							
CODES							
1 - Not applicable, missing			1	56824	1495	9.85	9.85
2 - Inpatient hospital accommodations in a private room			2	1495	3254	11.59	21.43
3 - Inpatient hospital comfort items			7	1759	3254	0.01	21.44
4 - Inpatient hospital custodial care			11	1	3256	0.01	21.44
5 - Cosmetic surgery not resulting from an accidental injury			14	1	3257	0.01	21.45
6 - Psychiatric outpatient services in excess of fifty-two consultations per year			19	1	3258	0.01	21.46
7 - Outpatient psychiatric services			20	398	3656	2.62	24.08
8 - Orthodontia not resulting from accidental injury			21	7	3657	0.01	24.09
9 - Christian Science practitioner or sanatorium not listed in the Christian Science Journal			22	1	3664	0.05	24.13
10 - Non-emergency transportation			25	89	3753	0.59	24.72
11 - More than one eye or hearing examination during the accounting year			28	14	3767	0.09	24.81
12 - More than one pair of eyeglass frames every two accounting years			30	163	3930	1.07	25.88
13 - More than one set of eyeglass lenses during the accounting year			31	8610	12540	56.70	82.59
14 - More than one hearing aid during accounting year			32	478	13018	3.15	85.74
15 - Exceeds limit on eyeglass frames or hearing aids			35	529	13547	3.48	89.22
16 - Repairs to eyeglass frames and hearing aids			36	124	13671	0.82	90.04
17 - Diagnostic, screening, preventative, or rehabilitation services not otherwise specified in the scope of coverage			37	1	13672	0.01	90.04
18 - More than one piece of medical equipment, appliance or supply			42	316	13988	2.08	92.12
19 - Equipment, appliances or supplies costing more than \$25.00			43	45	14033	0.30	92.42
20 - Not medically necessary			44	190	14223	1.25	93.67
21 - Duplicate line item			45	217	14440	1.43	95.10
22 - Amount paid on another Explanation of Benefits			46	13	14453	0.09	95.19
23 - Service prior to enrollment (SAME AS 64)			56	291	14744	1.92	97.10
24 - Procedure done twice			58	285	15029	1.88	98.98
25 - Certificate of benefits stipulations on service not met			60	1	15030	0.01	98.99
26 - Prior authorization not approved			63	61	15091	0.40	99.39
27 - Participant not eligible for dental care			66	86	15178	0.01	99.39
28 - Blood credit			71	1	15179	0.57	99.96
			73	1	15180	0.01	99.97
			74	4	15184	0.03	100.00

(cont.)

VARIABLE DE15560 (cont.)

- 29 - Over-the-counter drugs
- 30 - Deductible not met
- 31 - Participant's co-insurance portion
- 32 - Services covered by workmen's compensation or employer's liability laws
- 33 - Pass through (covered by other insurance; payment from other company was "passed through")
- 34 - Prepayment made
- 35 - Services covered by accident insurance policies
- 36 - Medicare paid
- 37 - Discount
- 38 - Not covered prepayment and deductible
- 39 - Not covered prepayment and coinsurance
- 40 - Discount and deductible not met
- 41 - Discount and coinsurance
- 42 - Paid by other insurance carrier
- 43 - Paid by agency other than insurance company
- 44 - Services obtained outside Group Health Cooperative
- 45 - Plan benefit is 5% of covered charges
- 46 - Services obtained at Group Health Cooperative
- 47 - Allowance on over-the-counter-drugs per illness per accounting year has been met
- 48 - Services paid for by Group Health Cooperative
- 53 - Part paid by Group Health Cooperative; plan benefit = 5% or balance
- 54 - Charge information unavailable--charge coded as one cent
- 55 - Discount plus plan benefit is 5%
- 56 - Medicaid paid
- 57 - Company physical provided as fringe benefit--charge coded as one cent, but true charge unknown
- 58 - Workmen's compensation - charge coded as one cent, but true charge unknown
- 59 - Services rendered after termination date
- 60 - Claim is duplicate
- 61 - Participant not eligible
- 62 - Suspended
- 63 - No service
- 64 - Before enrollment date (SAME AS 23)
- 65 - Claim filed after time limit
- 66 - No charge
- 67 - Underpayment
- 68 - Overpayment, deducted on another claim
- 69 - Overpayment, returned

(cont.)

VARIABLE DE15560 (cont.)

- 70 - Overpayment, deducted on this claim, overpaid on another claim
- 71 - Billed in error--patient not seen
- 72 - Prepayment made (SAME AS 34)
- 73 - Duplicate payment recovered
- 74 - Duplicate payment not recovered
- 80 - Prepayment for future services - no Maximum Dollar Expenditure involved
- 81 - Prepayment - part applied to the Maximum Dollar Expenditure

DE15560 describes the reason a charge was not covered under the participant's HIE plan. The above code values were designed to cover all line-item charges; not all values are appropriate in every file.

VARIABLE DE15562

Other noncovered charges

CODES

. - Not applicable, missing

DE15562 represents an additional amount of charged services in DE15558 not covered by the insurance plan.

DE15562

NUMBER OF OBSERVATIONS	448
NUMBER OF MISSING	71560
MEAN	31.01
MEDIAN	22.75
MINIMUM VALUE	1.00
MAXIMUM VALUE	135.85
STANDARD DEVIATION	24.47
COEFFICIENT OF VARIATION	78.89
SKWENESS	1.84
KURTOSIS	3.28

VARIABLE	DEI5563	FFS	FILE	01	DEI5563	VALUE	FREQ	CUM FREQ	%	CUM %
Other reason for noncoverage										
CODES										
1 - Not applicable, missing										
1 - Inpatient hospital accommodations in a private room					1	71560	58	58	12.95	12.95
2 - Inpatient hospital comfort items					2		1	59	0.22	13.17
3 - Inpatient hospital custodial care					30		8	67	1.79	14.96
4 - Cosmetic surgery not resulting from an accidental injury					31		378	445	84.38	99.33
5 - Psychiatric outpatient services in excess of fifty-two consultations per year					32		1	446	0.22	99.55
6 - Outpatient psychiatric services					35		1	447	0.22	99.78
7 - Outpatient personal care services					45		1	448	0.22	100.00
8 - Orthodontia not resulting from accidental injury										
9 - Christian science practitioner or sanatorium not listed in the Christian Science Journal										
10 - Non-Emergency transportation										
11 - More than one eye or hearing examination during the accounting year										
12 - More than one pair of eyeglass frames every two accounting years										
13 - More than one set of eyeglass lenses during the accounting year										
14 - More than one hearing aid during the accounting year										
15 - Exceeds limit on eyeglass frames or hearing aids										
16 - Repairs to eyeglass frames and hearing aids										
17 - Diagnostic, screening, preventative, or rehabilitation services not otherwise specified in the scope of coverage										
18 - More than one piece of medical equipment, appliance or supply										
19 - Equipment, appliances or supplies costing more than \$25.00										
20 - Not medically necessary										
21 - Duplicate line-item										
22 - Amount paid on another Explanation of Benefits										
23 - Service prior to enrollment (SAME AS 64)										
24 - Procedure done twice										
25 - Certificate of benefits stipulations on service not met										
26 - Prior authorization not approved										
27 - Participant not eligible for dental care										

(cont.)

VARIABLE DE15563 (cont.)

28 - Blood credit
29 - Over-the-counter drugs
30 - Deductible not met
31 - Participant's co-insurance portion
32 - Services covered by workmen's compensation or employer's liability laws
33 - Pass thru
34 - Prepayment made
35 - Services covered by accident insurance policies
36 - Medicare paid
37 - Discount
38 - Not covered prepayment and deductible
39 - Not covered prepayment and coinsurance
40 - Discount and deductible not met
41 - Discount and coinsurance
42 - Paid by other insurance carrier
43 - Paid by agency other than insurance company
44 - Services obtained outside group health cooperative
45 - Plan benefit is 5% of covered charges
46 - Services obtained at group health cooperative
47 - Allowances on over-the-counter-drugs per illness per accounting year is met
48 - Services paid for by Group Health Cooperative
53 - Part paid by Group Health Cooperative; plan benefit = 5% or balance
54 - Charge information unavailable--charge coded as one cent
55 - Discount plus plan benefit is 5%
56 - Medicaid paid
57 - Company physical provided as fringe benefit--charge coded as one cent, but true charge unknown
58 - Workmen's compensation - charge coded as one cent, but true charge unknown
59 - Services rendered after termination date
60 - Claim is duplicate
61 - Not eligible participant
62 - Suspended
63 - No service
64 - Before enrollment date (SAME AS 23)
65 - Claim filed after time limit
66 - No charge
67 - Underpayment
68 - Overpayment, deducted on another claim
69 - Overpayment, returned

(cont.)

VARIABLE DE15563 (cont.)

70 - Overpayment, deducted on this claim, overpaid on another claim
71 - Billed in error--patient not seen
72 - Prepayment made (SAME AS 34)
73 - Duplicate payment recovered
74 - Duplicate payment not recovered
80 - Prepayment for future services - no Maximum Dollar Expenditure involved
In some cases, there was more than one reason a service would not be covered under a participant's insurance plan. DE15563 describes any such additional reason.

DE15561

NUMBER OF OBSERVATIONS	72008
NUMBER OF MISSING	0
MEAN	48.10
MEDIAN	20.86
MINIMUM VALUE	-6.00
MAXIMUM VALUE	4831.00
STANDARD DEVIATION	77.26
COEFFICIENT OF VARIATION	160.61
SKWENESS	10.61
KURTOSIS	350.81

VARIABLE DE15561	FFS FILE 01
Reimbursement	
CODES	
. - Not applicable, missing	
DE15561 indicates the reimbursement amount for the line-item charge shown in DE15558.	

VARIABLE DE15522	FFS FILE 01
1st diagnosis	
DE15522 indicates the code of the first condition diagnosed by the physician. Codes were assigned in the order in which the diagnosis appeared on the claim. In this file, DE15522 is the discharge diagnosis. Diagnosis codes used in the HIE claims files are listed in Section I of "Codes Used."	

DEI5523					
VALUE		FREQ	CUM FREQ	%	CUM %
1	63693	63693	63693	88.45	88.45
2	267	267	63960	0.37	88.82
3	779	779	64739	1.08	89.91
4	7244	7244	71983	10.06	99.97
6	25	25	72008	0.04	100.00

VARIABLE	DEI5523	FFS FILE 01
1st diagnosis qualifier		
CODES		
1 - No qualifier given		
2 - Rule out		
3 - Probable/possible/?/question of		
4 - With, associated with, complicated by, secondary to, due to		
5 - Not, turned out not to be, was not		
6 - Or, versus		
9 - Well-care code assigned*		
DEI5523 indicates a diagnosis qualifier for the first diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible a diagnosis qualifier was used in the absence of a primary diagnosis.		

*NOTE: Value #9 is not a true diagnosis qualifier. Occasionally, health maintenance procedures were performed by the provider which did not pertain to any of the diagnoses on the MER. In such cases, coders assigned a well-care code from the H-ICDA-2, and it was notated in this variable.

VARIABLE	DEI5524	FFS FILE 01
1st associated diagnosis		
DEI5524 indicates the associated diagnosis code when required by the diagnosis qualifier.		

VARIABLE DE15525 FFS FILE 01

2nd diagnosis

DE15525 indicates the code of a second condition diagnosed by the physician. Codes were assigned in the order in which the diagnosis appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section I of "Codes Used."

VARIABLE DE15526 FFS FILE 01

2nd diagnosis qualifier

CODES

- Not applicable, missing
- 1 - No qualifier given
- 2 - Rule out
- 3 - Probable/possible/?/question of
- 4 - With, associated with, complicated by, secondary to, due to
- 5 - Not, turned out not to be, was not
- 6 - Or, versus
- 9 - Well-care code assigned*

DE15526 indicates a diagnosis qualifier for the 2nd diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible a diagnosis qualifier was used in the absence of a primary diagnosis.

*NOTE: See note on DE15523.

DE15526

VALUE	FREQ	CUM FREQ	%	CUM %
1	44748	24674	90.51	90.51
2	24674	24773	0.36	90.88
3	338	25111	1.24	92.12
4	2074	27185	7.61	99.73
5	3	27188	0.01	99.74
6	52	27240	0.19	99.93
9	20	27260	0.07	100.00

VARIABLE	DE15527	FFS FILE 01
	2nd associated diagnosis	
	DE15527 indicates the associated diagnosis code when required by the qualifier.	

VARIABLE	DE15528	FFS FILE 01
	3rd diagnosis	
	CODES	
	blank - Not applicable, missing	
	DE15528 indicates the code of a second condition diagnosed by the physician. Codes were assigned in the order in which the diagnosis appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section 1 of "Codes Used."	

VARIABLE DE15529		FFS FILE 01					
3rd diagnosis qualifier							
CODES							
1 - Not applicable, missing							
2 - Rule out							
3 - Probable/possible/?/question of							
4 - With, associated with, complicated by, secondary to, due to							
5 - Not, turned out not to be, was not							
6 - Or, versus							
9 - Well-care code assigned*							
DE15529 indicates a diagnosis qualifier for the 3rd diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible a diagnosis qualifier was used in the absence of a primary diagnosis.							
*NOTE: See note on DE15523.							
VARIABLE DE15530		FFS FILE 01					
3rd associated diagnosis							
DE15530 indicates the associated diagnosis code when required by the qualifier.							
DE15529	VALUE	FREQ	CUM FREQ	%	CUM %		
1	60215	10807	10807	91.64	91.64		
3	174	10981	10981	1.48	93.12		
4	793	11774	11774	6.72	99.84		
9	19	11793	11793	0.16	100.00		

VARIABLE DE15531 FFS FILE 01

4th diagnosis

CODES

blank - Not applicable, missing

DE15531 indicates the code of a fourth condition diagnosed by the physician. Codes were assigned in the order in which the diagnosis appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section I of "Codes Used."

VARIABLE DE15532 FFS FILE 01

4th diagnosis qualifier

CODES

- 1 - Not applicable, missing
- 2 - No qualifier given
- 3 - Rule out
- 4 - Probable/possible/?/question of
- 5 - With, associated with, complicated by, secondary to, due to
- 6 - Not, turned out not to be, was not
- 7 - Or, versus
- 8 - Well-care code assigned*

DE15532 indicates a diagnosis qualifier for the 4th diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible that a diagnosis qualifier could be used in the absence of a primary diagnosis.

*NOTE: See note on DE15523.

DE15532	VALUE	FREQ	CUM FREQ	%	CUM %
1	68010	3571	3571	89.32	89.32
3	311	3882	3882	7.78	97.10
4	116	3998	3998	2.90	100.00

VARIABLE	DEI5533	FFS FILE 01
	4th associated diagnosis	
	DEI5533 indicates the associated diagnosis code when required by the qualifier.	

IV. INPATIENT PHYSICIAN PROCEDURES BILLED BY INSTITUTIONS FFS FILE 03

INTRODUCTION

This codebook documents primary variables concerning inpatient CRVS-codable¹ procedures and services rendered by physicians that were billed by institutions, i.e., cases where the doctor was functioning as a hospital employee, such as in the case of a resident or staff physician. If the hospital did not itemize the services of staff physicians, but only presented an all-inclusive bill for the participant's hospitalization, all hospital charges for services will appear in File 01 (Inpatient Services Billed by Institutions). The physician services listed in this file constitute a small segment of total physician services rendered; the bulk of physician charges are those submitted by *independent* physicians, and they are recorded in File 06, Services Rendered by Physicians.

The information in this file was taken from the same inpatient bills as the data in File 01 (Inpatient Services Billed by Institutions). However, it was separated from the File 01 data where possible to facilitate examination of physician procedures and charges. If the physician procedure or service was not codable by CRVS (some radiology, pathology and emergency room services), then it was recorded as a hospital service in variable DEI5557, Category of Hospital Service, in File 01.

Specific information provided in this file includes the type of procedure or service performed by the physician (as defined by CRVS code), the charge for the procedure/service, the identifiers of the admitting and attending physicians, the admission and discharge dates,

¹California Medical Association, *California Relative Value Studies*, San Francisco, CA, 1975. The *California Relative Value Studies* (CRVS) coding system defines the procedures or services of physicians and health professionals, and assigns standard unit values to them for use in computing medical charges. It was used by HIE researchers for this purpose.

the discharge destination, the diagnoses provided by the hospital, and whether the hospitalization was accident- or employment-related. Other variables indicate the charge for the physician service, the amount of the charges that are not covered by the HIE, and the amount reimbursed to the provider or participant.

The units of observation in this file are line items involving hospital billings for physician services.² For an explanation of common variables used in this codebook, see the final subsection of Sec. II. Below we provide explanations for specific variables in this file.

CRVS CODE

DEI5606 indicates the CRVS code for the service performed. CRVS codes are five-digit codes created by the California Medical Association to define procedures and services performed by physicians.³ A small number of supplementary codes were added under the direction of a Rand HIE physician to describe services not adequately reflected by any existing CRVS code. Standard CRVS codes and HIE-created supplementary codes used in these files can be found in Sec. II of *Codes Used*.

CRVS UNITS

DEI5609 indicates the unit value of the procedure or service performed, as given in the 1974 revision of the CRVS, published 1975. CRVS codes lacking printed unit values were assigned the value zero.

²Analysts should note that the statistical frequency of a variable in this file represents the number of times it occurs in relation to the unit of observation, *not* the number of claims on which it appears.

³*Ibid.*

CODEBOOK FOR FFS FILE 03

INPATIENT PHYSICIAN PROCEDURES BILLED BY INSTITUTIONS

DIRECTORY OF VARIABLES - FFS FILE 03
INPATIENT PHYSICIAN PROCEDURES BILLED BY INSTITUTIONS

VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK	VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK
FILENAME	Name of file	67	DEI5519	Patient status	76
PERSON	Person identifier	67	DEI5558	Line-item charge	76
SITE	Site	67	DEI5559	Noncovered charges	77
INSTAT	Insurance status	68	DEI5560	Reason for noncoverage	78
CONTR	Contract year	68	DEI5561	Reimbursement	80
DEI5553	Claim number	69	DEI5522	1st diagnosis	81
DEI5502	Provider number	69	DEI5523	1st diagnosis qualifier	81
DEI5513	Admission date	69	DEI5524	1st associated diagnosis	82
DEI5555	Date of service	70	DEI5525	2nd diagnosis	82
DEI5514	Discharge date	70	DEI5526	2nd associated diagnosis	83
DEI5520	Discharge destination	71	DEI5527	3rd diagnosis	84
DEI5515	Admitting physician number	71	DEI5528	3rd diagnosis qualifier	84
DEI5508	1st attending physician number	72	DEI5529	3rd associated diagnosis	85
DEI5509	2nd attending physician number	72	DEI5530	4th diagnosis	85
DEI5511	Accident related	73	DEI5531	4th diagnosis qualifier	86
DEI5512	Employment related	73	DEI5532	4th associated diagnosis	86
DEI5606	CRVS code	74			
DEI5609	CRVS units	75			

FILENAME					
VALUE	FREQ	CUM FREQ	%	CUM %	
PE03AA	1058	1058	100.00	100.00	
SITE					
VALUE	FREQ	CUM FREQ	%	CUM %	
1	64	64	6.05	6.05	
2	815	879	77.03	83.08	
3	132	1011	12.48	95.56	
4	9	1020	0.85	96.41	
5	37	1057	3.50	99.91	
6	1	1058	0.10	100.00	

VARIABLE	FILENAME	FFS FILE 03
	Name of file	
	FILENAME is a 6-character code that uniquely identifies the file. This file name is PE03AA.	

VARIABLE	PERSON	FFS FILE 03
	Person identifier	
	PERSON is an 8-character alphanumeric code that uniquely identifies the participant in the HIE to whom the following data refer. The 2nd character of PERSON designates in which site a participant resided during enrollment in the HIE: A=Dayton; B=Seattle; E=Fitchburg; F=Franklin County; G=Charleston; H=Georgetown County.	

VARIABLE	SITE	FFS FILE 03
	Site	
	CODES	
	1 - Dayton, Ohio	
	2 - Seattle, Washington	
	3 - Fitchburg, Massachusetts	
	4 - Franklin County, Massachusetts	
	5 - Charleston, South Carolina	
	6 - Georgetown County, South Carolina	
	SITE identifies the participant's place of residence when enrolled.	

INSTAT	CUM	CUM
VALUE	FREQ	%
1	1058	100.00

VARIABLE	INSTAT	FFS FILE
Insurance status		03

CODES

- 1 - Ever insured (includes HMO experimental group)
- 2 - Ever assigned to HMO control group
- 3 - Never insured

INSTAT describes the participant's insurance status in the Health Insurance Experiment.

CONTYR	CUM	CUM
VALUE	FREQ	%
P1	3	0.28
01	141	13.33
02	495	46.79
03	338	31.95
04	38	3.59
05	43	4.06

VARIABLE	CONTYR	FFS FILE
Contract year		03

CODES

- P1 - First year (South Carolina 3 year enrollees)
- P2 - Second year (South Carolina 3 year enrollees)
- P3 - Third year (South Carolina 3 year enrollees)
- 01 - First year
- 02 - Second year
- 03 - Third year
- 04 - Fourth year
- 05 - Fifth year

CONTYR identifies the participant's contract year of coverage for which the claim was filed under the HIE. A three-year South Carolina enrollment group also served as an uninsured control group for two years prior to the beginning of its contract period; P1 - P3 identify the medical insurance contract periods for this group. Thus, P1 indicates the first contract year for this group, but is the third contract year of the study.

VARIABLE	DEI5553	FFS FILE 03
	Claim number	
	DEI5553 indicates a claim identifier which is used to link the line items from a given MER.	

VARIABLE	DEI5502	FFS FILE 03
	Provider number	
	DEI5502 is an 8-character code which refers, in this file, to the hospital, nursing facility, or any other health care facility in which the participant was an inpatient. For further information on the provider, this number can be linked to information in the provider file.	

VARIABLE	DEI5513	FFS FILE 03
	Admission date	
	CODES	
	19750511 to 19810901 - Range on this file (YYYYMMDD)	
	DEI5513 indicates the participant's hospital admission date.	

VARIABLE	DEI5555	FFS FILE 03
	Date of service	
	CODES	
	19750511 to 19810924	- Range on this file (YYYYMMDD)
	DEI5555	indicates the initial date that the hospital physician service was rendered.

VARIABLE	DEI5514	FFS FILE 03
	Discharge date	
	CODES	
	19750521 to 19810929	- Not applicable, missing - Range on this file (YYYYMMDD)
	DEI5514	indicates the participant's hospital discharge date.

VARIABLE	DE15520	FFS FILE 03
Discharge destination		
CODES		
1 - Not applicable, missing		
2 - Home		
3 - Home, with home health care		
4 - Hospital		
5 - Skilled nursing facility		
6 - Child care institution		
7 - Intermediate care facility		
8 - Other		
DE15520 states the destination of the patient upon leaving the hospital.		

NOTE: No identifiers for discharge institution were available for this file.

VARIABLE	DE15515	FFS FILE 03
Admitting physician number		
CODES		
blank - Not applicable, missing		
DE15515 indicates the admitting physician's identifier number. The admitting physician has primary responsibility for the patient's care while the participant is in the hospital. For more information on the physician, this number can be linked to information in the provider file.		

DE15520	VALUE	FREQ	CUM FREQ	%	CUM %
1	638	397	397	94.52	94.52
3	13	410	410	3.10	97.62
4	2	412	412	0.48	98.10
7	8	420	420	1.91	100.00

VARIABLE	DEI5508	FFS FILE 03
	1st attending physician number	
	CODES	
	blank - Not applicable, missing	
	DEI5508 indicates the attending physician's identifier number. It was used only when the admitting physician (see DEI5515) did not continue as the primary physician. For more information on the physician, this number can be linked to information in the provider file.	

VARIABLE	DEI5509	FFS FILE 03
	2nd attending physician number	
	CODES	
	blank - Not applicable, missing	
	DEI5509 indicates the second attending physician's identifier. It was used when the admitting physician (see DEI5515) and the first attending physician (see DEI5508) did not continue as the primary physician. For more information on the physician, this number can be linked to information in the provider file.	

DEI5511	VALUE	FREQ	CUM FREQ	%	CUM %
	1	15	15	1.42	1.42
	2	1043	1058	98.58	100.00

VARIABLE DEI5511 FFS FILE 03

Accident related

CODES

1 - Yes
2 - No

DEI5511 states whether the illness or injury was
accident related.

DEI5512	VALUE	FREQ	CUM FREQ	%	CUM %
	1	22	22	2.08	2.08
	2	1036	1058	97.92	100.00

VARIABLE DEI5512 FFS FILE 03

Employment related

CODES

1 - Yes
2 - No

DEI5512 states whether the illness or injury was
employment related.

VARIABLE	DEI5606	FFS FILE 03	VALUE	FREQ	CUM FREQ	%	CUM %
	CRVS code						
	DEI5606 indicates a five-digit California Relative Value Studies (CRVS) code identifying the service provided by the physician; the charge for this service is found in DEI558. CRVS codes used in the HIE claims files are defined in Section II of "Codes Used."						
	A small number of codes were added under the direction of a Rand HIE physician to describe services not adequately reflected by any existing CRVS code. Those codes are also defined in the supplementary volume.						
			32000	1	1	0.10	0.10
			36480	1	2	0.10	0.19
			40140	1	3	0.10	0.28
			62284	1	4	0.10	0.38
			72250	1	5	0.10	0.47
			90051	1	6	0.10	0.57
			90194	2	8	0.19	0.76
			90200	4	12	0.38	1.13
			90201	8	20	0.76	1.89
			90220	5	25	0.47	2.36
			90240	3	28	0.28	2.65
			90250	10	38	0.95	3.59
			90251	49	87	4.63	8.22
			90260	10	97	0.95	9.17
			90270	1	98	0.10	9.26
			90275	3	101	0.28	9.55
			90511	2	103	0.19	9.74
			90515	1	104	0.10	9.83
			90601	3	107	0.28	10.11
			90605	2	109	0.19	10.30
			90610	12	121	1.13	11.44
			90804	60	181	5.67	17.11
			90807	26	207	2.46	19.57
			90810	250	457	23.63	43.20
			90812	4	461	0.38	43.57
			90816	24	485	2.27	45.84
			90818	1	486	0.10	45.94
			90819	75	561	7.09	53.03
			90822	9	570	0.85	53.88
			90824	4	574	0.38	54.25
			90825	1	575	0.10	54.35
			90832	1	576	0.10	54.44
			90841	1	577	0.10	54.54
			90842	5	582	0.47	55.01
			90845	1	583	0.10	55.10
			90895	18	601	1.70	56.81
			90897	19	620	1.80	58.60
			90898	16	636	1.51	60.11
			90899	4	640	0.38	60.49
			91000	3	643	0.28	60.78
			92012	1	644	0.10	60.87
			92506	1	645	0.10	60.96
			92507	84	729	7.94	68.90
			92561	1	730	0.10	69.00
			92562	1	731	0.10	69.09
						(cont.)	

VARIABLE DE15606 (cont.)

VALUE	FREQ	CUM FREQ	%	CUM %
92563	1	732	0.10	69.19
92566	1	733	0.10	69.28
93526	1	734	0.10	69.38
96037	4	738	0.38	69.75
97100	133	871	12.57	82.33
97101	74	945	6.99	89.32
97200	1	946	0.10	89.41
97540	6	952	0.57	89.98
97545	11	963	1.04	91.02
97799	3	966	0.28	91.30
99026	60	1026	5.67	96.98
99030	24	1050	2.27	99.24
99032	8	1058	0.76	100.00

DE15609

VALUE	FREQ	CUM FREQ	%	CUM %
0	559	559	52.84	52.84
0.4	24	583	2.27	55.10
0.45	2	585	0.19	55.29
1.3	1	586	0.10	55.39
1.8	76	662	7.18	62.57
2.9	1	663	0.10	62.67
3.2	9	672	0.85	63.52
3.9	3	675	0.28	63.80
4	24	699	2.27	66.07
4.8	4	703	0.38	66.45
5.1	133	836	12.57	79.02
5.2	10	846	0.95	79.96
5.4	1	847	0.10	80.06
6	6	853	0.57	80.62
6.2	1	854	0.10	80.72
6.4	1	855	0.10	80.81
6.5	10	865	0.95	81.76
6.9	4	869	0.38	82.14
8.7	4	873	0.38	82.51
9	1	874	0.10	82.61
9.7	26	900	2.46	85.07
10.5	5	905	0.47	85.54
11.5	1	906	0.10	85.63
12	3	909	0.28	85.92
13	3	912	0.28	86.20
15	60	972	5.67	91.87
15.5	12	984	1.13	93.01
17	61	1045	5.77	98.77

(cont.)

VARIABLE DE15609 FFS FILE 03

CRVS units

DE15609 indicates the unit value of the procedure in DE15606, as given in the 1974 revision of the CRVS, published 1975. CRVS codes lacking printed unit values were assigned the value zero.

VARIABLE DE15609 (cont.)

VARIABLE	DE15519	FFS FILE 03
Patient status		
CODES		
1 - Discharged		
2 - Deceased		
3 - Inpatient		
DE15519 describes the patient's hospital status at the time the claim was submitted.		

VARIABLE	DE15558	FFS FILE 03
Line-item charge		
DE15558 indicates the charge submitted to the HIE by the provider or participant for payment of the physician service specified in DE15606, GRVS Code.		

VALUE	FREQ	CUM FREQ	%	CUM %
18	1	1046	0.10	98.87
18.5	11	1057	1.04	99.91
140	1	1058	0.10	100.00
DE15519				
VALUE	FREQ	CUM FREQ	%	CUM %
1	396	396	37.43	37.43
2	8	404	0.76	38.19
3	654	1058	61.82	100.00
DE15558				
NUMBER OF OBSERVATIONS		1058		
NUMBER OF MISSING		0		
MEAN		23.59		
MEDIAN		18.00		
MINIMUM VALUE		0.00		
MAXIMUM VALUE		375.00		
STANDARD DEVIATION		25.29		
COEFFICIENT OF VARIATION		107.19		
SKEWNESS		4.73		
KURTOSIS		44.30		

DEI5559	61
NUMBER OF OBSERVATIONS	997
NUMBER OF MISSING	7.04
MEAN	8.75
MEDIAN	0.00
MINIMUM VALUE	45.00
MAXIMUM VALUE	7.79
STANDARD DEVIATION	110.73
COEFFICIENT OF VARIATION	2.08
SKEWNESS	8.11
KURTOSIS	

VARIABLE	DEI5559	FFS FILE 03
Noncovered charges		
CODES		
. - Not applicable, missing		
DEI5559 indicates the amount of the charge in DEI5558		
which was not covered by the insurance plan.		

VARIABLE	DE15560	FFS FILE 03	DE15560 VALUE	FREQ	CUM FREQ	%	CUM %
Reason for noncoverage							
CODES							
1 - Not applicable, missing			31	997	13	21.31	21.31
2 - Inpatient hospital accommodations in a private room			35	13	18	8.20	29.51
3 - Inpatient hospital comfort items			66	5	22	36.07	65.57
4 - Inpatient hospital custodial care			73	18	58	29.51	95.08
5 - Cosmetic surgery not resulting from an accidental injury			74	3	61	4.92	100.00
6 - Psychiatric outpatient services in excess of fifty-two consultations per year							
7 - Outpatient psychiatric services							
8 - Outpatient personal care services							
9 - Orthodontia not resulting from accidental injury							
10 - Christian Science practitioner or sanatorium not listed in the Christian Science Journal							
11 - Non-emergency transportation							
12 - More than one eye or hearing examination during the accounting year							
13 - More than one pair of eyeglass frames every two accounting years							
14 - More than one set of eyeglass lenses during the accounting year							
15 - More than one hearing aid during the accounting year							
16 - Exceeds limit on eyeglass frames or hearing aids							
17 - Repairs to eyeglass frames and hearing aids							
18 - Diagnostic, screening, preventative, or rehabilitation services not otherwise specified in the scope of coverage							
19 - More than one piece of medical equipment, appliance or supply							
20 - Equipment, appliances or supplies costing more than \$25.00							
21 - Not medically necessary							
22 - Duplicate line item							
23 - Amount paid on another Explanation of Benefits							
24 - Service prior to enrollment (SAME AS 64)							
25 - Procedure done twice							
26 - Certificate of benefits stipulations on service not met							
27 - Prior authorization not approved							
28 - Participant not eligible for dental care							

(cont.)

VARIABLE DE15560 (cont.)

28 - Blood credit
29 - Over-the-counter drugs
30 - Deductible not met
31 - Participant's co-insurance portion
32 - Services covered by workmen's compensation or employer's liability laws
33 - Pass through (covered by other insurance; payment from other company was "passed through" to provider or participant)
34 - Prepayment made
35 - Services covered by accident insurance policies
36 - Medicare paid
37 - Discount
38 - Not covered prepayment and deductible
39 - Not covered prepayment and coinsurance
40 - Discount and deductible not met
41 - Discount and coinsurance
42 - Paid by other insurance carrier
43 - Paid by agency other than insurance company
44 - Services obtained outside Group Health Cooperative
45 - Plan benefit is 5% of covered charges
46 - Services obtained at Group Health Cooperative
47 - Allowance on over-the-counter-drugs per illness per accounting year has been met
48 - Services paid for by Group Health Cooperative
53 - Part paid by Group Health Cooperative; plan benefit = 5% or balance
54 - Charge information unavailable--charge coded as one cent
55 - Discount plus plan benefit is 5%
56 - Medicaid paid
57 - Company physical provided as fringe benefit--charge coded as one cent, but true charge unknown
58 - Workmen's compensation - charge coded as one cent, but true charge unknown
59 - Services rendered after termination date
60 - Claim is duplicate
61 - Participant not eligible
62 - Suspended
63 - No service
64 - Before enrollment date (SAME AS 23)
65 - Claim filed after time limit
66 - No charge
67 - Underpayment

(cont.)

VARIABLE DE15560 (cont.)

68 - Overpayment, deducted on another claim
69 - Overpayment, returned
70 - Overpayment, deducted on this claim, overpaid
on another claim
71 - Billed in error--patient not seen
72 - Prepayment made (SAME AS 34)
73 - Duplicate payment recovered
74 - Duplicate payment not recovered
80 - Prepayment for future services - no Maximum
Dollar Expenditure involved
81 - Prepayment - part applied to the Maximum
Dollar Expenditure

DE15560 describes the reason a charge was not covered
under the participant's HIE plan. The above code
values were designed to cover all line-item charges;
not all values are appropriate in every file.

DE15561

NUMBER OF OBSERVATIONS 1058
NUMBER OF MISSING 0
MEAN 23.19
MEDIAN 18.00
MINIMUM VALUE 0.00
MAXIMUM VALUE 375.00
STANDARD DEVIATION 25.48
COEFFICIENT OF VARIATION 109.90
SKEWNESS 4.65
KURTOSIS 43.18

VARIABLE DE15561 FFS FILE 03

Reimbursement

DE15561 indicates the reimbursement amount for the
line-item charge shown in DE15558.

VARIABLE	DEI5522	FFS FILE 03
1st diagnosis		
CODES		
blank - Not applicable, missing		
DEI5522 indicates the code of the first condition diagnosed by the physician. Codes were assigned in the order in which the diagnosis appeared on the claim. In this file, DEI5522 is the discharge diagnosis. Diagnosis codes used in the HIE claims files are listed in Section I of "Codes Used."		

VARIABLE	DEI5523	FFS FILE 03
1st diagnosis qualifier		
CODES		
1 - No qualifier given		
2 - Rule out		
3 - Probable/possible/?/question of		
4 - With, associated with, complicated by,		
secondary to, due to		
5 - Not, turned out not to be, was not		
6 - Or, versus		
9 - Well-care code assigned*		
DEI5523 indicates a diagnosis qualifier for the first diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible a diagnosis qualifier was used in the absence of a primary diagnosis.		

*NOTE: Value #9 is not a true diagnosis qualifier. Occasionally, health maintenance procedures were performed by the provider which did not pertain to any of the diagnoses on the MER. In such cases, coders assigned a well-care code from the H-ICDA-2, and it was notated in this variable.

DEI5523	VALUE	FREQ	CUM FREQ	%	CUM %
1	1011	1011	1011	95.56	95.56
2	7	7	1018	0.66	96.22
4	40	40	1058	3.78	100.00

VARIABLE	DE15524	FFS FILE 03
	1st associated diagnosis	
	CODES	
	blank - Not applicable, missing	
	DE15524 indicates the associated diagnosis code	
	when required by the diagnosis qualifier.	

VARIABLE	DE15525	FFS FILE 03
	2nd diagnosis	
	CODES	
	blank - Not applicable, missing	
	DE15525 indicates the code of a second condition	
	diagnosed by the physician. Codes were assigned in	
	the order in which the diagnosis appeared on the	
	claim. Diagnosis codes used in the HIE claims files	
	are listed in Section I of "Codes Used."	

DEI5526	VALUE	FREQ	CUM FREQ	%	CUM %
	1	662	387	97.73	97.73
	3	387	393	1.52	99.24
	4	6	396	0.76	100.00

VARIABLE	DEI5526	FFS FILE 03
	2nd diagnosis qualifier	
	CODES	
	1 - Not applicable, missing	
	2 - No qualifier given	
	3 - Rule out	
	4 - Probable/possible/?/question of	
	5 - With, associated with, complicated by,	
	secondary to, due to	
	6 - Not, turned out not to be, was not	
	7 - Or, versus	
	8 - Well-care code assigned*	
	DEI5526 indicates a diagnosis qualifier for the second	
	diagnosis. In some instances (i.e., codes 2, 3, 5),	
	it is possible a diagnosis qualifier was used	
	in the absence of a primary diagnosis.	

*NOTE: See note on DEI5523.

VARIABLE	DEI5527	FFS FILE 03
	2nd associated diagnosis	
	CODES	
	blank - Not applicable, missing	
	DEI5527 indicates the associated diagnosis code	
	when required by the qualifier.	

VARIABLE	DEI5528	FFS FILE 03
3rd diagnosis		
CODES		
blank - Not applicable, missing		
DEI5528 indicates the code of a second condition diagnosed by the physician. Codes were assigned in the order in which the diagnosis appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section I of "Codes Used."		

VARIABLE	DEI5529	FFS FILE 03
3rd diagnosis qualifier		
CODES		
- Not applicable, missing		
1 - No qualifier		
2 - Rule out		
3 - Probable/possible/?/question of		
4 - With, associated with, complicated by, secondary to, due to		
5 - Not, turned out not to be, was not		
6 - Or, versus		
9 - Well-care code assigned*		
DEI5529 indicates a diagnosis qualifier for the third diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible a diagnosis qualifier was used in the absence of a primary diagnosis.		

*NOTE: See note on DEI5523.

DEI5529	VALUE	FREQ	CUM FREQ	%	CUM %
1	922	127	127	93.38	93.38
3	9	136	136	6.62	100.00

VARIABLE	DE15530	FFS FILE 03
	3rd associated diagnosis	
	CODES	
	blank - Not applicable, missing	
	DE15530 indicates the associated diagnosis code when required by the qualifier.	

VARIABLE	DE15531	FFS FILE 03
	4th diagnosis	
	CODES	
	blank - Not applicable, missing	
	DE15531 indicates the code of a fourth condition diagnosed by the physician. Codes were assigned in the order in which the diagnosis appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section I of "Codes Used."	

VARIABLE	DEI5532	FFS FILE 03
	4th diagnosis qualifier	
	CODES	
	<ul style="list-style-type: none"> 1 - Not applicable, missing 2 - No qualifier given 3 - Rule out 4 - Probable/possible/?/question of 5 - With, associated with, complicated by, 6 - secondary to, due to 7 - Not, turned out not to be, was not 8 - Or, versus 9 - Well-care code assigned* 	
	DEI5532 indicates a diagnosis qualifier for the fourth diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible that a diagnosis qualifier could be used in the absence of a primary diagnosis.	

*NOTE: See note on DEI5523.

VARIABLE	DEI5533	FFS FILE 03
	4th associated diagnosis	
	CODES	
	blank - Not applicable, missing	
	DEI5533 indicates the associated diagnosis code when required by the qualifier.	

DEI5532	VALUE	FREQ	CUM FREQ	%	CUM %
	i	957	101	100.00	100.00
		101			

V. DRUGS PRESCRIBED BY PHYSICIANS FFS FILE 04

INTRODUCTION

This codebook documents primary variables concerning drugs prescribed or suggested by physicians (or other independent providers of medical services). These records indicate only that certain drugs were prescribed or suggested, but do not indicate if the prescription was filled. No charges are included in this file; prescriptions or suggestions are considered as part of the physician's charge for the visit, which is found in File 06, Services Rendered by the Physician. Drug charges are found in File 15, Drugs Purchased, or File 08, Drugs Sold by Physicians.¹

Specific information provided in this file includes the prescribed or suggested drugs (identified by National Drug Code), the prescriber identifier, and variables indicating codes for the generic components and therapeutic class of each drug. Other variables indicate the reason/symptom for the visit to the physician or medical provider, the referral physicians (if any), the diagnoses to which the prescriptions or suggestions are related, and the treatment history/status of each diagnosis. Also included are variables indicating whether the medication was a prescription or over-the-counter drug, and whether the visit was accident- or employment-related.

The units of observation in this file are line items representing drug prescriptions or suggestions.² For an explanation of common variables used in this codebook, see the final subsection of Sec. II. Below we provide explanations for specific variables in this file.

¹Charges for drugs sold as part of inpatient or outpatient care rendered by an institution can be found on Files 01 and 11, respectively. However, these drugs could not be specifically identified, and no quantities could be provided.

²Analysts should note that the statistical frequency of a variable in this file represents the number of times it occurs in relation to the unit of observation, *not* the number of claims on which it appears.

NDC CODE

DEI5589 indicates the first seven digits of the National Drug Code (NDC) identifier of the prescribed drug. The last two digits of the national nine-digit code number represent trade package size, and were not used by the HIE. Codes were taken from the *National Drug Code Directory*, whenever possible.³ A number of supplementary codes were added by the HIE to identify drugs not listed in the 1972 NDC Directory. NDC and supplementary codes used in the claims files are defined in Sec. V of *Codes Used*.

GENERIC CODES

DEI5590 - DEI5594 indicate codes that identify up to five generic components of the prescribed drug. This generic coding system was developed by the HIE; code definitions are found in Sec. VI of *Codes Used*.

DRUG THERAPEUTIC CODE

The variable DEI5595 indicates a code identifying the therapeutic use category of the drug. Codes were taken from the American Medical Association's *AMA Drug Evaluations, 1973*,⁴ by creating a code number which represents the chapter number of the drug's therapeutic category. Therapeutic codes are defined in Sec. VII of *Codes Used*.

DIAGNOSIS RELATION TO DRUG

Four variables, DEI5596 - DEI5599, indicate whether the prescribed or suggested drug in DEI5589 is related to one or more of the four possible diagnoses.

³Public Health Service, U.S. Dept. of Health and Human Services, Washington, D.C. 20204, June 1972.

⁴Second edition, Publishing Sciences Group, Inc., Acton, MA.

WERE DRUGS PRESCRIBED

In variable DEI5632, Were Drugs Prescribed, physicians were asked to check "yes" or "no" boxes on the MER, indicating whether drugs had been prescribed. However, many physicians skipped the question and then wrote down the drugs they had prescribed. If the physician skipped DEI5632, coders assigned it a value of "missing." There are a great number of missing values for DEI5632. Also, some physicians who answered "no" to the question then wrote down specific drugs, which indicates such drugs *may* have been suggested rather than prescribed. For these reasons, the data for this variable are considered to be of marginal value.

CODEBOOK FOR FFS FILE 04
DRUGS PRESCRIBED BY PHYSICIANS

DIRECTORY OF VARIABLES - FFS FILE 04

DRUGS PRESCRIBED BY PHYSICIANS

VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK	VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK
FILENAME	Name of file	93	DE15527	2nd associated diagnosis	105
PERSON	Person identifier	93	DE15575	2nd problem/symptom date	105
SITE	Site	93	DE15577	Treatment history/status of the 2nd diagnosis	106
INSTAT	Insurance status	94	DE15598	3rd diagnosis related?	106
CONTYR	Contract year	94	DE15528	3rd diagnosis	107
DE15553	Claim number	95	DE15529	3rd diagnosis qualifier	107
DE15502	Provider number	95	DE15530	3rd associated diagnosis	108
DE15503	1st reason/symptom for visit	95	DE15578	3rd problem/symptom date	108
DE15505	2nd reason/symptom for visit	96	DE15580	Treatment history/status of the 3rd diagnosis	109
DE15565	3rd reason/symptom for visit	96	DE15599	4th diagnosis related?	109
DE15567	Previous visit to this doctor	97	DE15531	4th diagnosis	110
DE15568	Provider referred from	97	DE15532	4th diagnosis qualifier	110
DE15569	First provider referral	97	DE15533	4th associated diagnosis	111
DE15570	Second provider referral	98	DE15581	4th problem/symptom date	111
DE15571	Third provider referral	98	DE15583	Treatment history/status of the 4th diagnosis	112
DE15511	Accident related	98	DE15632	Were drugs prescribed	112
DE15512	Employment related	99	DE15666	Prescription status of drug	113
DE15566	Date of injury	99	DE15589	NDC code	113
DE15596	1st diagnosis related?	100	DE15590	1st generic code	114
DE15522	1st diagnosis	100	DE15591	2nd generic code	114
DE15523	1st diagnosis qualifier	101	DE15592	3rd generic code	115
DE15524	1st associated diagnosis	102	DE15593	4th generic code	115
DE15572	1st problem/symptom date	102	DE15594	5th generic code	116
DE15574	Treatment history/status of the 1st diagnosis	103	DE15595	Drug therapeutic code	116
DE15597	2nd diagnosis related?	103			
DE15525	2nd diagnosis	104			
DE15526	2nd diagnosis qualifier	104			

FILENAME	VALUE	FREQ	CUM FREQ	%	CUM %
	PE04AA	109142	109142	100.00	100.00

SITE	VALUE	FREQ	CUM FREQ	%	CUM %
	1	27106	27106	24.84	24.84
	2	30383	57489	27.84	52.67
	3	13703	71192	12.56	65.23
	4	15267	86459	13.99	79.22
	5	9208	95667	8.44	87.65
	6	13475	109142	12.35	100.00

VARIABLE FILENAME FFS FILE 04

Name of file

FILENAME is a 6-digit code that uniquely identifies the file. This file name is PE04AA.

VARIABLE PERSON FFS FILE 04

Person identifier

PERSON is an 8-character alphanumeric code that uniquely identifies the participant in the HIE to whom the following data refer. The 2nd character of PERSON designates in which site a participant resided during enrollment in the HIE: A=Dayton; B=Seattle; E=Fitchburg; F=Franklin County; G=Charleston; H=Georgetown County.

VARIABLE SITE FFS FILE 04

Site

CODES

- 1 - Dayton, Ohio
- 2 - Seattle, Washington
- 3 - Fitchburg, Massachusetts
- 4 - Franklin County, Massachusetts
- 5 - Charleston, South Carolina
- 6 - Georgetown County, South Carolina

SITE identifies the participant's place of residence when enrolled.

VARIABLE	INSTAT	FFS FILE 04
Insurance status		
CODES		
1 - Ever insured (includes HMO experimental group)		
2 - Ever assigned to HMO control group		
3 - Never insured		
INSTAT describes the participant's insurance status in the Health Insurance Experiment.		

INSTAT	VALUE	FREQ	CUM FREQ	%	CUM %
	1	108569	108569	99.48	99.48
	2	573	109142	0.53	100.00

VARIABLE	CONTR	FFS FILE 04
Contract year		
CODES		
P1 - First year (South Carolina 3 year enrollees)		
P2 - Second year (South Carolina 3 year enrollees)		
P3 - Third year (South Carolina 3 year enrollees)		
01 - First year		
02 - Second year		
03 - Third year		
04 - Fourth year		
05 - Fifth year		
CONTR identifies the participant's contract year of coverage for which the claim was filed under the HIE. A three-year South Carolina enrollment group also served as an uninsured control group for two years prior to the beginning of its contract period; P1 - P3 identify the medical insurance contract periods for this group. Thus, P1 indicates the first contract year for this group, but is the third contract year of the study.		

CONTR	VALUE	FREQ	CUM FREQ	%	CUM %
	P1	4407	4407	4.04	4.04
	P2	4738	9145	4.34	8.38
	P3	4826	13971	4.42	12.80
	01	26210	40181	24.02	36.82
	02	26379	66560	24.17	60.99
	03	23912	90472	21.91	82.89
	04	9279	99751	8.50	91.40
	05	9391	109142	8.60	100.00

VARIABLE	DEI5553	FFS FILE 04
	Claim number	
	DEI5553 indicates a claim identifier which is used to link the line items from a given MER.	

VARIABLE	DEI5502	FFS FILE 04
	Provider number	
	DEI5502 is an 8-character code which refers, in this file, to the physician who prescribed the drug to the participant. For further information on the provider, this number can be linked to information in the provider file.	

VARIABLE	DEI5503	FFS FILE 04
	1st reason/symptom for visit	
	CODES	
	Blank - Not applicable, missing	
	DEI5503 indicates the code for the first reason the participant went to see a physician. All reason-for-visit codes used in the claims line-item files are listed in Section IV of "Codes Used."	

NOTE: NAMCS codes were entered without decimal points.
Any codes lacking definitions are coding errors.

VARIABLE	DE15505	FFS FILE 04
	2nd reason/symptom for visit	
	CODES	
	Blank - Not applicable, missing	
	DE15505 indicates the code for an additional reason the participant went to see the doctor. All reason-for-visit codes used in the claims line-item files are listed in Section IV of "Codes Used."	

VARIABLE	DE15565	FFS FILE 04
	3rd reason/symptom for visit	
	CODES	
	Blank - Not applicable, missing	
	DE15565 indicates the code for an additional reason the participant went to see the doctor. All reason-for-visit codes used in the claims line-item files are listed in Section IV of "Codes Used."	

VARIABLE DE15567		FFS FILE 04		DE15567			
Previous visit to this doctor				VALUE	FREQ	CUM FREQ	CUM %
CODES							
1 - Not applicable, missing				1	1406		
2 - Yes				2	87413	87413	81.14
2 - No					20323	107736	18.86
DE15567 indicates whether the participant had previously visited this doctor.							100.00

VARIABLE DE15568		FFS FILE 04	
Provider referred from			
CODES			
Blank - Not applicable, missing			
DE15568 indicates the provider number of the person or institution (if any) who referred the participant.			

VARIABLE DE15569		FFS FILE 04	
First provider referral			
CODES			
Blank - Not applicable, missing			
DE15569 indicates the provider number of the first provider (if any) to whom the participant was referred.			

VARIABLE	DEI5570	FFS FILE 04
	Second provider referral	
	CODES	
	Blank - Not applicable, missing	
	DEI5570 indicates the provider number of the second provider (if any) to whom the participant was referred.	

VARIABLE	DEI5571	FFS FILE 04
	Third provider referral	
	CODES	
	Blank - Not applicable, missing	
	DEI5571 indicates the provider number of the third provider (if any) to whom the participant was referred.	

VARIABLE	DEI5511	FFS FILE 04
	Accident related	
	CODES	
	1 - Not applicable, missing	
	2 - Yes	
	3 - No	
	DEI5511 states whether the illness or injury was accident related.	

DEI5511	VALUE	FREQ	CUM FREQ	%	CUM %
1	162	8937	8937	8.20	8.20
2	100043	108980	108980	91.80	100.00

DEI5512	VALUE	FREQ	CUM FREQ	%	CUM %
1	1	141			
2	2	1140	1140	1.05	1.05
		107861	109001	98.95	100.00

VARIABLE	DEI5512	FFS FILE 04
Employment related		
CODES		
1 - Not applicable, missing		
2 - Yes		
2 - No		
DEI5512 states whether the illness or injury was employment related.		

VARIABLE	DEI5566	FFS FILE 04
Date of injury		
CODES		
19250618 to 19820108 - Not applicable, missing		
DEI5566 indicates the date (if any) the participant was injured.		

VARIABLE	DE15596	FFS FILE 04
	1st diagnosis related?	
	CODES	
	1 - Not applicable, missing	
	2 - Yes	
	2 - No	
	DE15596 indicates whether the drug prescribed by the provider was medically related to the first diagnosis/problem.	

VARIABLE	DE15522	FFS FILE 04
	1st diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DE15522 indicates the code of the first condition diagnosed by the physician. Codes were assigned in the order in which the diagnosis appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section I of "Codes Used."	

DE15596	VALUE	FREQ	CUM FREQ	%	CUM %
	1	75219	29406	86.69	86.69
	2	4517	33923	13.32	100.00

DEI5523	VALUE	FREQ	CUM FREQ	%	CUM %
	1	14303	84505	89.10	89.10
	2	84505	85294	0.83	89.94
	3	789	87023	1.82	91.76
	4	1729	94480	7.86	99.62
	5	7457	94507	0.03	99.65
	6	27	94574	0.07	99.72
	9	265	94839	0.28	100.00

VARIABLE DEI5523 FFS FILE 04

1st diagnosis qualifier

CODES

- 1 - Not applicable, missing
- 2 - Rule out
- 3 - Probable/possible/?/question of
- 4 - With, associated with, complicated by, secondary to, due to
- 5 - Not, turned out not to be, was not
- 6 - Or, versus
- 9 - well-care code assigned*

DEI5523 indicates a diagnosis qualifier for the first diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible a diagnosis qualifier was used in the absence of a primary diagnosis.

*NOTE: Value #9 is not a true diagnosis qualifier. Occasionally, health maintenance procedures were performed by the provider which did not pertain to any of the diagnoses on the MER. In such cases, coders assigned a well-care code from the H-ICDA-2, and it was notated in this variable.

VARIABLE	DEI5524	FFS FILE 04
	1st associated diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DEI5524 indicates the associated diagnosis code when required by the diagnosis qualifier.	

VARIABLE	DEI5572	FFS FILE 04
	1st problem/symptom date	
	CODES	
	19010101 to 19820128	- Not applicable, missing
	19820128 to 19900101	- Symptom present most of life
	19900101 to 19990101	- Range on this file (YYYYMMDD)
	DEI5572 indicates the date that the first problem or symptom appeared, as reported by the participant. The value 19010101 was used when the participant responded that the symptom had been present most or all of his/her life.	

VARIABLE	DEI5574	FFS FILE 04
Treatment history/status of the 1st diagnosis		
CODES		
: - Not applicable, missing 1 - Initial visit for acute condition 2 - Initial visit for chronic condition 3 - Repeat visit for acute condition 4 - Repeat visit for chronic condition (routine) 5 - Initial visit for flareup of a chronic condition 6 - Well-care or pregnancy-related 7 - Repeat visit for flareup of a chronic condition 8 - Acute; not specified as initial or repeat 9 - Chronic; not specified as initial or repeat		
DEI5574 describes the patient's treatment history or status for the first diagnosis/problem.		

DEI5574	VALUE	FREQ	CUM FREQ	%	CUM %
1	18158	29833	29833	32.79	32.79
2	29833	2851	32684	3.13	35.92
3	11710	44394	44394	12.87	48.79
4	22350	66744	66744	24.57	73.36
5	2714	69458	69458	2.98	76.34
6	15575	85033	85033	17.12	93.46
7	3917	88950	88950	4.31	97.76
8	1642	90592	90592	1.81	99.57
9	392	90984	90984	0.43	100.00

VARIABLE	DEI5597	FFS FILE 04
2nd diagnosis related?		
CODES		
: - Not applicable, missing 1 - Yes 2 - No		
DEI5597 indicates whether the drug prescribed by the provider was medically related to the second diagnosis/problem.		

DEI5597	VALUE	FREQ	CUM FREQ	%	CUM %
1	97469	6058	6058	51.90	51.90
2	5615	11673	11673	48.10	100.00

VARIABLE DE15525 FFS FILE 04

2nd diagnosis

CODES

Blank - Not applicable, missing

DE15525 indicates the code of the second condition diagnosed by the physician. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section 1 of "Codes Used."

VARIABLE DE15526

FFS FILE 04

2nd diagnosis qualifier

CODES

- Not applicable, missing
- 1 - Rule out
- 2 - Probable/possible/?/question of
- 3 - With, associated with, complicated by,
- 4 - secondary to, due to
- 5 - Not, turned out not to be, was not
- 6 - Or, versus
- 9 - well-care code assigned*

DE15526 indicates a diagnosis qualifier for the second diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible a diagnosis qualifier was used in the absence of a primary diagnosis.

*NOTE: See note on DE15523.

DE15526

VALUE

1
2
3
4
5
6
9

FREQ

84536
20928
456
659
1955
7
17
584

CUM
FREQ

20928
21384
22043
23998
24005
24022
24606

%

85.05
1.85
2.68
7.95
0.03
0.07
2.37

CUM
%

85.05
86.91
89.58
97.53
97.56
97.63
100.00

VARIABLE	DEI5527	FFS FILE 04
	2nd associated diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DEI5527 indicates the associated diagnosis code	
	when required by the qualifier.	

VARIABLE	DEI5575	FFS FILE 04
	2nd problem/symptom date	
	CODES	
	19010101 to 19820128	- Not applicable, missing
	19390101 to 19820128	- Symptom present most of life
	19390101 to 19820128	- Range on this file (YYYYMMDD)
	DEI5575 indicates the date that the second problem or	
	symptom appeared, as reported by the participant.	
	The value 19010101 was used when the participant	
	responded that the symptom had been present most	
	or all of his/her life.	

VARIABLE	DEI5577	FFS FILE 04
	Treatment history/status of the 2nd diagnosis	
	CODES	
	. - Not applicable, missing 1 - Initial visit for acute condition 2 - Initial visit for chronic condition 3 - Repeat visit for acute condition 4 - Repeat visit for chronic condition (routine) 5 - Initial visit for flareup of a chronic condition 6 - Well-care or pregnancy-related 7 - Repeat visit for flareup of a chronic condition 8 - Acute; not specified as initial or repeat 9 - Chronic; not specified as initial or repeat	
	DEI5577 describes the patient's treatment history or status for the second diagnosis/problem.	

DEI5577	VALUE	FREQ	CUM FREQ	%	CUM %
	1	85791	7121	30.50	30.50
	2	7121	8124	4.30	34.79
	3	1003	10790	11.42	46.21
	4	2666	18226	31.84	78.05
	5	7436	846	3.62	81.68
	6	2540	21612	10.88	92.55
	7	1050	22662	4.50	97.05
	8	489	23151	2.09	99.14
	9	200	23351	0.86	100.00

VARIABLE	DEI5598	FFS FILE 04
	3rd diagnosis related?	
	CODES	
	. - Not applicable, missing 1 - Yes 2 - No	
	DEI5598 indicates whether the drug prescribed by the provider was medically related to the third diagnosis/problem.	

DEI5598	VALUE	FREQ	CUM FREQ	%	CUM %
	1	105418	1376	36.95	36.95
	2	1376	3724	63.05	100.00

VARIABLE DE15528 FFS FILE 04

3rd diagnosis

CODES

Blank - Not applicable, missing

DE15528 indicates the code of the third condition diagnosed by the physician. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section I of "Codes Used."

VARIABLE DE15529

FFS FILE 04

3rd diagnosis qualifier

CODES

- Not applicable, missing
- 1 - No qualifier
- 2 - Rule out
- 3 - Probable/possible/?/question of
- 4 - With, associated with, complicated by, secondary to, due to
- 5 - Not, turned out not to be, was not
- 6 - Or, versus
- 9 - well-care code assigned*

DE15529 indicates a diagnosis qualifier for the third diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible a diagnosis qualifier was used in the absence of a primary diagnosis.

*NOTE: See note on DE15523.

DE15529

VALUE	FREQ	CUM FREQ	%	CUM %
1	101760	6037	81.78	81.78
2	6037	6185	2.01	83.79
3	148	6388	2.75	86.54
4	203	7175	10.66	97.20
5	787	7177	0.03	97.22
6	2	7183	0.08	97.30
9	6	7382	2.70	100.00

VARIABLE	DEI5530	FFS FILE 04
	3rd associated diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DEI5530 indicates the associated diagnosis code	
	when required by the qualifier.	

VARIABLE	DEI5578	FFS FILE 04
	3rd problem/symptom date	
	CODES	
	19010101	- Not applicable, missing
	19010101 to 19820101	- Symptom present most of life
	19390101 to 19820101	- Range on this file (YYYYMMDD)
	DEI5578 indicates the date that the third problem or	
	symptom appeared, as reported by the participant.	
	The value 19010101 was used when the participant	
	responded that the symptom had been present most	
	or all of his/her life.	

VARIABLE	DEI5580	FFS FILE 04
	Treatment history/status of the 3rd diagnosis	
	CODES	
	- Not applicable, missing 1 - Initial visit for acute condition 2 - Initial visit for chronic condition 3 - Repeat visit for acute condition 4 - Repeat visit for chronic condition (routine) 5 - Initial visit for flareup of a chronic condition 6 - Well-care or pregnancy-related 7 - Repeat visit for flareup of a chronic condition 8 - Acute; not specified as initial or repeat 9 - Chronic; not specified as initial or repeat	
	DEI5580 describes the patient's treatment history or status for the third diagnosis/problem.	

DEI5580	VALUE	FREQ	CUM FREQ	%	CUM %
1	102176	1649	1649	23.67	23.67
2	1649	357	2006	5.13	28.80
3	802	2808	5492	11.51	40.31
4	2684	5492	5740	38.53	78.84
5	248	632	6372	3.56	82.40
6	632	392	6764	9.07	91.47
7	392	146	6910	5.63	97.10
8	146	56	6966	2.10	99.20
9	56			0.80	100.00

VARIABLE	DEI5599	FFS FILE 04
	4th diagnosis related?	
	CODES	
	- Not applicable, missing 1 - Yes 2 - No	
	DEI5599 indicates whether the drug prescribed by the provider was medically related to the fourth diagnosis/problem.	

DEI5599	VALUE	FREQ	CUM FREQ	%	CUM %
1	107788	400	400	29.54	29.54
2	954	1354	1354	70.46	100.00

VARIABLE DE15531 FFS FILE 04

4th diagnosis

CODES

Blank - Not applicable, missing

DE1553125 indicates the code of the fourth condition diagnosed by the physician. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section I of "Codes Used."

VARIABLE DE15532

4th diagnosis qualifier

CODES

1 - Not applicable, missing

2 - Rule out

3 - Probable/possible/?/question of

4 - With, associated with, complicated by, secondary to, due to

5 - Not, turned out not to be, was not

6 - Or, versus

9 - well-care code assigned*

DE15532 indicates a diagnosis qualifier for the fourth diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible for a diagnosis qualifier to be used in the absence of a primary diagnosis.

*NOTE: See note on DE15523.

DE15532

VALUE

VALUE	FREQ	CUM FREQ	%	CUM %
1	106641	1941	77.61	77.61
2	1941	1993	2.08	79.69
3	52	2047	2.16	81.85
4	307	2354	12.28	94.12
5	1	2355	0.04	94.16
6	4	2359	0.16	94.32
9	142	2501	5.68	100.00

VARIABLE	DEI5533	FFS FILE 04
	4th associated diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DEI5533 indicates the associated diagnosis code when required by the qualifier.	

VARIABLE	DEI5581	FFS FILE 04
	4th problem/symptom date	
	CODES	
	19010101 to 19811114	- Not applicable, missing - Symptom present most of life - Range on this file (YYYYMMDD)
	DEI5581 indicates the date that the fourth problem or symptom appeared, as reported by the participant. The value 19010101 was used when the participant responded that the symptom had been present most or all of his/her life.	

VARIABLE	DEI5583	FFS FILE 04
	Treatment history/status of the 4th diagnosis	
	CODES	
	. - Not applicable, missing 1 - Initial visit for acute condition 2 - Initial visit for chronic condition 3 - Repeat visit for acute condition 4 - Repeat visit for chronic condition (routine) 5 - Initial visit for flareup of a chronic condition 6 - Well-care or pregnancy-related 7 - Repeat visit for flareup of a chronic condition 8 - Acute; not specified as initial or repeat 9 - Chronic; not specified as initial or repeat	
	DEI5583 describes the patient's treatment history or status for the fourth diagnosis/problem.	

DEI5583	VALUE	FREQ	CUM FREQ	%	CUM %
	.	106803	.	.	.
	1	462	462	19.75	19.75
	2	125	587	5.34	25.10
	3	270	857	11.54	36.64
	4	1020	1877	43.61	80.25
	5	98	1975	4.19	84.44
	6	216	2191	9.24	93.67
	7	83	2274	3.55	97.22
	8	46	2320	1.97	99.19
	9	19	2339	0.81	100.00

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VARIABLE	DEI5632	FFS FILE 04
	Were drugs prescribed	
	CODES	
	. - Not applicable, missing 1 - Yes 2 - No	
	DEI5632 indicates whether the provider prescribed any drugs for the symptom/problem.	

DEI5632	VALUE	FREQ	CUM FREQ	%	CUM %
	.	32090	.	.	.
	1	31664	31664	41.09	41.09
	2	45388	77052	58.91	100.00

VARIABLE DE15666		FFS FILE 04	
Prescription status of drug			
CODES			
1 - Not applicable, missing			
2 - Over the counter (legend)			
3 - Either (varies by state)			
4 - Unknown			
DE15666 states whether the drug was a prescription or could be sold over the counter, or whether it required a prescription in some states but not in others, or whether the information about the status of the drug was unobtainable.			
*NOTE: Prescription status was determined by reference to the National Drug Code Directory. If the status was not found in the text, coders assigned it a value of "missing."			
VARIABLE DE15589		FFS FILE 04	
NDC code			
CODES			
Blank - Not applicable, missing			
DE15589 indicates the first seven digits of the National Drug Code for the drug prescribed by the provider. A number of codes were added by the HIE to identify drugs not listed in the 1972 NDC Directory. All NDC and supplementary codes used in the claims line-item files can be found in Section V of "Codes Used."			

DE15666	VALUE	FREQ	CUM FREQ	%	CUM %
1	74979	29839	29839	87.34	87.34
2	3513	3352	3352	10.28	97.63
3	510	3362	3362	1.49	99.12
4	301	34163	34163	0.88	100.00

VARIABLE	DE15590	FFS FILE 04
	1st generic code	
	CODES	
	. - Not applicable, missing	
	DE15590 identifies a generic component of the drug specified by NDC code in DE15589. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE	DE15591	FFS FILE 04
	2nd generic code	
	CODES	
	. - Not applicable, missing	
	DE15591 identifies a generic component of the drug specified by NDC code in DE15589. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE DE15592	FFS FILE 04
3rd generic code	
CODES	
. - Not applicable, missing	
DE15592 identifies a generic component of the drug specified by NDC code in DE15589. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE DE15593	FFS FILE 04
4th generic code	
CODES	
. - Not applicable, missing	
DE15593 identifies a generic component of the drug specified by NDC code in DE15589. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE	DE15594	FFS FILE 04
	5th generic code	
	CODES	
	. - Not applicable, missing	
	DE15594 identifies a generic component of the drug specified by NDC code in DE15589. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE	DE15595	FFS FILE 04
	Drug therapeutic code	
	CODES	
	. - Not applicable, missing	
	DE15595 indicates the code for the therapeutic use of the drug specified in DE15589. Codes were taken from the AMA Drug Evaluations, 1973, by assigning a code number which corresponds with the chapter number in which the drug's therapeutic uses are described. Therapeutic codes used in this file are listed and defined in Section VII of "Codes Used."	

VI. SUPPLIES PRESCRIBED BY PHYSICIANS FFS FILE 05

INTRODUCTION

This codebook documents primary variables concerning supplies prescribed or suggested by physicians (or other independent providers of medical services). These records indicate only that certain supplies were prescribed or suggested, but do not indicate if the prescription was filled. No charges are included in this file; prescriptions or suggestions are considered as part of the physician's charge for the visit, which is found in File 06, Services Rendered by the Physician. Supply charges are found in File 16, Supplies Purchased from Pharmacies, File 18, Supplies Purchased from Nonpharmacy Suppliers, and File 09, Supplies Sold by the Physician.¹

Specific information provided in this file includes the type of supply prescribed or suggested by the physician or independent health professional, and the provider number of the prescriber. Other variables indicate the reasons/symptoms for the visit, the date of the symptom's first appearance according to the participant, and whether the participant's visit was accident- or employment-related. Also included are variables that indicate the referral physicians (if any), the diagnosis to which the prescription or suggestion is related, and the treatment history/status of the diagnosis.

The units of observation in this file are line items representing supply prescriptions or suggestions.² For an explanation of common variables used in this codebook, see the final subsection of Sec. II. Below we provide explanations for specific variables in this file.

¹Charges for supplies sold as part of inpatient or outpatient care rendered by an institution can be found on Files 01 and 11, respectively. However, these supplies could not be specifically identified, and no quantities could be provided.

²Analysts should note that the statistical frequency of a variable in this file represents the number of times it occurs in relation to the unit of observation, *not* the number of claims on which it appears.

SUPPLY CODE

The variable DEI5601 identifies the supply prescribed or suggested by the provider. Each supply was identified using a coding system developed by the HIE. Supply codes are listed in Sec. III of *Codes Used*.

WERE SUPPLIES PRESCRIBED OR SUGGESTED

In variable DEI5654, Were Supplies Prescribed or Suggested, physicians were asked to check "yes" or "no" boxes on the MER, indicating whether supplies had been prescribed. However, many physicians skipped the question and then wrote down the supplies they had prescribed. If the physician skipped DEI5654, coders assigned it a value of "missing." There are a great number of missing values for DEI5654. Also, some physicians who answered "no" to the question then wrote down specific supplies, which indicates such supplies *may* have been suggested rather than prescribed. For these reasons, the data for this variable are considered to be of marginal value.

DIAGNOSIS RELATION TO SUPPLY

Four variables, DEI5596 - DEI5599, show whether the prescribed or suggested supply is related to one or more of the four possible diagnoses which could be listed on the MER.

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CODEBOOK FOR FFS FILE 05
SUPPLIES PRESCRIBED BY PHYSICIANS

DIRECTORY OF VARIABLES - FFS FILE 05
SUPPLIES PRESCRIBED BY PHYSICIANS

VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK	VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK
FILENAME					
PERSON	Name of file	121	DEI5597	2nd diagnosis related?	131
SITE	Person identifier	121	DEI5525	2nd diagnosis	131
INSTAT	Site	121	DEI5526	2nd diagnosis qualifier	132
CONTR	Insurance status	122	DEI5527	2nd associated diagnosis	132
CONTR	Contract year	122	DEI5575	2nd problem/symptom date	133
DEI5553	Claim number	123	DEI5577	Treatment history/status of	
DEI5502	Provider number	123		the 2nd diagnosis	133
DEI5503	1st reason/symptom for visit	123	DEI5598	3rd diagnosis related?	134
DEI5505	2nd reason/symptom for visit	124	DEI5528	3rd diagnosis	134
DEI5565	3rd reason/symptom for visit	124	DEI5529	3rd diagnosis qualifier	135
DEI5567	Previous visit to this doctor	125	DEI5530	3rd associated diagnosis	135
DEI5568	Provider referred from	125	DEI5578	3rd problem/symptom date	136
DEI5569	First provider referral	125	DEI5580	Treatment history/status of	
DEI5570	Second provider referral	126		the 3rd diagnosis	136
DEI5511	Accident related	126	DEI5599	4th diagnosis related?	137
DEI5512	Employment related	127	DEI5531	4th diagnosis	137
DEI5566	Date of injury	127	DEI5532	4th diagnosis qualifier	138
DEI5596	1st diagnosis related?	128	DEI5533	4th associated diagnosis	138
DEI5522	1st diagnosis	128	DEI5581	4th problem/symptom date	139
DEI5523	1st diagnosis qualifier	129	DEI5583	Treatment history/status of	
DEI5524	1st associated diagnosis	129		the 4th diagnosis	139
DEI5572	1st problem/symptom date	130	DEI5601	Supply code	140
DEI5574	Treatment history/status of the 1st diagnosis	130	DEI5654	Were supplies prescribed or suggested	140

FILENAME			
VALUE	FREQ	CUM FREQ	CUM %
PE05AA	1847	1847	100.00
SITE	FREQ	CUM FREQ	CUM %
VALUE			
1	309	309	16.73
2	510	819	27.61
3	255	1074	13.81
4	419	1493	22.69
5	157	1650	8.50
6	197	1847	10.67

VARIABLE	FILENAME	FFS FILE 05
Name of file		
FILENAME	is a 6-digit code that uniquely identifies the file. This file name is PE05AA.	

VARIABLE	PERSON	FFS FILE 05
Person identifier		
PERSON	is an 8-character alphanumeric code that uniquely identifies the participant in the HIE to whom the following data refer. The 2nd character of PERSON designates in which site a participant resided during enrollment in the HIE: A=Dayton; B=Seattle; E=Fitchburg; F=Franklin County; G=Charleston; H=Georgetown County.	

VARIABLE	SITE	FFS FILE 05
Site		
CODES		
1	Dayton, Ohio	
2	Seattle, Washington	
3	Fitchburg, Massachusetts	
4	Franklin County, Massachusetts	
5	Charleston, South Carolina	
6	Georgetown County, South Carolina	
SITE	identifies the participant's place of residence when enrolled.	

INSTAT				
VALUE	FREQ	CUM FREQ	%	CUM %
1	1838	1838	99.51	99.51
2	9	1847	0.49	100.00

CONTR				
VALUE	FREQ	CUM FREQ	%	CUM %
P1	74	74	4.01	4.01
P2	68	142	3.68	7.69
P3	73	215	3.95	11.64
01	381	596	20.63	32.27
02	406	1002	21.98	54.25
03	468	1470	25.34	79.59
04	168	1638	9.10	88.68
05	209	1847	11.32	100.00

VARIABLE	INSTAT	FFS FILE 05
Insurance status		
CODES		
1 - Ever insured (includes HMO experimental group)		
2 - Ever assigned to HMO control group		
3 - Never insured		
INSTAT describes the participant's insurance status in the Health Insurance Experiment.		

VARIABLE	CONTR	FFS FILE 05
Contract year		
CODES		
P1 - First year (South Carolina 3 year enrollees)		
P2 - Second year (South Carolina 3 year enrollees)		
P3 - Third year (South Carolina 3 year enrollees)		
01 - First year		
02 - Second year		
03 - Third year		
04 - Fourth year		
05 - Fifth year		
CONTR identifies the participant's contract year of coverage for which the claim was filed under the HIE. A three-year South Carolina enrollment group also served as an uninsured control group for two years prior to the beginning of its contract period; P1 - P3 identify the medical insurance contract periods for this group. Thus, P1 indicates the first contract year for this group, but is the third contract year of the study.		

VARIABLE	DEI553	FFS FILE 05
	Claim number	
	DEI553 indicates a claim identifier which is used to link the line items from a given MER.	

VARIABLE	DEI5502	FFS FILE 05
	Provider number	
	DEI5502 is an 8-character code that refers, in this file, to the physician who prescribed or suggested the supplies. For further information on the provider, this number can be linked to information in the provider file.	

VARIABLE	DEI5503	FFS FILE 05
	1st reason/symptom for visit	
	CODES	
	Blank - Not applicable, missing	
	DEI5503 indicates the code for the first reason the participant went to see a physician. All reason-for-visit codes used in the claims line-item files are listed in Section IV of "Codes Used."	

NOTE: NAMCS codes were entered without decimal points.
Any codes lacking definitions are coding errors.

VARIABLE	DEI5505	FFS FILE 05
	2nd reason/symptom for visit	
	CODES	
	Blank - Not applicable, missing	
	DEI5505 indicates the code for an additional reason the participant went to see a physician. All reason-for-visit codes used in the claims line-item files are listed in Section IV of "Codes Used."	

VARIABLE	DEI5565	FFS FILE 05
	3rd reason/symptom for visit	
	CODES	
	Blank - Not applicable, missing	
	DEI5565 indicates the code for an additional reason the participant went to see a physician. All reason-for-visit codes used in the claims line-item files are listed in Section IV of "Codes Used."	

DEI5567	VALUE	FREQ	CUM FREQ	%	CUM %
1	1172	3	1172	63.56	63.56
2	672	672	1844	36.44	100.00

VARIABLE	DEI5567	FFS FILE 05
	Previous visit to this doctor	
	CODES	
	1 - Not applicable, missing	
	2 - Yes	
	2 - No	
	DEI5567 indicates whether the participant had previously visited this doctor.	

VARIABLE	DEI5568	FFS FILE 05
	Provider referred from	
	CODES	
	Blank - Not applicable, missing	
	DEI5568 indicates the provider number of the person or institution (if any) who referred the participant.	

VARIABLE	DEI5569	FFS FILE 05
	First provider referral	
	CODES	
	Blank - Not applicable, missing	
	DEI5569 indicates the provider number of the first provider (if any) to whom the participant was referred.	

VARIABLE	DEI5570	FFS FILE 05
	Second provider referral	
	CODES	
	Blank - Not applicable, missing	
	DEI5570 indicates the provider number of the second provider (if any) to whom the participant was referred.	

VARIABLE	DEI5511	FFS FILE 05
	Accident related	
	CODES	
	1 - Not applicable, missing	
	2 - Yes	
	3 - No	
	DEI5511 states whether the illness or injury was accident related.	

DEI5511	VALUE	FREQ	CUM FREQ	%	CUM %
1	1	217	217	11.76	11.76
2	2	1629	1846	88.25	100.00

DEI5512	VALUE	FREQ	CUM FREQ	%	CUM %
	1	18	18	0.98	0.98
	2	1828	1846	99.03	100.00

VARIABLE	DEI5512	FFS FILE 05
	Employment related	
	CODES	
	1 - Yes	
	2 - No	
	DEI5512 states whether the illness or injury was employment related.	

VARIABLE	DEI5566	FFS FILE 05
	Date of injury	
	CODES	
	19720621 to 19810724 - Not applicable, missing	
	DEI5566 indicates the date (if any) the participant was injured.	

DEI5596	VALUE	FREQ	CUM FREQ	%	CUM %
	1	9	1712	93.15	93.15
	2	126	1838	6.86	100.00

VARIABLE	DEI5596	FFS FILE 05
	1st diagnosis related?	
	CODES	
	1 - Not applicable, missing	
	2 - Yes	
	2 - No	
	DEI5596 indicates whether the supply prescribed or suggested by the provider was medically related to the first diagnosis or problem.	

VARIABLE	DEI5522	FFS FILE 05
	1st diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DEI5522 indicates the code of the first condition diagnosed by the physician. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section 1 of "Codes Used."	

DEI5523	VALUE	FREQ	CUM FREQ	%	CUM %
1	1	1641	1641	88.94	88.94
2	2	4	1645	0.22	89.16
3	3	19	1664	1.03	90.19
4	4	163	1827	8.84	99.02
6	6	3	1830	0.16	99.19
9	9	15	1845	0.81	100.00

VARIABLE DEI5523 FFS FILE 05

1st diagnosis qualifier

CODES

- 1 - Not applicable, missing
- 2 - Rule out
- 3 - Probable/possible/?/question of
- 4 - With, associated with, complicated by, secondary to, due to
- 5 - Not, turned out not to be, was not
- 6 - Or, versus
- 9 - Well-care code assigned*

DEI5523 indicates a diagnosis qualifier for the first diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible a diagnosis qualifier was used in the absence of a primary diagnosis.

*NOTE: Value #9 is not a true diagnosis qualifier. Occasionally, health maintenance procedures were performed by the provider which did not pertain to any of the diagnoses on the MER. In such cases, coders assigned a well-care code from the H-ICDA-2, and it was notated in this variable.

VARIABLE DEI5524 FFS FILE 05

1st associated diagnosis

CODES

Blank - Not applicable, missing

DEI5524 indicates the associated diagnosis code when required by the diagnosis qualifier.

VARIABLE	DEI5572	FFS FILE 05
	1st problem/symptom date	
	CODES	
	19520101 to 19811026	- Not applicable, missing 19010101 - Symptom present most of life - Range on this file (YYYYMMDD)
	DEI5572 indicates the date that the first problem or symptom appeared, as reported by the participant. The value 19010101 was used when the participant responded that the symptom had been present most or all of his/her life.	

DEI5574	VALUE	FREQ	CUM FREQ	%	CUM %
1	14	333	333	18.17	18.17
2	70	403	403	3.82	21.99
3	77	480	480	4.20	26.19
4	149	629	629	8.13	34.32
5	23	652	652	1.26	35.57
6	1137	1789	1789	62.03	97.60
7	17	1806	1806	0.93	98.53
8	19	1825	1825	1.04	99.56
9	8	1833	1833	0.44	100.00

VARIABLE	DEI5574	FFS FILE 05
	Treatment history/status of the 1st diagnosis	
	CODES	
	1 - Initial visit for acute condition	- Not applicable, missing
	2 - Initial visit for chronic condition	1 - Initial visit for acute condition
	3 - Repeat visit for acute condition	2 - Initial visit for chronic condition
	4 - Repeat visit for chronic condition (routine)	3 - Repeat visit for acute condition
	5 - Initial visit for flareup of a chronic condition	4 - Repeat visit for chronic condition (routine)
	6 - Well-care or pregnancy-related	5 - Initial visit for flareup of a chronic condition
	7 - Repeat visit for flareup of a chronic condition	6 - Well-care or pregnancy-related
	8 - Acute; not specified as initial or repeat	7 - Repeat visit for flareup of a chronic condition
	9 - Chronic; not specified as initial or repeat	8 - Acute; not specified as initial or repeat
	DEI5574 describes the patient's treatment history or status for the first diagnosis/problem.	9 - Chronic; not specified as initial or repeat

DE15597	VALUE	FREQ	CUM FREQ	%	CUM %
	1	1477	229	61.89	61.89
	2	229	370	38.11	100.00
		141			

VARIABLE	DE15597	FFS FILE 05
	2nd diagnosis related?	
	CODES	
	1 - Not applicable, missing	
	2 - Yes	
	2 - No	
	DE15597 indicates whether the supply prescribed or suggested by the provider was medically related to the second diagnosis or problem.	

VARIABLE	DE15525	FFS FILE 05
	2nd diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DE15525 indicates the code of the second condition diagnosed by the physician. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section I of "Codes Used."	

DEI5526	VALUE	FREQ	CUM FREQ	%	CUM %
	1	1477	297	80.27	80.27
	2	2	299	0.54	80.81
	3	9	308	2.43	83.24
	4	25	333	6.76	90.00
	9	37	370	10.00	100.00

VARIABLE DEI5526 FFS FILE 05

2nd diagnosis qualifier

CODES

- 1 - Not applicable, missing
- 2 - Rule out
- 3 - Probable/possible/?/question of
- 4 - With, associated with, complicated by, secondary to, due to
- 5 - Not, turned out not to be, was not
- 6 - Or, versus
- 9 - Well-care code assigned*

DEI5526 indicates a diagnosis qualifier for the second diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible a diagnosis qualifier was used in the absence of a primary diagnosis.

*NOTE: See note on DEI5523.

VARIABLE DEI5527 FFS FILE 05

2nd associated diagnosis

CODES

Blank - Not applicable, missing

DEI5527 indicates the associated diagnosis code when required by the qualifier.

VARIABLE	DEI5575	FFS FILE 05
	2nd problem/symptom date	
	CODES	
	19010101 - Not applicable, missing	
	19660801 to 19801201 - Symptom present most of life	
	19660801 to 19801201 - Range on this file (YYYYMMDD)	
	DEI5575 indicates the date that the second problem or symptom appeared, as reported by the participant. The value 19010101 was used when the participant responded that the symptom had been present most or all of his/her life.	

DEI5577	VALUE	FREQ	CUM FREQ	%	CUM %
1	1481	51	51	13.93	13.93
2	23	74	125	6.28	20.22
3	15	89	214	4.10	24.32
4	74	163	377	20.22	44.54
5	4	167	544	1.09	45.63
6	186	353	900	50.82	96.45
7	4	357	1257	1.09	97.54
8	6	363	1620	1.64	99.18
9	3	366	1986	0.82	100.00

VARIABLE	DEI5577	FFS FILE 05
	Treatment history/status of the 2nd diagnosis	
	CODES	
	1 - Not applicable, missing	
	2 - Initial visit for acute condition	
	3 - Repeat visit for chronic condition	
	4 - Repeat visit for chronic condition (routine)	
	5 - Initial visit for flareup of a chronic condition	
	6 - Well-care or pregnancy-related	
	7 - Repeat visit for flareup of a chronic condition	
	8 - Acute; not specified as initial or repeat	
	9 - Chronic; not specified as initial or repeat	
	DEI5577 describes the patient's treatment history of status for the second diagnosis/problem.	

DEI5598	VALUE	FREQ	CUM FREQ	%	CUM %
	1	1765	43	52.44	52.44
	2	43	82	47.56	100.00
		39			

VARIABLE	DEI5598	FFS FILE 05
	3rd diagnosis related?	
	CODES	
	1 - Yes	
	2 - No	
	DEI5598 indicates whether the supply prescribed or suggested by the provider was medically related to the third diagnosis/problem.	

VARIABLE	DEI5528	FFS FILE 05
	3rd diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DEI5528 indicates the code of the third condition diagnosed by the physician. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section I of "Codes Used."	

DEI5529	VALUE	FREQ	CUM FREQ	%	CUM %
	1	1764	1764	84.34	84.34
	2	70	1834	1.21	85.54
	3	1	1835	1.21	86.75
	4	7	1842	8.43	95.18
	9	4	1846	4.82	100.00

VARIABLE	DEI5529	FFS FILE 05
	3rd diagnosis qualifier	
	CODES	
	1 - Not applicable, missing	
	2 - Rule out	
	3 - Probable/possible/?/question of	
	4 - With, associated with, complicated by, secondary to, due to	
	5 - Not, turned out not to be, was not	
	6 - Or, versus	
	9 - Well-care code assigned*	
	DEI5529 indicates a diagnosis qualifier for the third diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible a diagnosis qualifier was used in the absence of a primary diagnosis.	

*NOTE: See note on DEI5523.

VARIABLE	DEI5530	FFS FILE 05
	3rd associated diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DEI5530 indicates the associated diagnosis code when required by the qualifier.	

VARIABLE	DEI5578	FFS FILE 05
	3rd problem/symptom date	
	CODES	
	19010101 - Not applicable, missing	
	19660801 to 19801101 - Symptom present most of life	
	- Range on this file (YYYYMMDD)	
	DEI5578 indicates the date that the third problem or symptom appeared, as reported by the participant. The value 19010101 was used when the participant responded that the symptom had been present most or all of his/her life.	

VARIABLE	DEI5580	FFS FILE 05
	Treatment history/status of the 3rd diagnosis	
	CODES	
	- Not applicable, missing	
	1 - Initial visit for acute condition	
	2 - Initial visit for chronic condition	
	3 - Repeat visit for acute condition	
	4 - Repeat visit for chronic condition (routine)	
	5 - Initial visit for flareup of a chronic condition	
	6 - Well-care or pregnancy-related	
	7 - Repeat visit for flareup of a chronic condition	
	8 - Acute; not specified as initial or repeat	
	9 - Chronic; not specified as initial or repeat	
	DEI5580 describes the patient's treatment history or status for the third diagnosis/problem.	

DEI5580	VALUE	FREQ	CUM FREQ	%	CUM %
1	1767	17	17	21.25	21.25
2	17	8	25	10.00	31.25
3	2	2	27	2.50	33.75
4	21	48	48	26.25	60.00
5	2	50	50	2.50	62.50
6	28	78	78	35.00	97.50
7	1	79	79	1.25	98.75
9	1	80	80	1.25	100.00

DEI5599	VALUE	FREQ	CUM FREQ	%	CUM %
	1	1825	8	36.36	36.36
	2	14	22	63.64	100.00

VARIABLE	DEI5599	FFS FILE 05
	4th diagnosis related?	
	CODES	
	1 - Yes	
	2 - No	
	DEI5599 indicates whether the supply prescribed or suggested by the provider was medically related to the fourth diagnosis/problem.	

VARIABLE	DEI5531	FFS FILE 05
	4th diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DEI5531 indicates the code of the fourth condition diagnosed by the physician. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section I of "Codes Used."	

DEI5532	VALUE	FREQ	CUM FREQ	%	CUM %
	1	1825	18	81.82	81.82
	2	18	19	4.55	86.36
	3	1	20	4.55	90.91
	4	1	21	4.55	95.46
	9	1	22	4.55	100.00

VARIABLE	DEI5532	FFS FILE 05
	4th diagnosis qualifier	
	CODES	
	1 - Not applicable, missing	
	2 - Yes	
	3 - No qualifier given	
	4 - Rule out	
	5 - Probable/possible/?/question of	
	6 - With, associated with, complicated by,	
	7 - secondary to, due to	
	8 - Not, turned out not to be, was not	
	9 - Or, versus	
	10 - Well-care code assigned*	
	DEI5532 indicates a diagnosis qualifier for the fourth diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible for a diagnosis qualifier to be used in the absence of a primary diagnosis.	

*NOTE: See note on DEI5523.

VARIABLE	DEI5533	FFS FILE 05
	4th associated diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DEI5533 indicates the associated diagnosis code when required by the qualifier.	

VARIABLE	DEI5581	FFS FILE 05
	4th problem/symptom date	
	CODES	
	19010101 - Not applicable, missing	
	19761215 to 19801101 - Symptom present most of life	
	19761215 to 19801101 - Range on this file (YYYYMMDD)	
	DEI5581 indicates the date that the fourth problem or symptom appeared, as reported by the participant. The value 19010101 was used when the participant responded that the symptom had been present most or all of his/her life.	

VARIABLE	DEI5583	FFS FILE 05
	Treatment history/status of the 4th diagnosis	
	CODES:	
	1 - Not applicable, missing	
	2 - Initial visit for acute condition	
	3 - Repeat visit for acute condition	
	4 - Repeat visit for chronic condition (routine)	
	5 - Initial visit for flareup of a chronic condition	
	6 - Well-care or pregnancy-related	
	7 - Repeat visit for flareup of a chronic condition	
	8 - Acute; not specified as initial or repeat	
	9 - Chronic; not specified as initial or repeat	
	DEI5583 describes the patient's treatment history or status for the fourth diagnosis/problem.	

DEI5583	VALUE	FREQ	CUM FREQ	%	CUM %
1	1825	7	7	31.82	31.82
2	2	9	9	9.09	40.91
3	1	10	10	4.55	45.46
4	5	15	15	22.73	68.18
5	3	18	18	13.64	81.82
6	3	21	21	13.64	95.46
9	1	22	22	4.55	100.00

VARIABLE DE15601 FFS FILE 05

Supply code

CODES

. - Not applicable, missing

DE15601 identifies the supply prescribed or suggested by the provider. Each supply was identified using a coding system developed by the Health Insurance Experiment. The supply codes used in these files are listed in Section III of "Codes Used."

VARIABLE DE15654 FFS FILE 05

Were supplies prescribed or suggested

CODES

. - Not applicable, missing

1 - Yes

2 - No

DE15654 states whether supplies were prescribed or suggested by the provider.

DE15654	VALUE	FREQ	CUM FREQ	%	CUM %
1	14	1832	1832	99.95	99.95
2	1	1	1833	0.06	100.00

VII. SERVICES RENDERED BY PHYSICIANS FFS FILE 06

INTRODUCTION

This codebook documents primary variables concerning CRVS-codable services rendered by independent physicians and health professionals such as psychologists, speech and physical therapists, chiropractors, podiatrists, acupuncturists, and Christian Science healers.¹ A few services billed by dentists, primarily cases where a dentist was acting as an oral surgeon, are also found in this file.

Outpatient radiology, pathology, and emergency room physician charges billed by independent physicians are included here. However, *not* included are *inpatient hospital-based* physician services (e.g., radiologists, pathologists, and emergency room physicians), which are coded in File 01 as a Category of Hospital Service. Also not included are inpatient procedures where the physician was functioning as a hospital employee, as in the case of resident or staff physicians. Those charges can be found in File 03.

Specific information provided in this file includes the reasons/symptoms for the visit to the physician, the date of the symptom's first appearance according to the participant, the service rendered by the physician, the charge for the service, the date and place of the service, and variables indicating whether the participant's visit was accident- or employment-related. Also included are variables that indicate the referral physicians (if any), the diagnosis to which each service charge is related, and the treatment/history status of the diagnosis.

¹California Medical Association, *California Relative Value Studies*, San Francisco, CA, 1975. The CRVS coding system defines the procedures or services of physicians and health professionals, and assigns standard unit values to them for use in computing medical charges. It was used by HIE researchers for this purpose.

The units of observation in this file are line items for physician services.² For an explanation of common variables used in this codebook, see the final subsection of Sec. II. Below we provide explanations for specific variables in this file.

CRVS CODE

DEI5606 indicates the CRVS code for the service performed. CRVS codes are five-digit codes created by the California Medical Association to define procedures and services performed by physicians and health professionals.³ A small number of supplementary codes were added under the direction of a Rand HIE physician to describe services not adequately reflected by any existing CRVS code. All standard and supplementary CRVS codes used in this file can be found in Sec. II of *Codes Used*.

CRVS UNITS

DEI5609 indicates the unit value of the procedure or service performed, as given in the 1974 revision of the CRVS, published in 1975. CRVS codes lacking printed unit values were assigned the value zero.

CRVS MODIFIERS

The variables DEI5607 and DEI5608, first and second CRVS modifiers, indicate codes for up to two special circumstances that may have been involved in the CRVS procedure shown in DEI5606, CRVS code. These modifier codes are usually dependent upon the type of CRVS procedure; modifier code definitions can be found in the CRVS code manual cited above. The most frequently used modifiers were 80 (assistant surgeon for the procedure), 58 (visit charge included with charge for surgical procedure), 52 (incidental surgical procedure with reduced value), 30-49

²Analysts should note that the statistical frequency of a variable in this file represents the number of times it occurs in relation to the unit of observation, *not* the number of claims on which it appears.

³Ibid.

(related to anesthesia), and 26, 27 (related to pathology and radiology interpretations).

Code value 1 was added by Rand researchers to denote a service for which the charge was part of a lump sum bill, such as in prenatal care and delivery, or services associated with pre- and post-surgical procedures. In such cases, there was either no charge for the service or a small charge was billed, a charge not commensurate with the CRVS units associated with the procedure. In a few cases in these files, the main charge for a package of services/visits was incorrectly assigned a CRVS modifier of 1.

DIAGNOSIS RELATION TO SERVICE

Four variables, DE15596 - DE15599, indicate if a specific service is related to one or more of the four possible diagnoses.

CODEBOOK FOR FFS FILE 06
SERVICES RENDERED BY PHYSICIANS

DIRECTORY OF VARIABLES - FFS FILE 06
SERVICES RENDERED BY PHYSICIANS

VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK	VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK
FILENAME	Name of file	147	DEI5561	Reimbursement	160
PERSON	Person identifier	147	DEI5596	1st diagnosis related?	161
SITE	Site	147	DEI5522	1st diagnosis	161
INSTAT	Insurance status	148	DEI5523	1st diagnosis qualifier	162
CONTR	Contract year	148	DEI5524	1st associated diagnosis	162
DEI5553	Claim number	149	DEI5572	1st problem/symptom date	163
DEI5502	Provider number	149	DEI5574	Treatment history/status of the 1st diagnosis	163
DEI5555	Date of service	149	DEI5597	2nd diagnosis related?	164
DEI5584	Place of service	150	DEI5525	2nd diagnosis	164
DEI5503	1st reason/symptom for visit	150	DEI5526	2nd diagnosis qualifier	165
DEI5505	2nd reason/symptom for visit	151	DEI5527	2nd associated diagnosis	165
DEI5565	3rd reason/symptom for visit	151	DEI5575	2nd problem/symptom date	166
DEI5567	Previous visit to this doctor	152	DEI5577	Treatment history/status of the 2nd diagnosis	166
DEI5568	Provider referred from	152	DEI5598	3rd diagnosis related?	167
DEI5569	First provider referral	153	DEI5528	3rd diagnosis	167
DEI5570	Second provider referral	153	DEI5529	3rd diagnosis qualifier	168
DEI5571	Third provider referral	153	DEI5530	3rd associated diagnosis	168
DEI5511	Accident related	154	DEI5578	3rd problem/symptom date	169
DEI5512	Employment related	154	DEI5580	Treatment history/status of the 3rd diagnosis	169
DEI5566	Date of injury	155	DEI5599	4th diagnosis related?	170
DEI5606	GRVS code	155	DEI5531	4th diagnosis	170
DEI5607	First GRVS modifier	156	DEI5532	4th diagnosis qualifier	171
DEI5608	Second GRVS modifier	156	DEI5533	4th associated diagnosis	171
DEI5609	GRVS units	157	DEI5581	4th problem/symptom date	172
DEI5558	Line-item charge	157	DEI5583	Treatment history/status of the 4th diagnosis	172
DEI5559	Noncovered charges	158			
DEI5560	Reason for noncoverage	158			

FILENAME			
VALUE	FREQ	CUM FREQ	CUM %
PE06AA	173264	173264	100.00

SITE			
VALUE	FREQ	CUM FREQ	CUM %
1	37413	37413	21.59
2	53591	91004	52.52
3	22196	113200	65.33
4	22998	136198	78.61
5	13836	150034	86.59
6	23230	173264	100.00

VARIABLE	FILENAME	FFS FILE 06
Name of file		
FILENAME is a 6-digit code that uniquely identifies the file. This file name is PE06AA.		

VARIABLE	PERSON	FFS FILE 06
Person identifier		
PERSON is an 8-character alphanumeric code that uniquely identifies the participant in the HIE to whom the following data refer. The 2nd character of PERSON designates in which site a participant resided during enrollment in the HIE: A=Dayton; B=Seattle; E=Fitchburg; F=Franklin County; G=Charleston; H=Georgetown County.		

VARIABLE	SITE	FFS FILE 06
Site		
CODES		
1	Dayton, Ohio	
2	Seattle, Washington	
3	Fitchburg, Massachusetts	
4	Franklin County, Massachusetts	
5	Charleston, South Carolina	
6	Georgetown County, South Carolina	
SITE identifies the participant's place of residence when enrolled.		

VARIABLE	INSTAT	FFS FILE 06
Insurance status		
CODES		
1 - Ever insured (includes HMO experimental group)		
2 - Ever assigned to HMO control group		
3 - Never insured		
INSTAT describes the participant's insurance status in the Health Insurance Experiment.		

INSTAT	VALUE	FREQ	CUM FREQ	%	CUM %
1	172157	172157	172157	99.36	99.36
2	1107	1107	173264	0.64	100.00

VARIABLE	CONTRY	FFS FILE 06
Contract year		
CODES		
P1 - First year (South Carolina 3 year enrollees)		
P2 - Second year (South Carolina 3 year enrollees)		
P3 - Third year (South Carolina 3 year enrollees)		
01 - First year		
02 - Second year		
03 - Third year		
04 - Fourth year		
05 - Fifth year		
CONTRY identifies the participant's contract year of coverage for which the claim was filed under the HIE. A three-year South Carolina enrollment group also served as an uninsured control group for two years prior to the beginning of its contract period; P1 - P3 identify the medical insurance contract periods for this group. Thus, P1 indicates the first contract year for this group, but is the third contract year of the study.		

CONTRY	VALUE	FREQ	CUM FREQ	%	CUM %
P1	7308	7308	7308	4.22	4.22
P2	7921	7921	15229	4.57	8.79
P3	8178	8178	23407	4.72	13.51
01	36789	36789	60196	21.23	34.74
02	39434	39434	99630	22.76	57.50
03	41233	41233	140863	23.80	81.30
04	16224	16224	157087	9.36	90.66
05	16177	16177	173264	9.34	100.00

VARIABLE	DEI5553	FFS FILE 06
	Claim number	
	DEI5553 indicates a claim identifier which is used to link the line items from a given MER.	

VARIABLE	DEI5502	FFS FILE 06
	Provider number	
	DEI5502 is an 8-character code which refers, in this file, to the physician who provided services for the participant. For further information on the provider, this number can be linked to information in the provider file.	

VARIABLE	DEI5555	FFS FILE 06
	Date of service	
	CODES	
	19741101 - 19820131 - Missing or inapplicable	
	19741101 - 19820131 - Range of dates on file (YYYYMMDD)	
	DEI5555 indicates the date on which the service was rendered. If a service was rendered over multiple dates, this variable is the initial date of service.	

DEI5584	VALUE	FREQ	CUM FREQ	%	CUM %
	1	122223	122223	70.56	70.56
	2	4065	126288	2.35	72.91
	3	775	127063	0.45	73.36
	4	18684	145747	10.79	84.15
	5	16	145763	0.01	84.16
	6	7279	153042	4.20	88.36
	7	1439	154481	0.83	89.19
	8	15814	170295	9.13	98.32
	9	2913	173208	1.68	100.00

VARIABLE	DEI5584	FFS FILE	06
	Place of service		
	CODES		
	1 - Missing		
	2 - Doctor's office		
	3 - Independent laboratory		
	4 - Patient's home		
	5 - Hospital		
	6 - Nursing home		
	7 - Emergency room		
	8 - Outpatient surgery		
	9 - Other outpatient hospital, including hospital clinic		
	DEI5584 indicates where the physician rendered medical services.		

VARIABLE	DEI5503	FFS FILE	06
	1st reason/symptom for visit		
	CODES		
	Blank - Not applicable, missing		
	DEI5503 indicates the code for the first reason the participant went to see a physician. All reason-for-visit codes used in the claims line-item files are listed in Section IV of "Codes Used."		

NOTE: NAMCS codes were entered without decimal points.
Any codes lacking definitions are coding errors.

VARIABLE	DEI5505	FFS FILE 06
	2nd reason/symptom for visit	
	CODES	
	Blank - Not applicable, missing	
	DEI5505 indicates the code for an additional reason the participant went to see a physician. All reason-for-visit codes used in the claims line-item files are listed in Section IV of "Codes Used."	

VARIABLE	DEI5565	FFS FILE 06
	3rd reason/symptom for visit	
	CODES	
	Blank - Not applicable, missing	
	DEI5565 indicates the code for an additional reason the participant went to see a physician. All reason-for-visit codes used in the claims line-item files are listed in Section IV of "Codes Used."	

DE15567				
VALUE	FREQ	CUM FREQ	%	CUM %
1	2771	133868	78.52	78.52
2	36625	170493	21.48	100.00

VARIABLE	DE15567	FFS FILE 06
Previous visit to this doctor		
CODES		
1 - Not applicable, missing		
2 - Yes		
2 - No		
DE15567 indicates whether the participant had previously visited this doctor or health professional.		

VARIABLE	DE15568	FFS FILE 06
Provider referred from		
CODES		
Blank - Not applicable, missing		
DE15568 indicates the provider number of the person or institution (if any) who referred the participant.		

VARIABLE	DE15569	FFS FILE 06
First provider referral		
CODES		
Blank - Not applicable, missing		
DE15569 indicates the provider number of the first provider (if any) to whom the participant was referred.		

VARIABLE	DEI5570	FFS FILE 06
	Second provider referral	
	CODES	
	Blank - Not applicable, missing	
	DEI5570 indicates the provider number of the second provider (if any) to whom the participant was referred.	

VARIABLE	DEI5571	FFS FILE 06
	Third provider referral	
	CODES	
	Blank - Not applicable, missing	
	DEI5571 indicates the provider number of the third provider (if any) to whom the participant was referred.	

VARIABLE	DEI5511	FFS FILE 06
	Accident related	
	CODES	
	1 - Not applicable, missing	
	2 - Yes	
	2 - No	
	DEI5511 states whether the illness or injury was accident related.	

DEI5511	VALUE	FREQ	CUM FREQ	%	CUM %
1	14346	629	14346	8.31	8.31
2	158289	172635	172635	91.69	100.00

VARIABLE	DEI5512	FFS FILE 06
	Employment related	
	CODES	
	1 - Not applicable, missing	
	2 - Yes	
	2 - No	
	DEI5512 states whether the illness or injury was employment related.	

DEI5512	VALUE	FREQ	CUM FREQ	%	CUM %
1	602	1961	1961	1.14	1.14
2	170701	172662	172662	98.86	100.00

VARIABLE	DEI5566	FFS FILE 06
	Date of injury	
	CODES	
	19290619 to 19820108 - Not applicable, missing	
	DEI5566 indicates the date (if any) the participant was injured.	

VARIABLE	DEI5606	FFS FILE 06
	CRVS code	
	CODES	
	. - Not applicable, missing	
	DEI5606 indicates a five-digit California Relative Value Studies (CRVS) code identifying the service provided by the physician or independent health professional. CRVS codes used in the HIE claims files are defined in Section II of "Codes Used." A small number of codes were added under the direction of a Rand HIE physician to describe services not adequately reflected by any existing CRVS code. Those codes are also defined in the supplementary volume.	

VARIABLE	DEI5607	FFS FILE 06
	First CRVS modifier	
	CODES	
	. - Not applicable, missing	
	DEI5607 indicates the code for a special circumstance in the CRVS procedure shown in DEI5606, CRVS Code. CRVS modifier code definitions are discussed in the introduction to this section.	

DEI5607	VALUE	FREQ	CUM FREQ	%	CUM %
1	161124	1	3426	28.22	28.22
21	3426	1	3427	0.01	28.23
22	17	17	3444	0.14	28.37
24	3	3	3447	0.03	28.39
26	4662	8109	8109	38.40	66.80
27	189	8298	8298	1.56	68.35
28	5	8303	8303	0.04	68.39
29	187	8490	8490	1.54	69.93
30	1218	9708	1003	10.03	79.97
47	6	9714	0.05	80.02	
48	1	9715	0.01	80.03	
50	34	9749	0.28	80.31	
51	49	9798	0.40	80.71	
52	67	9865	0.55	81.26	
54	4	9869	0.03	81.29	
55	34	9903	0.28	81.57	
58	1504	11407	12.39	93.96	
76	3	11410	0.03	93.99	
80	253	11663	2.08	96.07	
81	2	11665	0.02	96.09	
90	475	12140	3.91	100.00	

VARIABLE DE15608
FFS FILE 06

Second CRVS modifier

CODES

. - Not applicable, missing

DE15608 indicates the code for a second special circumstance in the CRVS procedure shown in DE15606, CRVS Code. CRVS modifier code definitions are discussed in the introduction to this section.

VARIABLE DE15609
FFS FILE 06

CRVS units

CODES

. - Not applicable, missing

DE15609 indicates the unit value of the procedure in DE15606, as given in the 1974 revision of the CRVS, published 1975. CRVS codes lacking printed unit values were assigned the value zero.

DE15608	VALUE	FREQ	CUM FREQ	%	CUM %
	.	173223	5	12.20	12.20
	1	5	12	17.07	29.27
	26	7	13	2.44	31.71
	28	1	14	2.44	34.15
	30	1	16	4.88	39.02
	50	2	17	2.44	41.46
	51	1	19	4.88	46.34
	52	2	20	2.44	48.78
	53	1	23	7.32	56.10
	54	3	24	2.44	58.54
	55	1	33	21.95	80.49
	58	9	36	7.32	87.81
	80	3	41	12.20	100.00
	90	5			

DE15609	NUMBER OF OBSERVATIONS	171139
	NUMBER OF MISSING	2125
	MEAN	6.94
	MEDIAN	5.20
	MINIMUM VALUE	0.00
	MAXIMUM VALUE	400.00
	STANDARD DEVIATION	7.25
	COEFFICIENT OF VARIATION	104.39
	SKEWNESS	7.68
	KURTOSIS	230.83

VARIABLE	DE15558	FFS FILE 06
	Line-item charge	
	DE15558 indicates the charge submitted to the HIE by the provider or participant for payment of the service specified in DE15606, CRVS Code.	

DE15558
 NUMBER OF OBSERVATIONS 173262
 NUMBER OF MISSING 2
 MEAN 22.47
 MEDIAN 13.00
 MINIMUM VALUE 0.00
 MAXIMUM VALUE 5500.00
 STANDARD DEVIATION 62.96
 COEFFICIENT OF VARIATION 280.23
 SKEWNESS 24.12
 KURTOSIS 1135.96

VARIABLE	DE15559	FFS FILE 06
	Noncovered charges	
	DE15559 indicates the amount of charged services not covered by the insurance plan.	

DE15559
 NUMBER OF OBSERVATIONS 63542
 NUMBER OF MISSING 109722
 MEAN 11.06
 MEDIAN 5.50
 MINIMUM VALUE 0.00
 MAXIMUM VALUE 2528.00
 STANDARD DEVIATION 30.76
 COEFFICIENT OF VARIATION 278.01
 SKEWNESS 26.74
 KURTOSIS 1345.17

VARIABLE	DE15560	FFS FILE 06	DE15560 VALUE	FREQ	CUM FREQ	%	CUM %
Reason for noncoverage							
CODES							
1 - Not applicable, missing			1	109722	1	0.00	0.00
2 - Inpatient hospital accommodations in a private room			4	6	7	0.01	0.01
3 - Inpatient hospital comfort items			5	337	344	0.53	0.54
4 - Inpatient hospital custodial care			6	80	424	0.13	0.67
5 - Cosmetic surgery not resulting from an accidental injury			8	14	438	0.02	0.69
6 - Psychiatric outpatient services in excess of fifty-two consultations per year			11	85	523	0.13	0.82
7 - Outpatient psychiatric services			13	1	524	0.00	0.83
8 - Outpatient personal care services			16	7	531	0.01	0.84
9 - Orthodontia not resulting from accidental injury listed in the Christian Science Journal			17	8	539	0.01	0.85
10 - Non-emergency transportation			20	29	568	0.05	0.89
11 - More than one eye or hearing examination during the accounting year			21	172	740	0.27	1.17
12 - More than one pair of eyeglass frames every two accounting years			22	493	1233	0.78	1.94
13 - More than one set of eyeglass lenses during the accounting year			23	7	1240	0.01	1.95
14 - Exceeds limit on eyeglass frames or hearing aids			25	437	1677	0.69	2.64
15 - Repairs to eyeglass frames and hearing aids			26	7	1684	0.01	2.65
16 - Diagnostic, screening, preventative, or rehabilitation services not otherwise specified in the scope of coverage			28	5	1689	0.01	2.66
17 - Equipment, appliances or supplies costing more than \$25.00			30	1342	3031	2.11	4.77
18 - Duplicate line-item			31	47342	50373	74.51	79.28
19 - Amount paid on another Explanation of Benefits			32	1069	51442	1.68	80.96
20 - Service prior to enrollment (SAME AS 64)			33	47	51489	0.07	81.03
21 - Procedure done twice			35	564	52053	0.89	81.92
22 - Certificate of benefits stipulations on service not met			36	9	52062	0.01	81.93
23 - Prior authorization not approved			37	107	52169	0.17	82.10
24 - Participant not eligible for dental care			39	1	52170	0.00	82.10
			40	5	52175	0.01	82.11
			41	42	52217	0.07	82.18
			42	230	52447	0.36	82.54
			43	157	52604	0.25	82.79
			44	981	53585	1.54	84.33
			45	917	54502	1.44	85.77
			46	4	54506	0.01	85.78
			48	210	54716	0.33	86.11
			54	44	54760	0.07	86.18
			55	5	54765	0.01	86.19
			56	1192	55957	1.88	88.06
			57	7	55964	0.01	88.07
			58	42	56006	0.07	88.14
			59	64	56070	0.10	88.24
			60	56	56126	0.09	88.33
			62	5	56131	0.01	88.34
			63	15	56146	0.02	88.36
			64	1	56147	0.00	88.36
			65	1	56148	0.00	88.36
			66	6925	63073	10.90	99.26
						(cont.)	

VARIABLE DE15560 (cont.)		VALUE	FREQ	CUM FREQ	%	CUM %
28 -	Blood credit	71	25	63098	0.04	99.30
29 -	Over-the-counter drugs	73	58	63156	0.09	99.39
30 -	Deductible not met	74	385	63541	0.61	100.00
31 -	Participant's co-insurance portion	99	1	63542	0.00	100.00
32 -	Services covered by workmen's compensation or employer's liability laws					
33 -	Pass through (covered by other insurance; payment from other company was "passed through" to provider or participant)					
34 -	Prepayment made					
35 -	Services covered by accident insurance policies					
36 -	Medicare paid					
37 -	Discount					
38 -	Not covered prepayment and deductible					
39 -	Not covered prepayment and coinsurance					
40 -	Discount and deductible not met					
41 -	Discount and coinsurance					
42 -	Paid by other insurance carrier					
43 -	Paid by agency other than insurance company					
44 -	Services obtained outside Group Health Cooperative					
45 -	Plan benefit is 5% of covered charges					
46 -	Services obtained at Group Health Cooperative					
47 -	Allowance on over-the-counter-drugs per illness per accounting year has been met					
48 -	Services paid for by Group Health Cooperative					
53 -	Part paid by Group Health Cooperative; plan benefit = 5% or balance					
54 -	Charge information unavailable--charge coded as one cent					
55 -	Discount plus plan benefit is 5%					
56 -	Medicaid paid					
57 -	Company physical provided as fringe benefit--charge coded as one cent, but true charge unknown					
58 -	Workmen's compensation - charge coded as one cent, but true charge unknown					
59 -	Services rendered after termination date					
60 -	Claim is duplicate					
61 -	Participant not eligible					
62 -	Suspended					
63 -	No service					
64 -	Before enrollment date (SAME AS 23)					
65 -	Claim filed after time limit					
66 -	No charge					
67 -	Underpayment					

(cont.)

VARIABLE DE15560 (cont.)

- 68 - Overpayment, deducted on another claim
- 69 - Overpayment, returned
- 70 - Overpayment, deducted on this claim, overpaid on another claim
- 71 - Billed in error--patient not seen
- 72 - Prepayment made (SAME AS 34)
- 73 - Duplicate payment recovered
- 74 - Duplicate payment not recovered
- 80 - Prepayment for future services - no Maximum Dollar Expenditure involved
- 81 - Prepayment - part applied to the Maximum Dollar Expenditure

DE15560 describes the reason a charge was not covered under the participant's HIE plan. The above code values were designed to cover all line-item charges; not all values are appropriate in every file.

NOTE: Code value 99 appears in the frequencies but is not a true code value and is believed to be a result of data entry errors.

VARIABLE DE15561 FFS FILE 06
Reimbursement
DE15561 indicates the reimbursement amount for the line-item charge shown in DE15558.

DE15561
NUMBER OF OBSERVATIONS 173262
NUMBER OF MISSING 2
MEAN 18.41
MEDIAN 10.00
MINIMUM VALUE 0.00
MAXIMUM VALUE 5500.00
STANDARD DEVIATION 59.51
COEFFICIENT OF VARIATION 323.26
SKEWNESS 26.51
KURTOSIS 1362.39

DE15596				
VALUE	FREQ	CUM FREQ	%	CUM %
1	166785	166785	96.42	96.42
2	6202	172987	3.59	100.00

VARIABLE	DE15596	FFS FILE 06
1st diagnosis related?		
CODES		
1 - Not applicable, missing		
2 - Yes		
DE15596 indicates whether the service rendered by the provider was medically related to the first diagnosis or problem.		

VARIABLE	DE15522	FFS FILE 06
1st diagnosis		
CODES		
Blank - Not applicable, missing		
DE15522 indicates the code of the first condition diagnosed by the physician or independent health professional. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section 1 of "Codes Used."		

VARIABLE		DEI5523	FFS FILE 06			
		1st diagnosis qualifier				
		CODES				
		1 - Not applicable, missing				
		2 - Rule out				
		3 - Probable/possible/?/question of				
		4 - With, associated with, complicated by, secondary to, due to				
		5 - Not, turned out not to be, was not				
		6 - Or, versus				
		9 - Well-care code assigned*				
		DEI5523 indicates a diagnosis qualifier for the first diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible a diagnosis qualifier was used in the absence of a primary diagnosis.				
		*NOTE: Value #9 is not a true diagnosis qualifier. Occasionally, health maintenance procedures were performed by the provider which did not pertain to any of the diagnoses on the MER. In such cases, coders assigned a well-care code from the H-ICDA-2, and it was notated in this variable.				
VARIABLE		DEI5524	FFS FILE 06			
		1st associated diagnosis				
		CODES				
		Blank - Not applicable, missing				
		DEI5524 indicates the associated diagnosis code when required by the diagnosis qualifier.				

DEI5523		VALUE	FREQ	CUM FREQ	%	CUM %
		1	25189	128258	86.62	86.62
		2	128258	129935	1.13	87.75
		3	1677	129935	1.85	89.60
		4	2741	132676	10.12	99.72
		5	14987	147663	0.03	99.75
		6	42	147705	0.06	99.81
		9	92	147797	0.19	100.00
			278	148075		

VARIABLE	DEI5572	FFS FILE 06
	1st problem/symptom date	
	CODES	
	19010101 to 19821231	- Not applicable, missing - Symptom present most of life - Range on this file (YYYYMMDD)
	DEI5572	indicates the date that the first problem or symptom appeared, as reported by the participant. The value 19010101 was used when the participant responded that the symptom had been present most or all of his/her life.

VARIABLE	DEI5574	FFS FILE 06
	Treatment history/status of the 1st diagnosis	
	CODES:	
	1	- Initial visit for acute condition
	2	- Initial visit for chronic condition
	3	- Repeat visit for acute condition
	4	- Repeat visit for chronic condition (routine)
	5	- Initial visit for flareup of a chronic condition
	6	- Well-care or pregnancy-related
	7	- Repeat visit for flareup of a chronic condition
	8	- Acute; not specified as initial or repeat
	9	- Chronic; not specified as initial or repeat
	DEI5574	describes the patient's treatment status for the first diagnosis/problem.

DEI5574	VALUE	FREQ	CUM FREQ	%	CUM %
1	32787	44572	44572	31.73	31.73
2	5273	49845	49845	3.75	35.48
3	20016	69861	69861	14.25	49.73
4	32418	102279	102279	23.08	72.81
5	4799	107078	107078	3.42	76.23
6	23461	130539	130539	16.70	92.93
7	6493	137032	137032	4.62	97.55
8	2584	139616	139616	1.84	99.39
9	861	140477	140477	0.61	100.00

VARIABLE	DEI5597	FFS FILE 06
	2nd diagnosis related?	
	CODES	
	1 - Not applicable, missing	
	2 - Yes	
	2 - No	
	DEI5597 indicates whether the service rendered by the provider was medically related to the second diagnosis or problem.	

DEI5597	VALUE	FREQ	CUM FREQ	%	CUM %
	1	125158	34950	72.65	72.65
	2	34950	48106	27.35	100.00

VARIABLE	DEI5525	FFS FILE 06
	2nd diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DEI5525 indicates the code of the second condition diagnosed by the physician or independent health professional. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section I of "Codes Used."	

DEI5526	VALUE	FREQ	CUM FREQ	%	CUM %
	1	125110	39645	82.33	82.33
	2	39645	40821	2.44	84.77
	3	1176	42138	2.74	87.51
	4	1317	47088	10.28	97.79
	5	4950	47111	0.05	97.83
	6	23	47158	0.10	97.93
	9	47	48154	2.07	100.00
		996			

VARIABLE DEI5526 FFS FILE 06

2nd diagnosis qualifier

CODES

- 1 - Not applicable, missing
- 2 - No qualifier given
- 3 - Rule out
- 4 - Probable/possible/?/question of
- 5 - With, associated with, complicated by, secondary to, due to
- 6 - Not, turned out not to be, was not
- 9 - Or, versus
- 9 - Well-care code assigned*

DEI5526 indicates a diagnosis qualifier for the second diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible a diagnosis qualifier was used in the absence of a primary diagnosis.

*NOTE: See note on DEI5523.

VARIABLE DEI5527 FFS FILE 06

2nd associated diagnosis

CODES

Blank - Not applicable, missing

DEI5527 indicates the associated diagnosis code when required by the qualifier.

VARIABLE	DEI5575	FFS FILE 06
	2nd problem/symptom date	
	CODES	
	19010101 - Not applicable, missing	
	19280101 to 19820131 - Symptom present most of life	
	19280101 to 19820131 - Range on this file (YYYYMMDD)	
	DEI5575 indicates the date that the second problem or symptom appeared, as reported by the participant. The value 19010101 was used when the participant responded that the symptom had been present most or all of his/her life.	

VARIABLE	DEI5577	FFS FILE 06
	Treatment history/status of the 2nd diagnosis	
	CODES	
	1 - Initial visit for acute condition	
	2 - Initial visit for chronic condition	
	3 - Repeat visit for acute condition	
	4 - Repeat visit for chronic condition (routine)	
	5 - Initial visit for flareup of a chronic condition	
	6 - Well-care or pregnancy-related	
	7 - Repeat visit for flareup of a chronic condition	
	8 - Acute; not specified as initial or repeat	
	9 - Chronic; not specified as initial or repeat	
	DEI5577 describes the patient's treatment status for the second diagnosis/problem.	

DEI5577	VALUE	FREQ	CUM FREQ	%	CUM %
1	128262	128262	13976	31.06	31.06
2	13976	2330	16306	5.18	36.23
3	5808	5808	22114	12.91	49.14
4	12903	12903	35017	28.67	77.81
5	1997	1997	37014	4.44	82.25
6	4127	4127	41141	9.17	91.42
7	2194	2194	43335	4.88	96.30
8	1157	1157	44492	2.57	98.87
9	510	510	45002	1.13	100.00

DEI5598		DEI5598		DEI5598		DEI5598	
VARIABLE	DEI5598	FFS FILE 06	VALUE	FREQ	CUM FREQ	%	CUM %
3rd diagnosis related?							
CODES							
1 - Not applicable, missing			1	155936			
2 - Yes			1	11804	11804	68.12	68.12
2 - No			2	5524	17328	31.88	100.00
DEI5598 indicates whether the service rendered by the provider was medically related to the third diagnosis/problem.							
DEI5528		FFS FILE 06					
3rd diagnosis							
CODES							
Blank - Not applicable, missing							
DEI5528 indicates the code of the third condition diagnosed by the physician or independent health professional. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section I of "Codes Used."							

VARIABLE	DE15529	FFS FILE 06
3rd diagnosis qualifier		
CODES		
<ul style="list-style-type: none"> 1 - Not applicable, missing 2 - Rule out 3 - Probable/possible/?/question of 4 - With, associated with, complicated by, secondary to, due to 5 - Not, turned out not to be, was not 6 - Or, versus 9 - Well-care code assigned* 		
DE15529 indicates a diagnosis qualifier for the third diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible a diagnosis qualifier was used in the absence of a primary diagnosis.		

*NOTE: See note on DE15523.

VARIABLE	DE15530	FFS FILE 06
3rd associated diagnosis		
CODES		
Blank - Not applicable, missing		
DE15530 indicates the associated diagnosis code when required by the qualifier.		

DE15529	VALUE	FREQ	CUM FREQ	%	CUM %
1	155843	13634	13634	78.26	78.26
2	13634	506	14140	2.91	81.17
3	535	14675	14675	3.07	84.24
4	2290	16965	16965	13.15	97.38
5	7	16972	16972	0.04	97.42
6	16	16988	16988	0.09	97.51
9	433	17421	17421	2.49	100.00

VARIABLE	DEI5578	FFS FILE 06
	3rd problem/symptom date	
	CODES	
	19010101	- Not applicable, missing
	19010101 to 19811231	- Symptom present most of life
	19390101 to 19811231	- Range on this file (YYYYMMDD)
	DEI5578 indicates the date that the third problem or symptom appeared, as reported by the participant. The value 19010101 was used when the participant responded that the symptom had been present most or all of his/her life.	

DEI5580	VALUE	FREQ	CUM FREQ	%	CUM %
1	157230	4342	4342	27.08	27.08
2	1184	5526	5526	7.38	34.46
3	2045	7571	7571	12.75	47.22
4	5013	12584	12584	31.27	78.48
5	613	13197	13197	3.82	82.31
6	1208	14405	14405	7.53	89.84
7	942	15347	15347	5.88	95.72
8	515	15862	15862	3.21	98.93
9	172	16034	16034	1.07	100.00

VARIABLE	DEI5580	FFS FILE 06
	Treatment history/status of the 3rd diagnosis	
	CODES:	
	1 - Initial visit for acute condition	
	2 - Initial visit for chronic condition	
	3 - Repeat visit for acute condition	
	4 - Repeat visit for chronic condition (routine)	
	5 - Initial visit for flareup of a chronic condition	
	6 - Well-care or pregnancy-related	
	7 - Repeat visit for flareup of a chronic condition	
	8 - Acute; not specified as initial or repeat	
	9 - Chronic; not specified as initial or repeat	
	DEI5580 describes the patient's treatment status for the third diagnosis/problem.	

VARIABLE	DEI5599	FFS FILE 06
	4th diagnosis related?	
	CODES	
	1 - Not applicable, missing	
	2 - Yes	
	2 - No	
	DEI5599 indicates whether the service rendered by the provider was medically related to the fourth diagnosis/problem.	

DEI5599	VALUE	FREQ	CUM FREQ	%	CUM %
	1	166137	4637	65.06	65.06
	2	4637	7127	34.94	100.00

VARIABLE	DEI5531	FFS FILE 06
	4th diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DEI5531 indicates the code of the fourth condition diagnosed by the physician or independent health professional. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section I of "Codes Used."	

DEI5532	VALUE	FREQ	CUM FREQ	%	CUM %
	1	166073	5137	71.44	71.44
	2	5137	5414	3.85	75.29
	3	277	5577	2.27	77.56
	4	163	6724	15.95	93.51
	5	1147	6726	0.03	93.53
	6	2	6739	0.18	93.71
	9	13	7191	6.29	100.00
		452			

VARIABLE	DEI5532	FFS FILE 06
	4th diagnosis qualifier	
	CODES	
	1 - Yes	
	2 - Rule out	
	3 - Probable/possible/?/question of	
	4 - With, associated with, complicated by, secondary to, due to	
	5 - Not, turned out not to be, was not	
	6 - Or, versus	
	9 - Well-care code assigned*	
	DEI5532 indicates a diagnosis qualifier for the fourth diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible for a diagnosis qualifier to be used in the absence of a primary diagnosis.	

*NOTE: See note on DEI5523.

VARIABLE	DEI5533	FFS FILE 06
	4th associated diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DEI5533 indicates the associated diagnosis code when required by the qualifier.	

VARIABLE	DEI5581	FFS FILE 06
	4th problem/symptom date	
	CODES	
	19010101 - Not applicable, missing	
	19570101 to 19811131 - Symptom present most of life	
	19570101 to 19811131 - Range on this file (YYYYMMDD)	
	DEI5581 indicates the date that the fourth problem or symptom appeared, as reported by the participant. The value 19010101 was used when the participant responded that the symptom had been present most or all of his/her life.	

VARIABLE	DEI5583	FFS FILE 06
	Treatment history/status of the 4th diagnosis	
	CODES:	
	1 - Initial visit for acute condition	
	2 - Initial visit for chronic condition	
	3 - Repeat visit for acute condition	
	4 - Repeat visit for chronic condition (routine)	
	5 - Initial visit for flareup of a chronic condition	
	6 - Well-care or pregnancy-related	
	7 - Repeat visit for flareup of a chronic condition	
	8 - Acute; not specified as initial or repeat	
	9 - Chronic; not specified as initial or repeat	
	DEI5583 describes the patient's treatment status for the fourth diagnosis/problem.	

DEI5583	VALUE	FREQ	CUM FREQ	%	CUM %
1	166691	1890	1890	28.75	28.75
2	426	426	2316	6.48	35.24
3	729	729	3045	11.09	46.33
4	1985	1985	5030	30.20	76.53
5	318	318	5348	4.84	81.36
6	694	694	6042	10.56	91.92
7	229	229	6271	3.48	95.41
8	230	230	6501	3.50	98.91
9	72	72	6573	1.10	100.00

VIII. DRUGS SOLD BY PHYSICIANS FFS FILE 08

INTRODUCTION

The following codebook documents primary variables concerning drugs sold directly by physicians (or other independent providers of health services) to HIE participants. Variables in this file indicate the NDC, generic and therapeutic codes for each drug sold, the strength and quantity of each drug, the dosage instructions, and whether the drug was a prescription or over-the-counter drug. Other variables indicate the diagnoses to which the drug is related, the treatment history/status of each diagnosis, the charge for the drug, the amount of the charge that was not covered by the HIE, the reason for such noncoverage, and the amount reimbursed to the provider or participant by the HIE. Also included are variables indicating the reasons or symptoms for the visit to the physician, the date and place of service, the referral physicians (if any), and whether the visit was accident- or employment-related. Some nonprescription drugs were covered by the HIE for certain conditions; they are listed in Appendix D.

The units of observation in this file are line items for drugs sold by physicians.¹ For an explanation of common variables used in this codebook, see the final subsection of Sec. II. Below we provide explanations concerning specific variables in this file.

PRESCRIPTION VARIABLES

Prescriptions contain a variety of specific data. To reconstruct a prescription, the user must consider several variables, as described below:

¹Analysts should note that the statistical frequency of a variable in this file represents the number of times it occurs in relation to the unit of observation, *not* the number of claims on which it appears.

- The numerical amount of the drug indicated in DEI5589 (NDC Code) is found in the variable DEI5588, Amount Sold (e.g., 30).
- The variable DEI5667, Dosage Instructions-Quantity, indicates the prescribed or suggested numerical quantity of each dosage (e.g., one).
- Both of these variables must be linked with DEI5668, Dosage Instructions-Form, to know in what form the quantity given is measured (e.g., tablet, ounce).
- The prescribed or suggested frequency for administering the drug (e.g., twice daily) is given in DEI5669, and these instructions are modified if necessary in DEI5670.
- The numerical dosage strength (e.g., 250) of the drug is given in DEI5586, and this number must be linked to its appropriate unit of measure (e.g., milligrams), given in DEI5587, Dosage Strength Unit.

The above information was filled in voluntarily by physicians; the MER form did not specifically request it. If a drug had a common form and dosage, the physician may have felt it unnecessary to fill in any of the prescription elements when the drug name itself seemed sufficient. Consequently, missing data can exist in the above prescription element variables.

NDC CODE

DEI5589 indicates the first seven digits of the National Drug Code (NDC) identifier for the drug sold. The last two digits of the national nine-digit code number represent trade package size and were not used by the HIE. Codes were taken from the *National Drug Code Directory*, whenever possible.² A number of supplementary codes were added by the HIE to identify drugs not listed in the 1972 NDC Directory. NDC and supplementary codes used in the claims files are defined in Sec. V of *Codes Used*.

²Public Health Service, U.S. Dept. of Health and Human Services, Washington, D.C. 20204, June 1972.

GENERIC CODES

DEI5590 - DEI5594 indicate codes that identify up to five generic components of the drug sold. This generic coding system was developed by the HIE; code definitions are found in Sec. VI of *Codes Used*.

DRUG THERAPEUTIC CODE

DEI5595 indicates a code identifying the therapeutic use category of the drug. Codes were taken from the American Medical Association's *AMA Drug Evaluations, 1973*,³ by creating a code number that represents the chapter number of the drug's therapeutic category. Therapeutic codes are defined in Sec. VII of *Codes Used*.

DIAGNOSIS RELATION TO DRUG SOLD

The variables DEI5596 - DEI5599 indicate whether the drug sold by the physician is related to one or more of the four possible diagnoses.

³Second edition, Publishing Sciences Group, Inc., Acton, MA.

CODEBOOK FOR FFS FILE 08

DRUGS SOLD BY PHYSICIANS

DIRECTORY OF VARIABLES - FFS FILE 08

DRUGS SOLD BY PHYSICIANS

VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK	VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK
FILENAME			DE15577	Treatment history/status of	197
PERSON	Name of file	179	DE15598	the 2nd diagnosis	197
SITE	Person identifier	179	DE15528	3rd diagnosis related?	198
INSTAT	Site	180	DE15529	3rd diagnosis	198
CONTYR	Insurance status	180	DE15530	3rd diagnosis qualifier	199
DE15553	Contract year	181	DE15578	3rd associated diagnosis	199
DE15502	Claim number	181	DE15580	3rd problem/symptom date	199
DE15555	Provider number	181		Treatment history/status of	
DE15584	Date of service	182	DE15599	the 3rd diagnosis	200
DE15503	Place of service	182	DE15531	4th diagnosis related?	200
DE15505	1st reason/symptom for visit	183	DE15532	4th diagnosis	201
DE15565	2nd reason/symptom for visit	183	DE15533	4th diagnosis qualifier	201
DE15567	3rd reason/symptom for visit	184	DE15581	4th associated diagnosis	202
DE15568	Previous visit to this doctor	184	DE15583	4th problem/symptom date	202
DE15569	Provider referred from	184		Treatment history/status of	
DE15570	First provider referral	185	DE15666	the 4th diagnosis	203
DE15571	Second provider referral	185	DE15589	Prescription status of drug	203
DE15512	Accident related	186	DE15590	NDC code	204
DE15566	Employment related	186	DE15591	1st generic code	204
DE15558	Date of injury	186	DE15592	2nd generic code	205
DE15559	Line-item charge	187	DE15593	3rd generic code	205
DE15560	Noncovered charges	188	DE15594	4th generic code	206
DE15561	Reason for noncoverage	190	DE15595	5th generic code	206
DE15596	Reimbursement	191	DE15588	Drug therapeutic code	207
DE15522	1st diagnosis related?	191	DE15667	Amount sold	208
DE15523	1st diagnosis	192		Dosage instructions --	210
DE15524	1st diagnosis qualifier	192	DE15668	quantity	211
DE15572	1st associated diagnosis	193	DE15669	Dosage instructions --	211
DE15574	1st problem/symptom date	193	DE15670	Dosage instructions --	212
	Treatment history/status of		DE15586	frequency	213
	the 1st diagnosis	194	DE15587	flexibility	213
DE15597	2nd diagnosis related?	194		Dosage strength	215
DE15525	2nd diagnosis	195		Dosage strength unit	215
DE15526	2nd diagnosis qualifier	195			
DE15527	2nd associated diagnosis	196			
DE15575	2nd problem/symptom date	196			

FILENAME	VALUE	FREQ	CUM FREQ	%	CUM %
	PE08AA	3730	3730	100.00	100.00

SITE	VALUE	FREQ	CUM FREQ	%	CUM %
	1	1833	1833	49.14	49.14
	2	1063	2896	77.64	77.64
	3	175	3071	82.33	82.33
	4	368	3439	92.20	92.20
	5	145	3584	96.09	96.09
	6	146	3730	100.00	100.00

VARIABLE FILENAME FFS FILE 08

Name of file

FILENAME is a 6-digit code that uniquely identifies the file. This file name is PE08AA.

VARIABLE PERSON FFS FILE 08

Person identifier

PERSON is an 8-character alphanumeric code that uniquely identifies the participant in the HIE to whom the following data refer. The 2nd character of PERSON designates in which site a participant resided during enrollment in the HIE: A=Dayton; B=Seattle; E=Fitchburg; F=Franklin County; G=Charleston; H=Georgetown County.

VARIABLE SITE FFS FILE 08

Site

CODES

1 - Dayton, Ohio
2 - Seattle, Washington
3 - Fitchburg, Massachusetts
4 - Franklin County, Massachusetts
5 - Charleston, South Carolina
6 - Georgetown County, South Carolina

SITE identifies the participant's place of residence when enrolled.

VARIABLE	INSTAT	FFS FILE 08
Insurance status		
CODES		
1 - Ever insured (includes HMO experimental group)		
2 - Ever assigned to HMO control group		
3 - Never insured		
INSTAT describes the participant's insurance status in the Health Insurance Experiment.		

INSTAT	FREQ	CUM FREQ	%	CUM %
1	3707	3707	99.38	99.38
2	23	3730	0.62	100.00

VARIABLE	CONTYR	FFS FILE 08
Contract year		
CODES		
P1 - First year (South Carolina 3 year enrollees)		
P2 - Second year (South Carolina 3 year enrollees)		
P3 - Third year (South Carolina 3 year enrollees)		
01 - First year		
02 - Second year		
03 - Third year		
04 - Fourth year		
05 - Fifth year		
CONTYR identifies the participant's contract year of coverage for which the claim was filed under the HIE. A three-year South Carolina enrollment group also served as an uninsured control group for two years prior to the beginning of its contract period; P1 - P3 identify the medical insurance contract periods for this group. Thus, P1 indicates the first contract year for this group, but is the third contract year of the study.		

CONTYR	FREQ	CUM FREQ	%	CUM %
P1	63	63	1.69	1.69
P2	54	117	1.45	3.14
P3	52	169	1.39	4.53
01	1121	1290	30.05	34.58
02	893	2183	23.94	58.53
03	1013	3196	27.16	85.68
04	262	3458	7.02	92.71
05	272	3730	7.29	100.00

VARIABLE	DEI5553	FFS FILE 08
	Claim number	
	DEI5553 indicates a claim identifier which is used to link the line items from a given MER.	

VARIABLE	DEI5502	FFS FILE 08
	Provider number	
	DEI5502 is an 8-character code which refers, in this file, to the physician or independent health professional who sold drugs directly to the participant. For further information on the provider, this number can be linked to information in the provider file.	

VARIABLE	DEI5555	FFS FILE 08
	Date of service	
	CODES	
	1974115 to 19820120 - Date range on file (YYYYMMDD)	
	DEI5555 indicates the date on which the drug was sold by the provider.	

DE15584	VALUE	FREQ	CUM FREQ	%	CUM %
	1	3267	3267	87.59	87.59
	2	10	3277	0.27	87.86
	3	3	3280	0.08	87.94
	4	3	3283	0.08	88.02
	6	216	3499	5.79	93.81
	7	2	3501	0.05	93.86
	8	118	3619	3.16	97.02
	9	111	3730	2.98	100.00

VARIABLE	DE15584	FFS FILE 08
	Place of service	
	CODES	
	1 - Doctor's office	
	2 - Independent laboratory	
	3 - Patient's home	
	4 - Hospital	
	5 - Nursing home	
	6 - Emergency room (when not admitting)	
	7 - Outpatient surgery	
	8 - Other outpatient hospital, including hospital clinic	
	9 - Other locations, including non-hospital clinics	
	DE15584 indicates the place the participant received medical services.	

VARIABLE	DE15503	FFS FILE 08
	1st reason/symptom for visit	
	CODES	
	Blank - Not applicable, missing	
	DE15503 indicates the code for the first reason the participant went to see the physician or independent health professional. All reason-for-visit codes used in the claims line-item files are listed in Section IV of "Codes Used."	

NOTE: NAMCS codes were entered without decimal points.
Any codes lacking definitions are coding errors.

VARIABLE	DE15505	FFS FILE 08
	2nd reason/symptom for visit	
	CODES	
	Blank - Not applicable, missing	
	DE15505 indicates the code for an additional reason the participant went to see the physician or independent health professional. All reason-for-visit codes used in the claims line-item files are listed in Section IV of "Codes Used."	

VARIABLE	DE15565	FFS FILE 08
	3rd reason/symptom for visit	
	CODES	
	Blank - Not applicable, missing	
	DE15565 indicates the code for an additional reason the participant went to see the physician or independent health professional. All reason-for-visit codes used in the claims line-item files are listed in Section IV of "Codes Used."	

DEI5567	VALUE	FREQ	CUM FREQ	%	CUM %
	1	21	21	88.14	88.14
	2	3269	3269	11.86	100.00
		440	3709		

VARIABLE	DEI5567	FFS FILE 08
	Previous visit to this doctor	
	CODES	
	1 - Yes	
	2 - No	
	DEI5567 indicates whether the participant had previously visited this physician or independent health professional.	

VARIABLE	DEI5568	FFS FILE 08
	Provider referred from	
	CODES	
	Blank - Not applicable, missing	
	DEI5568 indicates the provider number of the person or institution (if any) who referred the participant.	

VARIABLE	DEI5569	FFS FILE 08
	First provider referral	
	CODES	
	Blank - Not applicable, missing	
	DEI5569 indicates the provider number of the first provider (if any) to whom the participant was referred.	

VARIABLE	DEI5570	FFS FILE 08
	Second provider referral	
	CODES	
	Blank - Not applicable, missing	
	DEI5570 indicates the provider number of the second provider (if any) to whom the participant was referred.	

VARIABLE	DEI5511	FFS FILE 08
	Accident related	
	CODES	
	1 - Not applicable, missing	
	2 - Yes	
	DEI5511 states whether the illness or injury was accident related.	

DEI5511	VALUE	FREQ	CUM FREQ	%	CUM %
1	5	138	138	3.71	3.71
2	3587	3725	3725	96.30	100.00

DEI5512	VALUE	FREQ	CUM FREQ	%	CUM %
	1	7	7	0.54	0.54
	2	20	20	0.54	0.54
		3703	3723	99.46	100.00

DEI5558	NUMBER OF OBSERVATIONS	3724
	NUMBER OF MISSING	6
	MEAN	6.83
	MEDIAN	3.00
	MINIMUM VALUE	0.00
	MAXIMUM VALUE	180.00
	STANDARD DEVIATION	11.56
	COEFFICIENT OF VARIATION	169.28
	SKEWNESS	4.46
	KURTOSIS	31.07

VARIABLE	DEI5512	FFS FILE 08
Employment related		
CODES		
1 - Yes		
2 - No		
DEI5512 states whether the illness or injury was employment related.		

VARIABLE	DEI5566	FFS FILE 08
Date of injury		
CODES		
19500801 to 19810414 - Range of dates on file (YYYYMMDD)		
DEI5566 indicates the date (if any) the participant was injured.		

VARIABLE	DEI5558	FFS FILE 08
Line-item charge		
CODES		
1 - Not applicable, missing		
DEI5558 indicates the charge submitted to the HIE for the drug listed in DEI5589, NDC Code.		

VARIABLE DE15559		FFS FILE 08
Noncovered charges		
CODES		
. - Not applicable, missing		
DE15559 indicates the amount of charges in DE15558		
which were not covered by the insurance plan.		

DE15559

NUMBER OF OBSERVATIONS

1943

NUMBER OF MISSING

1787

MEAN

4.03

MEDIAN

1.75

MINIMUM VALUE

0.00

MAXIMUM VALUE

90.00

STANDARD DEVIATION

6.97

COEFFICIENT OF VARIATION

172.87

SKEWNESS

4.54

KURTOSIS

30.99

VARIABLE	DE15560	FFS FILE 08
Reason for noncoverage		
CODES		
1 - Not applicable, missing		
2 - Inpatient hospital accommodations in a private room		
3 - Inpatient hospital comfort items		
4 - Inpatient hospital custodial care		
5 - Cosmetic surgery not resulting from an accidental injury		
6 - Psychiatric outpatient services in excess of fifty-two consultations per year		
7 - Outpatient psychiatric services		
8 - Outpatient personal care services		
9 - Orthodontia not resulting from accidental injury		
10 - Christian Science practitioner or sanatorium not listed in the Christian Science Journal		
11 - Non-emergency transportation		
12 - More than one eye or hearing examination during the accounting year		
13 - More than one pair of eyeglass frames every two accounting years		
14 - More than one set of eyeglass lenses during the accounting year		
15 - More than one hearing aid during the accounting year		
16 - Exceeds limit on eyeglass frames or hearing aids		
17 - Repairs to eyeglass frames and hearing aids		
18 - Diagnostic, screening, preventative, or rehabilitation services not otherwise specified in the scope of coverage		
19 - More than one piece of medical equipment, appliance or supply		
20 - Equipment, appliances or supplies costing more than \$25.00		
21 - Not medically necessary		
22 - Duplicate line item		
23 - Amount paid on another Explanation of Benefits		
24 - Service prior to enrollment (SAME AS 64)		
25 - Procedure done twice		
26 - Certificate of benefits stipulations on service not met		
27 - Prior authorization not approved		
28 - Participant not eligible for dental care		

(cont.)

DE15560	VALUE	FREQ	CUM FREQ	%	CUM %
1	1787	1	1	0.05	0.05
2	20	1	2	0.62	0.67
3	21	12	13	0.72	1.39
4	22	14	27	0.15	1.54
5	25	3	30	0.05	1.60
6	26	1	31	24.91	26.51
7	29	484	515	4.22	30.73
8	30	82	597	51.47	82.19
9	31	1000	1597	0.41	82.60
10	32	8	1605	0.10	82.71
11	35	2	1607	0.05	82.76
12	37	1	1608	0.05	82.81
13	40	1	1609	0.15	82.96
14	42	3	1612	0.62	83.58
15	44	12	1624	0.21	84.77
16	45	19	1643	0.10	84.87
17	48	4	1647	0.15	85.02
18	56	2	1649	0.05	85.08
19	58	3	1652	0.05	85.13
20	59	1	1653	14.36	99.49
21	60	1	1654	0.26	99.74
22	66	279	1933	0.26	100.00
23	73	5	1938		
24	74	5	1943		

VARIABLE DE15560 (cont.)

28 - Blood credit
29 - Over-the-counter drugs
30 - Deductible not met
31 - Participant's co-insurance portion
32 - Services covered by workmen's compensation or employer's liability laws
33 - Pass through (covered by other insurance; payment from other company was "passed through" to provider or participant)
34 - Prepayment made
35 - Services covered by accident insurance policies
36 - Medicare paid
37 - Discount
38 - Not covered prepayment and deductible
39 - Not covered prepayment and coinsurance
40 - Discount and deductible not met
41 - Discount and coinsurance
42 - Paid by other insurance carrier
43 - Paid by agency other than insurance company
44 - Services obtained outside Group Health Cooperative
45 - Plan benefit is 5% of covered charges
46 - Services obtained at Group Health Cooperative
47 - Allowance on over-the-counter-drugs per illness per accounting year has been met
48 - Services paid for by Group Health Cooperative
53 - Part paid by Group Health Cooperative; plan benefit = 5% or balance
54 - Charge information unavailable--charge coded as one cent
55 - Discount plus plan benefit is 5%
56 - Medicaid paid
57 - Company physical provided as fringe benefit--charge coded as one cent, but true charge unknown
58 - Workmen's compensation - charge coded as one cent, but true charge unknown
59 - Services rendered after termination date
60 - Claim is duplicate
61 - Participant not eligible
62 - Suspended
63 - No service
64 - Before enrollment date (SAME AS 23)
65 - Claim filed after time limit
66 - No charge
67 - Underpayment

(cont.)

VARIABLE DE15560 (cont.)

- 68 - Overpayment, deducted on another claim
- 69 - Overpayment, returned
- 70 - Overpayment, deducted on this claim, overpaid on another claim
- 71 - Billed in error--patient not seen
- 72 - Prepayment made (SAME AS 34)
- 73 - Duplicate payment recovered
- 74 - Duplicate payment not recovered
- 80 - Prepayment for future services - no Maximum Dollar Expenditure involved
- 81 - Prepayment - part applied to the Maximum Dollar Expenditure

DE15560 describes the reason a charge was not covered under the participant's HIE plan. The above code values were designed to cover all line-item charges; not all values are appropriate in every file.

VARIABLE DE15561

Reimbursement

CODES

. - Not applicable, missing

DE15561 indicates the reimbursement amount for the line-item charge shown in DE15558.

FFS FILE 08

DE15561

NUMBER OF OBSERVATIONS	3728
NUMBER OF MISSING	2
MEAN	4.72
MEDIAN	1.50
MINIMUM VALUE	0.00
MAXIMUM VALUE	114.00
STANDARD DEVIATION	10.25
COEFFICIENT OF VARIATION	217.28
SKEWNESS	4.41
KURTOSIS	25.45

DEI5596	VALUE	FREQ	CUM FREQ	%	CUM %
	1	76	3371	92.26	92.26
	2	283	3654	7.75	100.00

VARIABLE	DEI5596	FFS FILE 08
	1st diagnosis related?	
	CODES	
	1 - Not applicable, missing	
	2 - Yes	
	2 - No	
	DEI5596 indicates whether the drug sold by the provider was medically related to the first diagnosis/problem.	

VARIABLE	DEI5522	FFS FILE 08
	1st diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DEI5522 indicates the code of the first condition diagnosed by the physician or independent health professional. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section 1 of "Codes Used."	

DEI5523	VALUE	FREQ	CUM FREQ	%	CUM %
	.	133	.	.	.
	1	3298	3298	91.69	91.69
	2	22	3320	0.61	92.30
	3	63	3383	1.75	94.05
	4	203	3586	5.64	99.69
	6	3	3589	0.08	99.78
	9	8	3597	0.22	100.00

VARIABLE DEI5523 FFS FILE 08

1st diagnosis qualifier

CODES

- 1 - Not applicable, missing
- 2 - Rule out
- 3 - Probable/possible/?/question of
- 4 - With, associated with, complicated by, secondary to, due to
- 5 - Not, turned out not to be, was not
- 6 - Or, versus
- 9 - Well-care code assigned*

DEI5523 indicates a diagnosis qualifier for the first diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible a diagnosis qualifier was used in the absence of a primary diagnosis.

*NOTE: Value #9 is not a true diagnosis qualifier. Occasionally, health maintenance procedures were performed by the provider which did not pertain to any of the diagnoses on the MER. In such cases, coders assigned a well-care code from the H-ICDA-2, and it was notated in this variable.

VARIABLE	DEI5524	FFS FILE 08
	1st associated diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DEI5524 indicates the associated diagnosis code	
	when required by the diagnosis qualifier.	

VARIABLE	DEI5572	FFS FILE 08
	1st problem/symptom date	
	CODES	
	19010101 to 19821231	- Not applicable, missing
		- Symptom present most of life
		- Range on this file (YYYYMMDD)
	DEI5572 indicates the date that the first problem or	
	symptom appeared, as reported by the participant.	
	The value 19010101 was used when the participant	
	responded that the symptom had been present most	
	or all of his/her life.	

VARIABLE	DEI5574	FFS FILE 08
	Treatment history/status of the 1st diagnosis	
	CODES	
	: - Not applicable, missing	
	1 - Initial visit for acute condition	
	2 - Initial visit for chronic condition	
	3 - Repeat visit for acute condition	
	4 - Repeat visit for chronic condition (routine)	
	5 - Initial visit for flareup of a chronic condition	
	6 - Well care or pregnancy-related	
	7 - Repeat visit for flareup of a chronic condition	
	8 - Acute; not specified as initial or repeat	
	9 - Chronic; not specified as initial or repeat	
	DEI5574 describes the patient's treatment history or status for the first diagnosis/problem.	

DEI5574	VALUE	FREQ	CUM FREQ	%	CUM %
1	1	316	1384	40.54	40.54
2	2	1384	1481	2.84	43.38
3	3	201	1682	5.89	49.27
4	4	1331	3013	38.99	88.25
5	5	68	3081	1.99	90.25
6	6	124	3205	3.63	93.88
7	7	110	3315	3.22	97.10
8	8	78	3393	2.29	99.39
9	9	21	3414	0.62	100.00

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VARIABLE	DEI5597	FFS FILE 08
	2nd diagnosis related?	
	CODES	
	: - Not applicable, missing	
	1 - Yes	
	2 - No	
	DEI5597 indicates whether the drug sold by the provider was medically related to the second diagnosis/problem.	

DEI5597	VALUE	FREQ	CUM FREQ	%	CUM %
1	1	2614	640	57.35	57.35
2	2	476	1116	42.65	100.00

VARIABLE	DEI5525	FFS FILE 08
2nd diagnosis		
CODES		
Blank - Not applicable, missing		
DEI5525 indicates the code of the second condition diagnosed by the physician or independent health professional. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section I of "Codes Used."		

VARIABLE	DEI5526	FFS FILE 08
2nd diagnosis qualifier		
CODES		
1 - Not applicable, missing		
2 - No qualifier given		
3 - Rule out		
4 - Probable/possible/?/question of		
5 - With, associated with, complicated by,		
6 - secondary to, due to		
7 - Not, turned out not to be, was not		
8 - Or, versus		
9 - Well-care code assigned*		
DEI5526 indicates a diagnosis qualifier for the second diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible a diagnosis qualifier was used in the absence of a primary diagnosis.		

*NOTE: See note on DEI5523.

DEI5526	VALUE	FREQ	CUM FREQ	%	CUM %
1	2584	1031	1031	89.97	89.97
2	32	1063	1063	2.79	92.76
3	40	1103	1103	3.49	96.25
4	26	1129	1129	2.27	98.52
6	1	1130	1130	0.09	98.60
9	16	1146	1146	1.40	100.00

VARIABLE	DEI5527	FFS FILE 08
	2nd associated diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DEI5527 indicates the associated diagnosis code	
	when required by the qualifier.	

VARIABLE	DEI5575	FFS FILE 08
	2nd problem/symptom date	
	CODES	
	19010101 - Not applicable, missing	
	19740705 to 19811010 - Symptom present most of life	
	19740705 to 19811010 - Range on this file (YYYYMMDD)	
	DEI5575 indicates the date that the second problem or	
	symptom appeared, as reported by the participant.	
	The value 19010101 was used when the participant	
	responded that the symptom had been present most	
	or all of his/her life.	

VARIABLE	DEI5577	FFS FILE 08
	Treatment history/status of the 2nd diagnosis	
	CODES	
	1 - Not applicable, missing 2 - Initial visit for acute condition 3 - Initial visit for chronic condition 4 - Repeat visit for acute condition 5 - Repeat visit for chronic condition (routine) 6 - Initial visit for flareup of a chronic condition 7 - Well care or pregnancy-related 8 - Repeat visit for flareup of a chronic condition 9 - Acute; not specified as initial or repeat 9 - Chronic; not specified as initial or repeat	
	DEI5577 describes the patient's treatment history or status for the second diagnosis/problem.	

DEI5577	VALUE	FREQ	CUM FREQ	%	CUM %
1	2681	396	396	37.75	37.75
2	396	56	452	5.34	43.09
3	57	509	509	5.43	48.52
4	399	908	908	38.04	86.56
5	15	923	923	1.43	87.99
6	48	971	971	4.58	92.56
7	63	1034	1034	6.01	98.57
8	12	1046	1046	1.14	99.71
9	3	1049	1049	0.29	100.00

VARIABLE	DEI5598	FFS FILE 08
	3rd diagnosis related?	
	CODES	
	1 - Not applicable, missing 1 - Yes 2 - No	
	DEI5598 indicates whether the drug sold by the provider was medically related to the third diagnosis/problem.	

DEI5598	VALUE	FREQ	CUM FREQ	%	CUM %
1	3333	200	200	50.38	50.38
2	197	397	397	49.62	100.00

VARIABLE	DEI5528	FFS FILE 08
	3rd diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DEI5528 indicates the code of the third condition diagnosed by the physician or independent health professional. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section 1 of "Codes Used."	

VARIABLE	DEI5529	FFS FILE 08
	3rd diagnosis qualifier	
	CODES	
	1 - Not applicable, missing	
	2 - Rule out	
	3 - Probable/possible/?/question of	
	4 - With, associated with, complicated by, secondary to, due to	
	5 - Not, turned out not to be, was not	
	6 - Or, versus	
	9 - Well-care code assigned*	
	DEI5529 indicates a diagnosis qualifier for the third diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible a diagnosis qualifier was used in the absence of a primary diagnosis.	

*NOTE: See note on DEI5523.

DEI5529	VALUE	FREQ	CUM FREQ	%	CUM %
1	3323	346	346	85.01	85.01
2	346	9	355	2.21	87.22
3	17	372	403	4.18	91.40
4	31	403	403	7.62	99.02
9	4	407	407	0.98	100.00

VARIABLE	DE15530	FFS FILE 08
	3rd associated diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DE15530 indicates the associated diagnosis code when required by the qualifier.	

VARIABLE	DE15578	FFS FILE 08
	3rd problem/symptom date	
	CODES	
	19010101	- Not applicable, missing
	19741210 to 19810420	- Symptom present most of life
		- Range on this file (YYYYMMDD)
	DE15578 indicates the date that the third problem or symptom appeared, as reported by the participant. The value 19010101 was used when the participant responded that the symptom had been present most or all of his/her life.	

VARIABLE	DEI5580	FFS FILE 08
	Treatment history/status of the 3rd diagnosis	
	CODES	
	1 - Not applicable, missing	
	2 - Initial visit for acute condition	
	3 - Repeat visit for chronic condition	
	4 - Repeat visit for acute condition	
	5 - Initial visit for chronic condition (routine)	
	6 - Well care or pregnancy-related	
	7 - Repeat visit for flareup of a chronic condition	
	8 - Acute; not specified as initial or repeat	
	9 - Chronic; not specified as initial or repeat	
	DEI5580 describes the patient's treatment history or status for the third diagnosis/problem.	

DEI5580 VALUE	FREQ	CUM FREQ	%	CUM %
1	3351	88	23.22	23.22
2	88	105	4.49	27.70
3	17	148	11.35	39.05
4	43	169	44.59	83.64
5	2	319	0.53	84.17
6	14	333	3.69	87.86
7	17	350	4.49	92.35
8	28	378	7.39	99.74
9	1	379	0.26	100.00

VARIABLE	DEI5599	FFS FILE 08
	4th diagnosis related?	
	CODES	
	1 - Not applicable, missing	
	2 - Yes	
	2 - No	
	DEI5599 indicates whether the drug sold by the provider was medically related to the fourth diagnosis/problem.	

DEI5599 VALUE	FREQ	CUM FREQ	%	CUM %
1	3573	66	42.04	42.04
2	66	157	57.96	100.00

VARIABLE	DEI5531	FFS FILE 08
	4th diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DEI5531 indicates the code of the fourth condition diagnosed by the physician or independent health professional. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE Claims files are listed in Section I of "Codes Used."	

VARIABLE	DEI5532	FFS FILE 08
	4th diagnosis qualifier	
	CODES	
	1 - Not applicable, missing 2 - No qualifier given 3 - Rule out 4 - Probable/possible/?/question of With, associated with, complicated by, secondary to, due to 5 - Not, turned out not to be, was not 6 - Or, versus 9 - Well-care code assigned*	
	DEI5532 indicates a diagnosis qualifier for the fourth diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible for a diagnosis qualifier to be used in the absence of a primary diagnosis.	

*NOTE: See note on DEI5523.

DEI5532	VALUE	FREQ	CUM FREQ	%	CUM %
1	3567	146	146	89.57	89.57
2	8	154	154	4.91	94.48
3	1	155	155	0.61	95.09
4	6	161	161	3.68	98.77
9	2	163	163	1.23	100.00

VARIABLE	DEI5533	FFS FILE 08
	4th associated diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DEI5533 indicates the associated diagnosis code when required by the qualifier.	

VARIABLE	DEI5581	FFS FILE 08
	4th problem/symptom date	
	CODES	
	19010101 - Not applicable, missing	
	19741210 to 19790702 - Symptom present most of life	
	19741210 to 19790702 - Range on this file (YYYYMMDD)	
	DEI5581 indicates the date that the fourth problem or symptom appeared, as reported by the participant. The value 19010101 was used when the participant responded that the symptom had been present most or all of his/her life.	

VARIABLE	DEI5583	FFS	FILE	08
Treatment history/status of the 4th diagnosis				
CODES				
<ul style="list-style-type: none"> 1 - Not applicable, missing 2 - Initial visit for acute condition 3 - Repeat visit for chronic condition 4 - Repeat visit for chronic condition (routine) 5 - Initial visit for flareup of a chronic condition 6 - Well care or pregnancy-related 7 - Repeat visit for flareup of a chronic condition 8 - Acute; not specified as initial or repeat 9 - Chronic; not specified as initial or repeat 				
DEI5583 describes the patient's treatment history or status for the fourth diagnosis/problem.				

VARIABLE	DEI5666	FFS	FILE	08
Prescription status of drug				
CODES				
<ul style="list-style-type: none"> 1 - Not applicable, missing 2 - Prescription (legend) 3 - Over the counter (non-legend) 4 - Either (varies by state) 5 - Unknown 				
DEI5666 states whether the drug was a prescription or could be sold over the counter, or whether it required a prescription in some states but not in others, or whether the information about the status of the drug was unobtainable.				

VARIABLE	DE15589	FFS FILE 08
	NDC code	
	CODES	
	Blank - Not applicable, missing	
	DE15589 indicates the first seven digits of the National Drug Code for the drug sold by the provider. A number of codes were added by the HIE to identify drugs not listed in the 1972 NDC Directory. All NDC and supplementary codes used in the claims line-item files can be found in Section V of "Codes Used."	

VARIABLE	DE15590	FFS FILE 08
	1st generic code	
	CODES	
	. - Not applicable, missing	
	DE15590 identifies a generic component of the drug specified by NDC code in DE15589. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE	DEI5591	FFS FILE 08
	2nd generic code	
	CODES	
	. - Not applicable, missing	
	DEI5591 identifies a generic component of the drug specified by NDC code in DEI5589. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE	DEI5592	FFS FILE 08
	3rd generic code	
	CODES	
	. - Not applicable, missing	
	DEI5592 identifies a generic component of the drug specified by NDC code in DEI5589. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE	DEI5593	FFS FILE 08
	4th generic code	
	CODES	
	. - Not applicable, missing	
	DEI5593 identifies a generic component of the drug specified by NDC code in DEI5589. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE	DEI5594	FFS FILE 08
	5th generic code	
	CODES	
	. - Not applicable, missing	
	DEI5594 identifies a generic component of the drug specified by NDC code in DEI5589. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE	DE15595	FFS FILE 08	DE15595	VALUE	FREQ	CUM FREQ	%	CUM %
Drug therapeutic code								
CODES								
. - Not applicable, missing								
DE15595 indicates the code for the therapeutic use of the drug. Codes were taken from the American Medical Association Drug Evaluations, 1973, by assigning a code number which corresponds with the chapter number in which the drug's therapeutic use is described. Therapeutic codes used in this file are listed and defined in Section VII of "Codes Used."								
	1			97	1	1	0.03	0.03
	2			1	1	2	0.03	0.06
	3			6	8	10	0.17	0.22
	4			3	11	21	0.08	0.30
	5			50	61	81	1.38	1.68
	6			10	71	91	0.28	1.95
	7			25	96	116	0.69	2.64
	8			1	97	117	0.03	2.67
	9			1	98	118	0.03	2.70
	10			232	330	448	6.39	9.08
	11			11	341	459	0.30	9.39
	12			43	384	497	1.18	10.57
	13			31	415	525	0.85	11.42
	14			25	440	549	0.69	12.11
	15			12	452	561	0.33	12.44
	16			17	469	578	0.47	12.91
	17			191	660	759	5.26	18.17
	18			8	668	776	0.22	18.39
	19			24	673	790	0.14	18.53
	20			5	687	805	0.39	18.91
	21			14	703	819	0.44	19.35
	22			16	762	835	1.62	20.97
	23			59	766	894	0.11	21.09
	24			4	807	908	1.13	22.21
	25			3	810	911	0.08	22.30
	26			3	819	914	0.25	22.54
	27			9	988	997	4.65	27.20
	28			169	1115	1226	3.50	30.69
	29			127	1118	1335	0.08	30.77
	30			3	1168	1338	1.38	32.15
	31			50	1171	1388	0.08	32.23
	32			3	1211	1391	1.10	33.33
	33			40	1240	1430	0.80	34.13
	34			29	1267	1459	0.74	34.88
	35			27	1326	1591	1.62	36.50
	36			59	1433	1734	2.95	39.44
	37			107	1481	1881	15.08	54.53
	38			548	235	2216	6.47	61.00
	39			235	2548	2548	9.14	70.14
	40			332	2554	2554	0.17	70.30
	41			6	2627	2633	2.01	72.31
	42			73	2634	2637	0.19	72.50
	43			7	2637	2644	0.08	72.59
	44			3	2907	2910	7.43	80.02
	45			53			(cont.)	

VARIABLE DE15595 (cont.)

VALUE	FREQ	CUM FREQ	%	CUM %
55	55	2962	1.51	81.53
56	6	2968	0.17	81.70
57	13	2981	0.36	82.05
58	1	2982	0.03	82.08
59	1	2983	0.03	82.11
60	22	3005	0.61	82.71
61	4	3009	0.11	82.82
64	10	3019	0.28	83.10
66	6	3025	0.17	83.27
67	9	3034	0.25	83.51
68	265	3299	7.29	90.81
71	23	3322	0.63	91.44
72	7	3329	0.19	91.63
73	20	3349	0.55	92.18
74	1	3350	0.03	92.21
77	2	3352	0.06	92.27
78	43	3395	1.18	93.45
79	22	3417	0.61	94.06
80	18	3435	0.50	94.55
81	9	3444	0.25	94.80
82	2	3446	0.06	94.85
83	33	3479	0.91	95.76
84	1	3480	0.03	95.79
85	17	3497	0.47	96.26
88	67	3564	1.84	98.10
89	4	3568	0.11	98.21
91	1	3569	0.03	98.24
92	50	3619	1.38	99.62
93	14	3633	0.39	100.00

DE15588

VALUE	FREQ	CUM FREQ	%	CUM %
.	1558	.	.	5.99
1	130	130	5.99	5.99
2	48	178	2.21	8.20
3	44	222	2.03	10.22
4	29	251	1.34	11.56
5	93	344	4.28	15.84
6	53	397	2.44	18.28
7	6	403	0.28	18.55
8	20	423	0.92	19.48
9	4	427	0.18	19.66
10	49	476	2.26	21.92
11	1	477	0.05	21.96
12	32	509	1.47	23.44

(cont.)

VARIABLE	DE15588	FFS FILE 08
Amount sold		
CODES		
.	Not applicable, missing	
DE15588	indicates a number which identifies the amount of the drug sold (e.g., 40). Refer to DE15668, dosage form, for an indication of the appropriate unit.	

VARIABLE DE15588 (cont..)

VALUE	FREQ	CUM FREQ	%	CUM %	VALUE	FREQ	CUM FREQ	%	CUM %
13	2	511	0.09	23.53	120	143	2052	6.58	94.48
14	15	526	0.69	24.22	125	2	2054	0.09	94.57
15	110	636	5.06	29.28	126	1	2055	0.05	94.61
16	21	657	0.97	30.25	140	2	2057	0.09	94.71
18	15	672	0.69	30.94	147	5	2062	0.23	94.94
20	162	834	7.46	38.40	150	15	2077	0.69	95.63
21	8	842	0.37	38.77	155	1	2078	0.05	95.67
22	1	843	0.05	38.81	168	6	2084	0.28	95.95
23	2	845	0.09	38.90	180	18	2102	0.83	96.78
24	47	892	2.16	41.07	196	2	2104	0.09	96.87
25	16	908	0.74	41.81	200	14	2118	0.65	97.51
26	3	911	0.14	41.94	240	13	2131	0.60	98.11
28	137	1048	6.31	48.25	250	16	2147	0.74	98.85
30	178	1226	8.20	56.45	252	1	2148	0.05	98.90
32	2	1228	0.09	56.54	273	1	2149	0.05	98.94
34	1	1229	0.05	56.58	300	3	2152	0.14	99.08
35	1	1230	0.05	56.63	336	1	2153	0.05	99.13
36	7	1237	0.32	56.95	360	1	2154	0.05	99.17
38	1	1238	0.05	57.00	400	1	2155	0.05	99.22
40	79	1317	3.64	60.64	454	1	2156	0.05	99.26
42	4	1321	0.18	60.82	480	5	2161	0.23	99.49
43	2	1323	0.09	60.91	500	5	2166	0.23	99.72
45	16	1339	0.74	61.65	900	1	2167	0.05	99.77
47	1	1340	0.05	61.69	1000	4	2171	0.18	99.95
48	3	1343	0.14	61.83	1332	1	2172	0.05	100.00
50	60	1403	2.76	64.60					
56	29	1432	1.34	65.93					
59	2	1434	0.09	66.02					
60	117	1551	5.39	71.41					
63	5	1556	0.23	71.64					
64	3	1559	0.14	71.78					
65	1	1560	0.05	71.82					
67	1	1561	0.05	71.87					
72	2	1563	0.09	71.96					
75	25	1588	1.15	73.11					
78	1	1589	0.05	73.16					
79	1	1590	0.05	73.20					
80	23	1613	1.06	74.26					
84	17	1630	0.78	75.05					
85	6	1636	0.28	75.32					
90	41	1677	1.89	77.21					
94	1	1678	0.05	77.26					
100	226	1904	10.41	87.66					
112	4	1908	0.18	87.85					
118	1	1909	0.05	87.89					

DEI5667	VALUE	FREQ	CUM FREQ	%	CUM %
	0	2667	3	0.28	0.28
	1	580	583	54.56	54.85
	2	108	691	10.16	65.01
	3	7	698	0.66	65.66
	4	2	700	0.19	65.85
	5	3	703	0.28	66.13
	8	2	705	0.19	66.32
	9	27	732	2.54	68.86
	10	1	733	0.09	68.96
	11	1	734	0.09	69.05
	12	2	736	0.19	69.24
	13	1	737	0.09	69.33
	15	1	738	0.09	69.43
	20	1	739	0.09	69.52
	21	4	743	0.38	69.90
	23	1	744	0.09	69.99
	26	1	745	0.09	70.09
	28	102	847	9.60	79.68
	30	1	848	0.09	79.77
	99	215	1063	20.23	100.00

VARIABLE	DEI5667	FFS FILE 08
Dosage instructions - quantity		
CODES		
0	- Not applicable, missing	
1	- One quarter	
2	- One, 1/2 to one	
3	- Two	
4	- Three	
5	- Four	
6	- Five	
7	- Six	
8	- Varies	
9	- Eight	
10	- Half (use 1/2 only)	
11	- Ten	
12	- 1 1/2, 1 - 1 1/2, 1/2 - 1 1/2	
13	- Three-quarters	
14	- One-third	
15	- Two-thirds	
16	- Fifteen	
17	- Twenty	
18	- One or two	
19	- Two or three	
20	- Three or four	
21	- Four or five	
22	- Five or six	
23	- Sparingly	
24	- Liberally	
25	- To, into, on, apply, (e.g. cream)	
26+	- Values over 28 indicate actual dosage quantity	
99	- As directed (only instruction)	
DEI5667 indicates the dosage amount for each use of the drug. This quantity refers to the form of the drug given in DEI5668.		

VARIABLE	DE15668	FFS FILE 08
Dosage instructions - form		
CODES		
0	- Not applicable, missing	
1	- None	
2	- Capsule, tablet, suppository	
3	- Teaspoonful(s)	
4	- Drop(s)	
5	- Milliliter (ml) or cubic centimeter (cc)	
6	- Applicator full	
7	- Affected area, e.g. cream	
8	- Units	
DE15668 states the dosage form for each use of the drug sold by the provider.		

DE15668	VALUE	FREQ	CUM FREQ	%	CUM %
0	2667	13	13	1.22	1.22
1	655	655	668	61.62	62.84
2	184	2	670	0.19	63.03
3	12	184	854	17.31	80.34
4	82	12	866	1.13	81.47
5	11	82	948	7.71	89.18
6	102	11	959	1.04	90.22
7	2	102	1061	9.60	99.81
8		2	1063	0.19	100.00

DEI5669	VALUE	FREQ	CUM FREQ	%	CUM %
1	2667	1	1	0.09	0.09
2	1	4	5	0.38	0.47
3	7	7	12	0.66	1.13
4	109	109	121	10.25	11.38
6	288	288	409	27.09	38.48
8	133	133	542	12.51	50.99
9	142	142	684	13.36	64.35
12	74	74	758	6.96	71.31
17	1	1	759	0.09	71.40
18	14	14	773	1.32	72.72
19	1	1	774	0.09	72.81
21	2	2	776	0.19	73.00
23	1	1	777	0.09	73.10
24	36	36	813	3.39	76.48
26	7	7	820	0.66	77.14
28	7	7	827	0.66	77.80
98	6	6	833	0.56	78.36
99	230	230	1063	21.64	100.00

VARIABLE DEI5669 FFS FILE 08

Dosage instructions - frequency

CODES:

- 0 - Every half hour
- 1 - Every hour
- 2 - Every 2 hours, 2-3 hours, or 12 times/day
- 3 - Every 3 hours, 3-4 hours, or 8 times/day
- 4 - Every 4 hours, 4-6 hours, or six times/day
- 6 - Every six hours, 4 times/day, 3-4 times/day, after meals and at bedtime
- 8 - Every 8 hours, 3 times/day, 2-3 times/day, after meals
- 12 - Every 12 hours, 2 times/day
- 17 - 3 times/week (or 2 weeks/month)
- 18 - Once a week
- 19 - Twice a week (or 2 weeks/month)
- 20 - Once a month
- 21 - Twice a month
- 22 - Every other day (QOD)
- 23 - 20 or 21 days a month, 5 days a week, 3 weeks a month
- 24 - As directed (UD)
- 25 - 25 days each month
- 26 - As needed, PRN
- 27 - Every 3 weeks
- 28 - STAT (immediately)
- 98 - No instructions as to time
- 99 - As directed (only instructions)

DEI5669 states the prescribed frequency of use for the drug sold by the provider.

VARIABLE	DEI5670	FFS FILE 08	VALUE	FREQ	CUM FREQ	%	CUM %
Dosage instructions - flexibility	.			2667	.	96.52	96.52
CODES	0			1026	1026	3.29	99.81
1 - Not applicable, missing	1			35	1063	0.19	100.00
2 - As needed (PRN)	3			2			
3 - May repeat if necessary (SOS)							
3 - Averaged (dosage tapered to 0)							
DEI5670 modifies the prescribed dosage frequency given in DEI5669 for the drug sold by the provider.							
VARIABLE	DEI5586	FFS FILE 08	VALUE	FREQ	CUM FREQ	%	CUM %
Dosage strength	.			1402	.	0.04	0.04
CODES	0			1	1	1.72	1.76
1 - Not applicable, missing	1			40	41	0.73	2.49
48888 - 400,000 units	2			17	58	0.43	2.92
99999 - Standard fixed combination drug	3			10	68	0.52	3.44
DEI5586 indicates a number which identifies the actual dosage strength of the drug, as measured in the dosage units given in DEI5587.	4			12	80	2.45	5.89
	5			57	137	0.04	5.93
	7			1	138	0.47	6.40
	8			11	149	2.19	8.59
	10			51	200	0.04	8.63
	12			1	201	0.30	8.94
	15			7	208	0.26	9.19
	20			6	214	0.04	9.24
	21			1	215	2.02	11.25
	25			47	262	0.86	12.11
	30			20	282	0.04	12.16
	32			1	283	0.64	12.80
	35			15	298	0.56	13.36
	40			13	311	0.04	13.40
	43			1	312	4.73	18.13
	50			110	422	0.09	18.21
	60			2	424	0.04	18.26
	63			1	425	0.22	18.47
	70			5	430	0.13	18.60
	75			3	433	(cont.)	

VARIABLE DE1586 (cont.)

VALUE	FREQ	CUM FREQ	%	CUM %
80	3	436	0.13	18.73
100	26	462	1.12	19.85
105	1	463	0.04	19.89
125	10	473	0.43	20.32
150	7	480	0.30	20.62
200	8	488	0.34	20.96
240	2	490	0.09	21.05
250	270	760	11.60	32.65
300	6	766	0.26	32.90
320	1	767	0.04	32.95
325	2	769	0.09	33.03
350	1	770	0.04	33.08
400	34	804	1.46	34.54
450	1	805	0.04	34.58
500	40	845	1.72	36.30
550	1	846	0.04	36.34
600	1	847	0.04	36.38
750	6	853	0.26	36.64
800	1	854	0.04	36.68
975	1	855	0.04	36.73
1000	3	858	0.13	36.86
1500	1	859	0.04	36.90
2500	9	868	0.39	37.29
3500	1	869	0.04	37.33
3750	2	871	0.09	37.41
8100	1	872	0.04	37.46
9999	1	873	0.04	37.50
12500	2	875	0.09	37.59
48888	1	876	0.04	37.63
99999	1452	2328	62.37	100.00

VARIABLE	DEI5587	FFS FILE 08
Dosage strength unit		
CODES		
1	- Not applicable, missing	
2	- grams (gm)	
3	- milligrams/cubic centimeter (mg/cc), or milligrams/milliliter (mg/ml)	
4	- units/cubic centimeter (u/cc), or units/milliliter (u/ml)	
5	- milligram/vial (mg/vial)	
6	- grams/vial (gm/vial)	
7	- percent (%)	
8	- grains (gr)	
9	- units (u)	
10	- micrograms (mcg)	
11	- 100ths or percent (.00 or %)	
12	- micrograms/cubic centimeter (mcg/cc)	
13	- units/gram (u/gm)	
14	- milligrams/gram (mg/gm)	
99	- Standard fixed dosage (SF, STD); no specified strength unit	
DEI5587 indicates the unit in which the strength of the drug is measured.		

DEI5587	VALUE	FREQ	CUM FREQ	%	CUM %
1	1398	1398	622	26.67	26.67
2	622	622	624	0.09	26.76
3	2	2	735	4.76	31.52
5	111	111	736	0.04	31.56
7	1	1	764	1.20	32.76
8	28	28	808	1.89	34.65
9	44	44	811	0.13	34.78
10	3	3	833	0.94	35.72
11	22	22	864	1.33	37.05
12	31	31	874	0.43	37.48
13	10	10	877	0.13	37.61
14	3	3	879	0.09	37.69
99	2	2	2332	62.31	100.00
	1453	1453			

IX. SUPPLIES SOLD BY PHYSICIANS FFS FILE 09

INTRODUCTION

The following codebook documents primary variables concerning supplies sold directly by physicians or health professionals to HIE participants. Specific information provided in this file includes the type and amount of supply sold, the date and place of service, and variables indicating the diagnoses to which the supply is related, as well as the treatment history/status of each diagnosis. Also included are the reasons/symptoms for the visit to the physician, the date of each symptom's appearance according to the participant, whether the visit was accident- or employment-related, and the referral physicians (if any). Other variables indicate the charge for each supply or group of supplies, the amount of the charge that was not covered, the reasons for such noncoverage, and the amount reimbursed to the provider or participant by the HIE.

The units of observation in this file are line items for supplies sold by physicians or health professionals.¹ For an explanation of common variables used in this codebook, see the final subsection of Sec. II. Below we provide explanations for specific variables in this file.

SUPPLY CODE

The variable DEI5601 identifies the supply sold by the provider. Each supply was identified using a coding system developed by the HIE. Supply codes are listed in Sec. III of *Codes Used*.

¹Analysts should note that the statistical frequency of a variable in this file represents the number of times it occurs in relation to the unit of observation, *not* the number of claims on which it appears.

DIAGNOSIS RELATION TO SUPPLY

Four variables, DEI5596 - DEI5599, show whether the prescribed or suggested supply is related to one or more of the four possible diagnoses that could be listed on the MER.

SECOND NONCOVERED CHARGES AND REASON FOR NONCOVERAGE

This file contains many charges for eyewear (eyeglasses, contact lenses). The HIE had a limit on the amount of eyewear that could be purchased. Any expense beyond that limit would not be covered. Thus, there can exist two reasons for noncoverage of charges in this file-- one for the portion of charges that exceeded the limit, and one for coinsurance charges on the remaining portion. The variable DEI5562, Second Noncovered Charges, indicates, if necessary, a second amount in the line-item charge (DEI5558) that was not covered by the HIE. An additional variable, DEI5563, is included to explain the reason for this noncoverage.

CODEBOOK FOR FFS FILE 09
SUPPLIES SOLD BY PHYSICIANS

DIRECTORY OF VARIABLES - FFS FILE 09
SUPPLIES SOLD BY PHYSICIANS

VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK	VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK
FILENAME	Name of file	221	DEI5523	1st diagnosis qualifier	237
PERSON	Person identifier	221	DEI5524	1st associated diagnosis	237
SITE	Site	221	DEI5572	1st problem/symptom date	238
INSTAT	Insurance status	222	DEI5574	Treatment history/status of the 1st diagnosis	238
CONTR	Contract year	222	DEI5597	2nd diagnosis related?	239
DEI5553	Claim number	223	DEI5525	2nd diagnosis	239
DEI5502	Provider number	223	DEI5526	2nd diagnosis qualifier	240
DEI5555	Date of service	223	DEI5527	2nd associated diagnosis	240
DEI5584	Place of service	224	DEI5575	2nd problem/symptom date	241
DEI5503	1st reason/symptom for visit	224	DEI5577	Treatment history/status of the 2nd diagnosis	241
DEI5505	2nd reason/symptom for visit	225	DEI5598	3rd diagnosis related?	242
DEI5565	3rd reason/symptom for visit	225	DEI5528	3rd diagnosis	242
DEI5567	Previous visit to this doctor	226	DEI5529	3rd diagnosis qualifier	243
DEI5568	Provider referred from	226	DEI5530	3rd associated diagnosis	243
DEI5569	First provider referral	227	DEI5578	3rd problem/symptom date	244
DEI5570	Second provider referral	227	DEI5580	Treatment history/status of the 3rd diagnosis	244
DEI5571	Third provider referral	227	DEI5599	4th diagnosis related?	245
DEI5511	Accident related	228	DEI5531	4th diagnosis	245
DEI5512	Employment related	228	DEI5532	4th diagnosis qualifier	246
DEI5566	Date of injury	228	DEI5533	4th associated diagnosis	246
DEI5558	Line-item charge	229	DEI5581	4th problem/symptom date	247
DEI5559	First noncovered charges	230	DEI5583	Treatment history/status of the 4th diagnosis	247
DEI5560	First reason for noncoverage	232	DEI5601	Supply code	248
DEI5562	2nd noncovered charges	232	DEI5602	Amount sold	248
DEI5563	2nd reason for noncoverage	233			
DEI5561	Reimbursement	235			
DEI5596	1st diagnosis related?	236			
DEI5522	1st diagnosis	236			

FILENAME	VALUE	FREQ	CUM FREQ	%	CUM %
	PE09AA	5056	5056	100.00	100.00

SITE	VALUE	FREQ	CUM FREQ	%	CUM %
	1	1164	1164	23.02	23.02
	2	1227	2391	24.27	47.29
	3	858	3249	16.97	64.26
	4	559	3808	11.06	75.32
	5	477	4285	9.43	84.75
	6	771	5056	15.25	100.00

VARIABLE FILENAME FFS FILE 09

Name of file

FILENAME is a 6-digit code that uniquely identifies the file. This file name is PE09AA.

VARIABLE PERSON FFS FILE 09

Person identifier

PERSON is an 8-character alphanumeric code that uniquely identifies the participant in the HIE to whom the following data refer. The 2nd character of PERSON designates in which site a participant resided during enrollment in the HIE: A=Dayton; B=Seattle; E=Fitchburg; F=Franklin County; G=Charleston; H=Georgetown County.

VARIABLE SITE FFS FILE 09

Site

CODES

- 1 - Dayton, Ohio
- 2 - Seattle, Washington
- 3 - Fitchburg, Massachusetts
- 4 - Franklin County, Massachusetts
- 5 - Charleston, South Carolina
- 6 - Georgetown County, South Carolina

SITE identifies the participant's place of residence when enrolled.

VARIABLE	INSTAT	FFS FILE 09
Insurance status		
CODES		
1 - Ever insured (includes HMO experimental group)		
2 - Ever assigned to HMO control group		
3 - Never insured		
INSTAT describes the participant's insurance status in the Health Insurance Experiment.		
	INSTAT	
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	CUM %	
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VARIABLE	DEI5553	FFS FILE 09
	Claim number	
	DEI5553 indicates a claim identifier which is used to link the line items from a given MER.	

VARIABLE	DEI5502	FFS FILE 09
	Provider number	
	DEI5502 is an 8-character code which refers, in this file, to the physician or independent health professional who sold supplies to the participant. For further information on the provider, this number can be linked to information in the provider file.	

VARIABLE	DEI5555	FFS FILE 09
	Date of service CODES	
	19741107 to 19820129 - Date range on file (YYYYMMDD)	
	DEI5555 indicates the date on which the supply was sold by the provider.	

DEI5584	VALUE	FREQ	CUM FREQ	%	CUM %
1	4660	4660	4660	92.17	92.17
2	17	17	4677	0.34	92.50
3	4	4	4681	0.08	92.58
4	5	5	4686	0.10	92.68
6	268	268	4954	5.30	97.98
7	1	1	4955	0.02	98.00
8	31	31	4986	0.61	98.62
9	70	70	5056	1.38	100.00

VARIABLE	DEI5584	FFS FILE	09
Place of service			
CODES			
1 - Missing			
2 - Doctor's office			
3 - Independent laboratory			
4 - Patient's home			
5 - Hospital			
6 - Nursing home			
7 - Emergency room			
8 - Outpatient surgery			
9 - Other outpatient hospital, including hospital clinic			
9 - Other locations, including non-hospital clinics			
DEI5584 indicates where medical services were rendered.			

VARIABLE	DEI5503	FFS FILE	09
1st reason/symptom for visit			
CODES			
Blank - Not applicable, missing			
DEI5503 indicates the code for the first reason the participant went to see the physician or independent health professional. All reason-for-visit codes used in the claims line-item files are listed in Section IV of "Codes Used."			

NOTE: NAMCS codes were entered without decimal points.
Any codes lacking definitions are coding errors.

VARIABLE	DE15505	FFS FILE 09
	2nd reason/symptom for visit	
	CODES	
	Blank - Not applicable, missing	
	DE15505 indicates the code for an additional reason the participant went to see the physician or independent health professional. All reason-for-visit codes used in the claims line-item files are listed in Section IV of "Codes Used."	

VARIABLE	DE15565	FFS FILE 09
	3rd reason/symptom for visit	
	CODES	
	Blank - Not applicable, missing	
	DE15565 indicates the code for an additional reason the participant went to see the physician or independent health professional. All reason-for-visit codes used in the claims line-item files are listed in Section IV of "Codes Used."	

DEI5567	VALUE	FREQ	CUM FREQ	%	CUM %
	1	28	3404	67.70	67.70
	2	3404	5028	32.30	100.00

VARIABLE DEI5567 FFS FILE 09

Previous visit to this doctor

CODES

1 - Not applicable, missing

2 - Yes

DEI5567 indicates whether the participant had previously visited this physician or independent health professional.

VARIABLE DEI5568 FFS FILE 09

Provider referred from

CODES

Blank - Not applicable, missing

DEI5568 indicates the provider number of the person or institution (if any) who referred the participant.

VARIABLE DEI5569 FFS FILE 09

First provider referral

CODES

Blank - Not applicable, missing

DEI5569 indicates the provider number of the first provider (if any) to whom the participant was referred.

VARIABLE DE15570 FFS FILE 09
Second provider referral
CODES
Blank - Not applicable, missing
DE15570 indicates the provider number of the second provider (if any) to whom the participant was referred.

VARIABLE DE15571 FFS FILE 09
Third provider referral
CODES
Blank - Not applicable, missing
DE15571 indicates the provider number of the third provider (if any) to whom the participant was referred.

VARIABLE DE15511 FFS FILE 09
Accident related
CODES
1 - Not applicable, missing
2 - Yes
3 - No
DE15511 states whether the illness or injury was accident related.

DE15511	FREQ	CUM FREQ	%	CUM %
1	396	396	7.84	7.84
2	4655	5051	92.16	100.00

DEI5512				
VALUE	FREQ	CUM FREQ	%	CUM %
1	5	5	0.59	0.59
2	30	30	0.59	0.59
	5021	5051	99.41	100.00
DEI5558				
NUMBER OF OBSERVATIONS				
NUMBER OF MISSING				
MEAN				
MEDIAN				
MINIMUM VALUE				
MAXIMUM VALUE				
STANDARD DEVIATION				
COEFFICIENT OF VARIATION				
SKEWNESS				
KURTOSIS				

VARIABLE	DEI5512	FFS FILE 09
Employment related		
CODES		
- - Not applicable, missing		
1 - Yes		
2 - No		
DEI5512 states whether the illness or injury was employment related.		

VARIABLE	DEI5566	FFS FILE 09
Date of injury		
CODES		
19750206 to 19810927 - Not applicable, missing		
19750206 to 19810927 - Range on this file (YYYYMMDD)		
DEI5566 indicates the date (if any) the participant was injured.		

VARIABLE	DEI5558	FFS FILE 09
Line-item charge		
DEI5558 indicates the charge submitted to the HIE for the supply listed in DEI5601, Supply Code.		

VARIABLE	DE15560	FFS FILE 09	DE15560 VALUE	FREQ	CUM FREQ	%	CUM %
first reason for noncoverage				2260	4		
CODES							
1 - Not applicable, missing			11	4	155	0.14	0.14
2 - Inpatient hospital accommodations in a private room			12	151	248	5.40	5.54
3 - Inpatient hospital comfort items			13	93	341	3.33	8.87
4 - Inpatient hospital custodial care			15	678	1019	24.25	33.12
5 - Cosmetic surgery not resulting from an accidental injury			16	7	926	0.25	33.37
6 - Psychiatric outpatient services in excess of fifty-two consultations per year			17	1	934	0.04	33.41
7 - Outpatient psychiatric services			18	1	935	0.04	33.44
8 - Outpatient personal care services			20	210	1145	7.51	40.95
9 - Orthodontia not resulting from accidental injury			21	1	1146	0.04	40.99
10 - Christian Science practitioner or sanitorium not listed in the Christian Science Journal			22	8	1154	0.29	41.27
11 - Non-emergency transportation			25	254	1408	9.08	50.36
12 - More than one eye or hearing examination during the accounting year			30	44	1452	1.57	51.93
13 - More than one pair of eyeglass frames every two accounting years			31	1231	2683	44.03	95.96
14 - More than one set of eyeglass lenses during the accounting year			32	16	2699	0.57	96.53
15 - Exceeds limit on eyeglass frames or hearing aids			35	14	2713	0.50	97.03
16 - Repairs to eyeglass frames and hearing aids			37	7	2720	0.25	97.28
17 - Diagnostic, screening, preventative, or rehabilitation services not otherwise specified in the scope of coverage			41	3	2723	0.11	97.39
18 - More than one piece of medical equipment, appliance or supply			42	4	2727	0.14	97.53
19 - Equipment, appliances or supplies costing more than \$25.00			44	10	2737	0.36	97.89
20 - Not medically necessary			45	20	2757	0.72	98.61
21 - Duplicate line item			48	5	2762	0.18	98.78
22 - Amount paid on another Explanation of Benefits			56	8	2770	0.29	99.07
23 - Service prior to enrollment (SAME AS 64)			60	1	2771	0.04	99.11
24 - Procedure done twice			66	23	2794	0.82	99.93
25 - Certificate of benefits stipulations on service not met			73	2	2796	0.07	100.00
26 - Prior authorization not approved							
27 - Participant not eligible for dental care							

(cont.)

VARIABLE DE I5560 (cont.)

28 - Blood credit
29 - Over-the-counter drugs
30 - Deductible not met
31 - Participant's co-insurance portion
32 - Services covered by workmen's compensation or employer's liability laws
33 - Pass through (covered by other insurance; payment from other company was "passed through" to provider or participant)
34 - Prepayment made
35 - Services covered by accident insurance policies
36 - Medicare paid
37 - Discount
38 - Not covered prepayment and deductible
39 - Not covered prepayment and coinsurance
40 - Discount and deductible not met
41 - Discount and coinsurance
42 - Paid by other insurance carrier
43 - Paid by agency other than insurance company
44 - Services obtained outside Group Health Cooperative
45 - Plan benefit is 5% of covered charges
46 - Services obtained at Group Health Cooperative
47 - Allowance on over-the-counter-drugs per illness per accounting year has been met
48 - Services paid for by Group Health Cooperative
53 - Part paid by Group Health Cooperative; plan benefit = 5% or balance
54 - Charge information unavailable--charge coded as one cent
55 - Discount plus plan benefit is 5%
56 - Medicaid paid
57 - Company physical provided as fringe benefit--charge coded as one cent, but true charge unknown
58 - Workmen's compensation - charge coded as one cent, but true charge unknown
59 - Services rendered after termination date
60 - Claim is duplicate
61 - Participant not eligible
62 - Suspended
63 - No service
64 - Before enrollment date (SAME AS 23)
65 - Claim filed after time limit
66 - No charge
67 - Underpayment

(cont.)

VARIABLE DE15560 (cont.)

68 - Overpayment, deducted on another claim
69 - Overpayment, returned
70 - Overpayment, deducted on this claim, overpaid on another claim
71 - Billed in error--patient not seen
72 - Prepayment made (SAME AS 34)
73 - Duplicate payment recovered
74 - Duplicate payment not recovered
80 - Prepayment for future services - no Maximum Dollar Expenditure involved
81 - Prepayment - part applied to the Maximum Dollar Expenditure
DE15560 describes the first reason a charge was not covered under the participant's HIE plan and refers to the non-covered charge reported in DE15559. The above code values were designed to cover all line-item charges; not all values are appropriate in every file.

DE15562	NUMBER OF OBSERVATIONS	375
	NUMBER OF MISSING	4681
	MEAN	19.16
	MEDIAN	12.00
	MINIMUM VALUE	0.79
	MAXIMUM VALUE	254.22
	STANDARD DEVIATION	19.72
	COEFFICIENT OF VARIATION	102.90
	SKEWNESS	5.97
	KURTOSIS	59.89

VARIABLE DE15562	FFS FILE 09
2nd noncovered charges	
DE15562 indicates an additional amount of charged services in DE15558 which were not covered by the insurance plan.	

VARIABLE	DEI5563	FFS FILE 09	DEI5563 VALUE	FREQ	CUM FREQ	%	CUM %
2nd reason for noncoverage				4681	3	0.80	0.80
CODES							
1 - Not applicable, missing			12	3	3	0.27	1.07
2 - Inpatient hospital accommodations in a private room			13	1	4	0.27	1.34
3 - Inpatient hospital comfort items			15	7	11	1.87	3.21
4 - Inpatient hospital custodial care			20	8	19	2.13	5.34
5 - Cosmetic surgery not resulting from an accidental injury			25	11	30	2.93	8.27
6 - Psychiatric outpatient services in excess of fifty-two consultations per year			30	9	39	2.40	10.67
7 - Outpatient psychiatric services			31	319	358	85.07	95.74
8 - Outpatient personal care services			37	1	359	0.27	96.01
9 - Orthodontia not resulting from accidental injury			41	1	360	0.27	96.28
10 - Christian Science practitioner or sanitorium not listed in the Christian Science Journal			44	5	365	1.33	97.61
11 - Non-emergency transportation			45	10	375	2.67	100.28
12 - More than one eye or hearing examination during the accounting year							
13 - More than one pair of eyeglass frames every two accounting years							
14 - More than one set of eyeglass lenses during the accounting year							
15 - More than one hearing aid during the accounting year							
16 - Exceeds limit on eyeglass frames or hearing aids							
17 - Repairs to eyeglass frames and hearing aids							
18 - Diagnostic, screening, preventative, or rehabilitation services not otherwise specified in the scope of coverage							
19 - More than one piece of medical equipment, appliance or supply							
20 - Equipment, appliances or supplies costing more than \$25.00							
21 - Not medically necessary							
22 - Duplicate line-item							
23 - Amount paid on another Explanation of Benefits							
24 - Service prior to enrollment (SAME AS 64)							
25 - Procedure done twice							
26 - Certificate of benefits stipulations on service not met							
27 - Prior authorization not approved							
28 - Participant not eligible for dental care							

(cont.)

VARIABLE DE15563 (cont.)

- 28 - Blood credit
- 29 - Over-the-counter drugs
- 30 - Deductible not met
- 31 - Participant's co-insurance portion
- 32 - Services covered by workmen's compensation or employer's liability laws
- 33 - Pass through (covered by other insurance; payment from other company was "passed through" to provider or participant)
- 34 - Prepayment made
- 35 - Services covered by accident insurance policies
- 36 - Medicare paid
- 37 - Discount
- 38 - Not covered prepayment and deductible
- 39 - Not covered prepayment and coinsurance
- 40 - Discount and deductible not met
- 41 - Discount and coinsurance
- 42 - Paid by other insurance carrier
- 43 - Paid by agency other than insurance company
- 44 - Services obtained outside Group Health Cooperative
- 45 - Plan benefit is 5% of covered charges
- 46 - Services obtained at Group Health Cooperative
- 47 - Allowance on over-the-counter-drugs per illness per accounting year has been met
- 48 - Services paid for by Group Health Cooperative
- 53 - Part paid by Group Health Cooperative; plan benefit = 5% or balance
- 54 - Charge information unavailable--charge coded as one cent
- 55 - Discount plus plan benefit is 5%
- 56 - Medicaid paid
- 57 - Company physical provided as fringe benefit--charge coded as one cent, but true charge unknown
- 58 - Workmen's compensation - charge coded as one cent, but true charge unknown
- 59 - Services rendered after termination date
- 60 - Claim is duplicate
- 61 - Participant not eligible
- 62 - Suspended
- 63 - No service
- 64 - Before enrollment date (SAME AS 23)
- 65 - Claim filed after time limit
- 66 - No charge
- 67 - Underpayment

(cont.)

VARIABLE DE15563 (cont.)

68 - Overpayment, deducted on another claim
69 - Overpayment, returned
70 - Overpayment, deducted on this claim, overpaid on another claim
71 - Billed in error--patient not seen
72 - Prepayment made (SAME AS 34)
73 - Duplicate payment recovered
74 - Duplicate payment not recovered
80 - Prepayment for future services - no Maximum Dollar Expenditure involved
81 - Prepayment - part applied to the Maximum Dollar Expenditure
DE15563 describes an additional reason a charge was not covered under the participant's HIE plan and refers to the noncovered charge reported in DE15562. The above code values were designed to cover all line-item charges; not all values are appropriate in every file.

VARIABLE DE15561	FFS FILE 09
Reimbursement	
DE15561 indicates the reimbursement amount for the line-item charge shown in DE15558.	

DE15561

NUMBER OF OBSERVATIONS	5056
NUMBER OF MISSING	0
MEAN	25.33
MEDIAN	24.00
MINIMUM VALUE	0.00
MAXIMUM VALUE	700.00
STANDARD DEVIATION	31.13
COEFFICIENT OF VARIATION	122.90
SKEWNESS	8.59
KURTOSIS	135.47

VALUE	FREQ	CUM FREQ	%	CUM %
1	4847	4847	95.90	95.90
2	207	5054	4.10	100.00

VARIABLE	DEI5522	FFS FILE 09
1st diagnosis		
CODES		
Blank - Not applicable, missing		
<p>DEI5522 indicates the code of the first condition diagnosed by the physician or independent health professional. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section 1 of "Codes Used."</p>		

DEI5523	VALUE	FREQ	CUM FREQ	%	CUM %
1	121	4092	4092	82.92	82.92
2	5	4097	4097	0.10	83.02
3	16	4113	4113	0.32	83.34
4	690	4803	4803	13.98	97.33
6	1	4804	4804	0.02	97.35
9	131	4935	4935	2.66	100.00

VARIABLE DEI5523 FFS FILE 09

1st diagnosis qualifier

CODES

- 1 - Not applicable, missing
- 2 - No qualifier given
- 3 - Rule out
- 4 - Probable/possible/?/question of
- 5 - With, associated with, complicated by,
- 6 - secondary to, due to
- 7 - Not, turned out not to be, was not
- 8 - Or, versus
- 9 - Well-care code assigned*

DEI5523 indicates a diagnosis qualifier for the first diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible a diagnosis qualifier was used in the absence of a primary diagnosis.

*NOTE: Value #9 is not a true diagnosis qualifier. Occasionally, health maintenance procedures were performed by the provider which did not pertain to any of the diagnoses on the MER. In such cases, coders assigned a well-care code from the H-ICDA-2, and it was notated in this variable.

VARIABLE DEI5524 FFS FILE 09

1st associated diagnosis

CODES

Blank - Not applicable, missing

DEI5524 indicates the associated diagnosis code when required by the diagnosis qualifier.

VARIABLE	DEI5572	FFS FILE 09
	1st problem/symptom date	
	CODES	
	19010101 - Not applicable, missing	
	19530101 to 19811001 - Symptom present, most of life	
	19530101 to 19811001 - Range on this file (YYYYMMDD)	
	DEI5572 indicates the date that the first problem or symptom appeared, as reported by the participant. The value 19010101 was used when the participant responded that the symptom had been present most or all of his/her life.	

DEI5574	VALUE	FREQ	CUM FREQ	%	CUM %
1	157	430	430	8.78	8.78
2	56	486	486	1.14	9.92
3	106	592	592	2.16	12.08
4	289	881	881	5.90	17.98
5	15	896	896	0.31	18.29
6	3951	4847	4847	80.65	98.94
7	22	4869	4869	0.45	99.39
8	28	4897	4897	0.57	99.96
9	2	4899	4899	0.04	100.00

1 238 1

VARIABLE	DEI5574	FFS FILE 09
	Treatment history/status of the 1st diagnosis	
	CODES:	
	1 - Initial visit for acute condition	
	2 - Initial visit for chronic condition	
	3 - Repeat visit for acute condition	
	4 - Repeat visit for chronic condition (routine)	
	5 - Initial visit for flareup of a chronic condition	
	6 - Well-care or pregnancy-related	
	7 - Repeat visit for flareup of a chronic condition	
	8 - Acute; not specified as initial or repeat	
	9 - Chronic; not specified as initial or repeat	
	DEI5574 describes the patient's treatment history or status for the first diagnosis/problem.	

DE15597	VALUE	FREQ	CUM FREQ	%	CUM %
	1	3639	1073	75.72	75.72
	2	344	1417	24.28	100.00

VARIABLE	DE15597	FFS FILE 09
2nd diagnosis related?		
CODES		
0 - Not applicable, missing		
1 - Yes		
2 - No		
DE15597 indicates whether the service rendered by the provider was medically related to the second diagnosis or problem.		

VARIABLE DE15525

2nd diagnosis

CODES

Blank - Not applicable, missing

DE15525 indicates the code of the second condition diagnosed by the physician or independent health professional. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section I of "Codes Used."

VARIABLE		DEI5526	FFS FILE 09	
		2nd diagnosis qualifier		
		CODES		
		1 - Not applicable, missing		
		2 - Rule out		
		3 - Probable/possible/?/question of		
		4 - With, associated with, complicated by, secondary to, due to		
		5 - Not, turned out not to be, was not		
		6 - Or, versus		
		9 - Well-care code assigned*		
		DEI5526 indicates a diagnosis qualifier for the second diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible a diagnosis qualifier was used in the absence of a primary diagnosis.		
		*NOTE: See note on DEI5523.		
VARIABLE		DEI5527	FFS FILE 09	
		2nd associated diagnosis		
		CODES		
		Blank - Not applicable, missing		
		DEI5527 indicates the associated diagnosis code when required by the qualifier.		

DEI5526		VALUE	FREQ	CUM FREQ	%	CUM %
		1	3641	1200	84.81	84.81
		2	1200	9	0.64	85.44
		3	11	1220	0.78	86.22
		4	91	1311	6.43	92.65
		9	104	1415	7.35	100.00

VARIABLE DE15575 FFS FILE 09

2nd problem/symptom date

CODES

19010101 - Not applicable, missing
19010101 - Symptom present most of life
19530101 to 19811001 - Range on this file (YYYYMMDD)

DE15575 indicates the date that the second problem or symptom appeared, as reported by the participant. The value 19010101 was used when the participant responded that the symptom had been present most or all of his/her life.

VARIABLE DE15577

FFS FILE 09

Treatment history/status of the 2nd diagnosis

CODES

1 - Initial visit for acute condition
2 - Initial visit for chronic condition
3 - Repeat visit for acute condition
4 - Repeat visit for chronic condition (routine)
5 - Initial visit for flareup of a chronic condition
6 - Well-care or pregnancy-related
7 - Repeat visit for flareup of a chronic condition
8 - Acute; not specified as initial or repeat
9 - Chronic; not specified as initial or repeat

DE15577 describes the patient's treatment history of status for the second diagnosis/problem.

DE15577

VALUE

FREQ	CUM FREQ	%	CUM %
3662	88	6.31	6.31
88	127	2.80	9.11
39	149	1.58	10.69
22	299	10.76	21.45
150	309	0.72	22.17
10	1374	76.40	98.57
1065	1380	0.43	99.00
6	1387	0.50	99.50
7	1394	0.50	100.00

VARIABLE	DEI5598	FFS FILE 09
3rd diagnosis related?		
CODES		
	: - Not applicable, missing	
	1 - Yes	
	2 - No	
	DEI5598 indicates whether the service rendered by the provider was medically related to the third diagnosis/problem.	

VARIABLE	DEI5528	FFS FILE 09
3rd diagnosis		
CODES		
	Blank - Not applicable, missing	
	DEI5528 indicates the code of the third condition diagnosed by the physician or independent health professional. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section 1 of "Codes Used."	

VARIABLE	DEI5529	FFS FILE 09
3rd diagnosis qualifier		
CODES		
1 - Not applicable, missing		
2 - No qualifier		
3 - Rule out		
4 - Probable/possible/?/question of		
5 - With, associated with, complicated by,		
secondary to, due to		
6 - Not, turned out not to be, was not		
7 - Or, versus		
8 - Well-care code assigned*		
DEI5529 indicates a diagnosis qualifier for the third		
diagnosis. In some instances (i.e., codes 2, 3, 5),		
it is possible a diagnosis qualifier was used		
in the absence of a primary diagnosis.		
*NOTE: See note on DEI5523.		
VARIABLE	DEI5530	FFS FILE 09
3rd associated diagnosis		
CODES		
Blank - Not applicable, missing		
DEI5530 indicates the associated diagnosis code		
when required by the qualifier.		

DEI5529	VALUE	FREQ	CUM FREQ	%	CUM %
1	4765	275	275	94.50	94.50
2	275	1	276	0.34	94.85
4	13	13	289	4.47	99.31
9	2	2	291	0.69	100.00

VARIABLE	DE15578	FFS FILE 09
	3rd problem/symptom date	
	CODES	
	19010101 - Not applicable, missing	
	19390101 to 19811231 - Symptom present most of life	
	19390101 to 19811231 - Range on this file (YYYYMMDD)	
	DE15578 indicates the date that the third problem or symptom appeared, as reported by the participant. The value 19010101 was used when the participant responded that the symptom had been present most or all of his/her life.	

VARIABLE	DE15580	FFS FILE 09
	Treatment history/status of the 3rd diagnosis	
	CODES:	
	1 - Initial visit for acute condition	
	2 - Initial visit for chronic condition	
	3 - Repeat visit for acute condition	
	4 - Repeat visit for chronic condition (routine)	
	5 - Initial visit for flareup of a chronic condition	
	6 - Well-care or pregnancy-related	
	7 - Repeat visit for flareup of a chronic condition	
	8 - Acute; not specified as initial or repeat	
	9 - Chronic; not specified as initial or repeat	
	DE15580 describes the patient's treatment history or status for the third diagnosis/problem.	

DE15580	VALUE	FREQ	CUM FREQ	%	CUM %
1	4774	19	19	6.74	6.74
2	9	28	28	3.19	9.93
3	6	34	34	2.13	12.06
4	40	74	74	14.18	26.24
5	2	76	76	0.71	26.95
6	201	277	277	71.28	98.23
7	2	279	279	0.71	98.94
8	1	280	280	0.36	99.29
9	2	282	282	0.71	100.00

VARIABLE	DEI5599	FFS FILE 09
4th diagnosis related?		
CODES		
1 - Yes	5012	34
2 - No	10	44
	VALUE	FREQ
	1	34
	2	44
		CUM FREQ
		77.27
		100.00
		CUM %

VARIABLE	DEI5531	FFS FILE 09
4th diagnosis		
CODES		
Blank - Not applicable, missing		
DEI5531 indicates the code of the fourth condition diagnosed by the physician or independent health professional. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section 1 of "Codes Used."		

DEI5532	VALUE	FREQ	CUM FREQ	%	CUM %
	1	5012	41	93.18	93.18
	4	41	43	4.55	97.73
	9	2	44	2.27	100.00

VARIABLE	DEI5532	FFS FILE	09
4th diagnosis qualifier			
CODES			
<ul style="list-style-type: none"> - Not applicable, missing 1 - Yes 1 - No qualifier given 2 - Rule out 3 - Probable/possible/?/question of 4 - With, associated with, complicated by, secondary to, due to 5 - Not, turned out not to be, was not 6 - Or, versus 9 - Well-care code assigned* 			
<p>DEI5532 indicates a diagnosis qualifier for the fourth diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible for a diagnosis qualifier to be used in the absence of a primary diagnosis.</p>			

*NOTE: See note on DEI5523.

VARIABLE	DEI5533	FFS FILE	09
4th associated diagnosis			
CODES			
Blank - Not applicable, missing			
<p>DEI5533 indicates the associated diagnosis code when required by the qualifier.</p>			

VARIABLE	DEI5581	FFS FILE 09
	4th problem/symptom date	
	CODES	
	19010101 - Not applicable, missing	
	19760901 to 19790817 - Symptom present most of life	
	19760901 to 19790817 - Range on this file (YYYYMMDD)	
	DEI5581 indicates the date that the fourth problem or symptom appeared, as reported by the participant. The value 19010101 was used when the participant responded that the symptom had been present most or all of his/her life.	

VARIABLE	DEI5583	FFS FILE 09
	Treatment history/status of the 4th diagnosis	
	CODES:	
	1 - Initial visit for acute condition	
	2 - Initial visit for chronic condition	
	3 - Repeat visit for acute condition	
	4 - Repeat visit for chronic condition (routine)	
	5 - Initial visit for flareup of a chronic condition	
	6 - Well-care or pregnancy-related	
	7 - Repeat visit for flareup of a chronic condition	
	8 - Acute; not specified as initial or repeat	
	9 - Chronic; not specified as initial or repeat	
	DEI5583 describes the patient's treatment history or status for the fourth diagnosis/problem.	

DEI5583	VALUE	FREQ	CUM FREQ	%	CUM %
	1	5013	3	6.98	6.98
	2	3	8	11.63	18.61
	3	5	9	2.33	20.93
	4	1	25	37.21	58.14
	6	16	41	37.21	95.35
	7	1	42	2.33	97.67
	9	1	43	2.33	100.00

VARIABLE	DEI5601	FFS FILE 09
	Supply code	
	CODES	
	. - Not applicable, missing	
	DEI5601 identifies the supply sold by the provider. Each supply is identified using a coding system developed by the HIE. Supply codes are listed in Section III of "Codes Used."	

VARIABLE	DEI5602	FFS FILE 09
	Amount sold	
	CODES	
	. - Not applicable, missing	
	DEI5602 indicates a number which identifies the amount of the supplies sold (e.g., 30 syringes, 2 crutches, etc.). This quantity refers to the type of supply given in DEI5601.	

DEI5602	VALUE	FREQ	CUM FREQ	%	CUM %
1	2711	8	2711	53.70	53.70
2	2301	2301	5012	45.58	99.29
3		3	5015	0.06	99.35
4		9	5024	0.18	99.53
6		2	5026	0.04	99.56
8		3	5029	0.06	99.62
10		3	5032	0.06	99.68
12		1	5033	0.02	99.70
20		6	5039	0.12	99.82
22		1	5040	0.02	99.84
26		1	5041	0.02	99.86
31		1	5042	0.02	99.88
50		2	5044	0.04	99.92
99		4	5048	0.08	100.00

X. INJECTIONS ADMINISTERED BY PHYSICIANS FFS FILE 10

INTRODUCTION

The following codebook documents primary variables concerning injections administered by FFS physicians to HIE participants. A few injections are also recorded in File 06 as a CRVS physician procedure (e.g., 90030, "Minimal physician service") because the physician reported them in that manner.

Specific information provided in this file includes the drug(s) injected by the physician and the charge for each injection or group of injections. (Some injections, such as allergy or steroid injections, were sometimes given in groups during the same visit and thus were included in one lump sum billing.) Also included are the reasons/symptoms for the visit to the physician, whether the visit was accident- or employment-related, the date and place of service, and the referral physicians (if any). Other variables indicate the diagnoses to which the injection charge is related, the treatment history/status of each diagnosis, the amount of the charge not covered, the reason for such noncoverage, if any, and the amount reimbursed to the provider or participant by the HIE.

The units of observation in this file are line items for injections.¹ For an explanation of common variables used in this codebook, see the final subsection of Sec. II. Below we provide explanations for specific variables in this file.

CRVS CODE

DEI5606 indicates the *California Relative Values Studies* (CRVS) code for the service performed. CRVS codes are five-digit codes created by the California Medical Association to define procedures and services performed by physicians.² A small number of supplementary

¹Analysts should note that the statistical frequency of a variable in this file represents the number of times it occurs in relation to the unit of observation, *not* the number of claims on which it appears.

²California Medical Association, *California Relative Value Studies*, San Francisco, CA, 1975.

codes were added under the direction of a Rand HIE physician to describe services not adequately reflected by any existing CRVS code. All standard and supplementary CRVS codes used in this file can be found in Sec. II of *Codes Used*.

CRVS UNITS

DEI5609 indicates the unit value of the procedure or service performed, as given in the 1974 revision of the CRVS, published 1975. CRVS codes lacking printed unit values were assigned the value zero.

FIRST CRVS MODIFIER

The variable DEI5607, First CRVS Modifier, indicates a code for a special circumstance that may have been involved in the CRVS procedure shown in DEI5606, CRVS code. Modifier codes are usually dependent upon the type of CRVS procedure; modifier code definitions can be found in the CRVS code manual cited above. The most frequently used modifiers were 50 (secondary procedure when bilateral procedures are performed), and 58 (visit charge included with charge for surgical procedure). Code value 1 was added by Rand researchers to denote a service for which the charge was part of a lump sum bill, such as in prenatal care and delivery, or services associated with pre- and post-surgical procedures. In such cases, there was either no charge for the service or a small charge was billed, a charge not commensurate with the CRVS units associated with the procedure.

NDC CODE

DEI5589 indicates the first seven digits of the National Drug Code that identifies the drug injected by the provider. (The last two digits of the national nine-digit code number represent trade package size and were not used by the HIE.) Occasionally, two drugs were contained in the same injection or two different injections were part of a single charge. A second set of drug variables is provided to identify and classify any second drug, if necessary. DEI5613 contains the NDC code of the second drug.

Codes were taken from the *National Drug Code Directory*, June 1972, whenever possible.³ A number of supplementary codes were added by the HIE to identify drugs not listed in the 1972 NDC Directory. NDC and supplementary codes used in the claims files are defined in Sec. V of *Codes Used*.

NUMBER OF INJECTIONS

DEI5602, Number of Injections, indicates the number of injections of the same or closely related drug injected during one visit for one charge. Two situations account for nearly all cases of multiple units of service: (1) The injection was a series of multiple allergens (e.g., dust, mold, weed), or (2) the injection was a steroid injected into several body points. Although units of service higher than 5 are possible, any such entries connected to allergies most likely represent diagnostic allergy tests incorrectly recorded as injections; such entries may also be similarly miscoded in File 06.

DIAGNOSIS RELATION TO INJECTION

The variables DEI5596 - DEI5599 indicate whether the drug injection is related to one or more of the four possible diagnoses.

³Public Health Service, U.S. Dept. of Health and Human Services, Washington, D.C. 20204, June 1972.

CODEBOOK FOR FFS FILE 10
INJECTIONS ADMINISTERED BY PHYSICIANS

DIRECTORY OF VARIABLES - FFS FILE 10
INJECTIONS ADMINISTERED BY PHYSICIANS

VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK	VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK
FILENAME	Name of file	255	DEI5529	3rd diagnosis qualifier	276
PERSON	Person identifier	255	DEI5530	3rd associated diagnosis	277
SITE	Site	255	DEI5578	3rd problem/symptom date	277
INSTAT	Insurance status	256	DEI5580	Treatment history/status of the 3rd diagnosis	278
CONTR	Contract year	256	DEI5599	4th diagnosis related?	278
DEI5553	Claim number	257	DEI5531	4th diagnosis	279
DEI5502	Provider number	257	DEI5532	4th diagnosis qualifier	279
DEI5555	Date of service	257	DEI5533	4th associated diagnosis	280
DEI5584	Place of service	258	DEI5581	4th problem/symptom date	280
DEI5503	1st reason/symptom for visit	258	DEI5583	Treatment history/status of the 4th diagnosis	281
DEI5505	2nd reason/symptom for visit	259	DEI5666	Prescription status of first drug	281
DEI5505	3rd reason/symptom for visit	259	DEI5589	NDC code of first drug	282
DEI5567	Previous visit to this doctor	260	DEI5590	1st generic code of first drug	282
DEI5568	Provider referred from	260	DEI5591	2nd generic code of first drug	283
DEI5569	First provider referral	260	DEI5592	3rd generic code of first drug	283
DEI5570	Second provider referral	261	DEI5593	4th generic code of first drug	284
DEI5571	Third provider referral	261	DEI5594	5th generic code of first drug	284
DEI5511	Accident related	262	DEI5595	Drug therapeutic code of first drug	285
DEI5512	Employment related	262	DEI5665	Prescription status of second drug	286
DEI5566	Date of injury	263	DEI5613	NDC code of second drug	287
DEI5606	CRVS code	263	DEI5614	1st generic code of second drug	287
DEI5607	First CRVS modifier	264	DEI5615	2nd generic code of second drug	288
DEI5609	CRVS units	264	DEI5616	3rd generic code of second drug	288
DEI5558	Line-item charge	264	DEI5617	4th generic code of second drug	289
DEI5559	Noncovered charges	265	DEI5618	5th generic code of second drug	289
DEI5560	Reason for noncoverage	266	DEI5619	Drug therapeutic code of second drug	290
DEI5561	Reimbursement	268	DEI5602	Number of injections	291
DEI5596	1st diagnosis related?	269			
DEI5522	1st diagnosis	270			
DEI5523	1st diagnosis qualifier	270			
DEI5524	1st associated diagnosis	271			
DEI5572	1st problem/symptom date	271			
DEI5574	Treatment history/status of the 1st diagnosis	272			
DEI5597	2nd diagnosis	272			
DEI5525	2nd diagnosis related?	273			
DEI5526	2nd diagnosis	273			
DEI5527	2nd diagnosis qualifier	274			
DEI5527	2nd associated diagnosis	274			
DEI5575	2nd problem/symptom date	274			
DEI5577	Treatment history/status of the 2nd diagnosis	275			
DEI5598	3rd diagnosis	275			
DEI5528	3rd diagnosis related?	276			
	3rd diagnosis	276			

FILENAME				
VALUE	FREQ	CUM FREQ	%	CUM %
PE10AA	13008	13008	100.00	100.00

SITE				
VALUE	FREQ	CUM FREQ	%	CUM %
1	5629	5629	43.27	43.27
2	3336	8965	25.65	68.92
3	888	9853	6.83	75.75
4	1398	11251	10.75	86.49
5	824	12075	6.34	92.83
6	933	13008	7.17	100.00

VARIABLE	FILENAME	FFS FILE 10
Name of file		
FILENAME	is a 6-digit code that uniquely identifies the file. This file name is PE10AA.	

VARIABLE	PERSON	FFS FILE 10
Person identifier		
PERSON	is an 8-character alphanumeric code that uniquely identifies the participant in the HIE to whom the following data refer. The 2nd character of PERSON designates in which site a participant resided during enrollment in the HIE: A=Dayton; B=Seattle; E=Fitchburg; F=Franklin County; G=Charleston; H=Georgetown County.	

VARIABLE	SITE	FFS FILE 10
Site		
CODES		
	1 - Dayton, Ohio	
	2 - Seattle, Washington	
	3 - Fitchburg, Massachusetts	
	4 - Franklin County, Massachusetts	
	5 - Charleston, South Carolina	
	6 - Georgetown County, South Carolina	
SITE	identifies the participant's place of residence when enrolled.	

VARIABLE	INSTAT	FFS FILE 10
Insurance status		
CODES		
1 - Ever insured (includes HMO experimental group)		
2 - Ever assigned to HMO control group		
3 - Never insured		
INSTAT describes the participant's insurance status in the Health Insurance Experiment.		

INSTAT	VALUE	FREQ	CUM FREQ	%	CUM %
	1	12981	12981	99.79	99.79
	2	27	13008	0.21	100.00

VARIABLE	CONTYR	FFS FILE 10
Contract year		
CODES		
P1 - First year (South Carolina 3 year enrollees)		
P2 - Second year (South Carolina 3 year enrollees)		
P3 - Third year (South Carolina 3 year enrollees)		
O1 - First year		
O2 - Second year		
O3 - Third year		
O4 - Fourth year		
O5 - Fifth year		
CONTYR identifies the participant's contract year of coverage for which the claim was filed under the HIE. A three-year South Carolina enrollment group also served as an uninsured control group for two years prior to the beginning of its contract period; P1 - P3 identify the medical insurance contract periods for this group. Thus, P1 indicates the first contract year for this group, but is the third contract year of the study.		

CONTYR	VALUE	FREQ	CUM FREQ	%	CUM %
	P1	319	319	2.45	2.45
	P2	470	789	3.61	6.07
	P3	391	1180	3.01	9.07
	O1	3307	4487	25.42	34.49
	O2	3246	7733	24.95	59.45
	O3	3172	10905	24.39	83.83
	O4	1019	11924	7.83	91.67
	O5	1084	13008	8.33	100.00

VARIABLE	DEI5553	FFS FILE 10
	Claim number	
	DEI5553 indicates a claim identifier which is used to link the line items from a given MER.	

VARIABLE	DEI5502	FFS FILE 10
	Provider number	
	DEI5502 is an 8-character code which refers, in this file, to the physician who injected the participant. For further information concerning the provider, this number can be linked to information in the provider file.	

VARIABLE	DEI5555	FFS FILE 10
	Date of service	
	CODES	
	19741104 to 19820129 - Range of dates on file (YYMMDD)	
	DEI5555 indicates the date on which the service was rendered. If a service was rendered over multiple dates, this variable is the initial date of service.	

DEI5584	VALUE	FREQ	CUM FREQ	%	CUM %
	1	12172	12172	93.57	93.57
	2	5	12177	0.04	93.61
	3	6	12183	0.05	93.66
	4	17	12200	0.13	93.79
	5	1	12201	0.01	93.80
	6	482	12683	3.71	97.50
	7	14	12697	0.11	97.61
	8	171	12868	1.32	98.92
	9	140	13008	1.08	100.00

VARIABLE	DEI5584	FFS FILE 10
	Place of service	
	CODES	
	1 - Doctor's office	
	2 - Independent laboratory	
	3 - Patient's home	
	4 - Hospital	
	5 - Nursing home	
	6 - Emergency room (when not admitting)	
	7 - Outpatient surgery	
	8 - Other outpatient hospital, including hospital clinic	
	9 - Other locations, including non-hospital clinics	
	DEI5584 indicates where the participant received medical services.	

VARIABLE	DEI5503	FFS FILE 10
	1st reason/symptom for visit	
	CODES	
	Blank - Not applicable, missing	
	DEI5503 indicates the code for the first reason the participant went to see the physician. All reason-for-visit codes used in the claims line-item files are listed in Section IV of "Codes Used."	

NOTE: NAMCS codes were entered without decimal points.
Any codes lacking definitions are coding errors.

VARIABLE	DEI5505	FFS FILE 10
	2nd reason/symptom for visit	
	CODES	
	Blank - Not applicable, missing	
	DEI5505 indicates the code for an additional reason the participant went to see the doctor. All reason-for-visit codes used in the claims line-item files are listed in Section IV of "Codes Used."	

VARIABLE	DEI5565	FFS FILE 10
	3rd reason/symptom for visit	
	CODES	
	Blank - Not applicable, missing	
	DEI5565 indicates the code for an additional reason the participant went to see the doctor. All reason-for-visit codes used in the claims line-item files are listed in Section IV of "Codes Used."	

DEI5567	VALUE	FREQ	CUM FREQ	%	CUM %
	1	39	12088	93.21	93.21
	2	881	12969	6.79	100.00

VARIABLE	DEI5567	FFS FILE 10
	Previous visit to this doctor	
	CODES	
	1 - Not applicable, missing	
	2 - Yes	
	2 - No	
	DEI5567 indicates whether the participant had previously visited this doctor.	

VARIABLE	DEI5568	FFS FILE 10
	Provider referred from	
	CODES	
	Blank - Not applicable, missing	
	DEI5568 indicates the provider number of the person or institution (if any) who referred the participant.	

VARIABLE	DEI5569	FFS FILE 10
	First provider referral	
	CODES	
	Blank - Not applicable, missing	
	DEI5569 indicates the provider number of the first provider (if any) to whom the participant was referred.	

VARIABLE	DEI5570	FFS FILE 10
	Second provider referral	
	CODES	
	Blank - Not applicable, missing	
	DEI5570 indicates the provider number of the second provider (if any) to whom the participant was referred.	

VARIABLE	DEI5571	FFS FILE 10
	Third provider referral	
	CODES	
	Blank - Not applicable, missing	
	DEI5571 indicates the provider number of the third provider (if any) to whom the participant was referred.	

VARIABLE	DEI5511	FFS FILE 10
	Accident related	
	CODES	
	1 - Not applicable, missing	
	2 - Yes	
	3 - No	
	DEI5511 states whether the illness or injury was accident related.	

DEI5511	VALUE	FREQ	CUM FREQ	%	CUM %
1	491	8	491	3.78	3.78
2	12509	13000	13000	96.22	100.00

VARIABLE	DEI5512	FFS FILE 10
	Employment related	
	CODES	
	1 - Not applicable, missing	
	2 - Yes	
	2 - No	
	DEI5512 states whether the illness or injury was employment related.	

DEI5512	VALUE	FREQ	CUM FREQ	%	CUM %
1	1	5	73	0.56	0.56
2	2	12930	13003	99.44	100.00

VARIABLE	DEI5566	FFS FILE 10
	Date of injury	
	CODES	
	19710401 to 19820108 - Not applicable, missing	
	DEI5566 indicates the date (if any) the participant was injured.	

VARIABLE DE15606 FFS FILE 10

CRVS code

DE15606 indicates a five-digit California Relative Value Studies (CRVS) code identifying the service provided by the physician; the charge for this service is found in DE15558. CRVS codes used in the HIE claims files are defined in Section II of "Codes Used." A small number of codes were added under the direction of a Rand HIE physician to describe services not adequately reflected by any existing CRVS code. Those codes are also defined in the supplementary volume.

VARIABLE DE15607

First CRVS modifier

CODES

. - Not applicable, missing

DE15607 indicates the code for a special circumstance in the CRVS procedure shown in DE15606, CRVS Code.

DE15607

VALUE	FREQ	CUM FREQ	%	CUM %
.	12895	1	0.89	0.89
50	1	3	1.77	2.66
58	2	113	97.35	100.00
	110			

VARIABLE	DE15609	FFS FILE 10
CRVS units		
CODES		
-	Not applicable, missing	
	DE15609 indicates the unit value of the procedure in DE15606, as given in the 1974 revision of the CRVS, published 1975. CRVS codes lacking printed unit values were assigned the value zero.	

DE15609	
NUMBER OF OBSERVATIONS	12630
NUMBER OF MISSING	378
MEAN	2.24
MEDIAN	2.20
MINIMUM VALUE	0.00
MAXIMUM VALUE	17.50
STANDARD DEVIATION	0.69
COEFFICIENT OF VARIATION	30.67
SKEWNESS	5.55
KURTOSIS	78.34

VARIABLE	DE15558	FFS FILE 10
Line-item charge		
CODES		
-	Not applicable, missing	
	DE15558 indicates the charge submitted to the HIE by the provider or participant for payment of a specific service.	

DE15558	
NUMBER OF OBSERVATIONS	13008
NUMBER OF MISSING	0
MEAN	5.68
MEDIAN	5.00
MINIMUM VALUE	0.00
MAXIMUM VALUE	125.00
STANDARD DEVIATION	6.16
COEFFICIENT OF VARIATION	108.56
SKEWNESS	7.97
KURTOSIS	105.23

VARIABLE	DE15559	FFS FILE 10
Noncovered charges		
CODES		
. - Not applicable, missing		
DE15559 indicates the amount of charged services in DE15558 not covered by the insurance plan.		

VARIABLE	DEI5560	FFS FILE 10	DEI5560 VALUE	FREQ	CUM FREQ	%	CUM %
Reason for noncoverage							
CODES							
1 - Not applicable, missing			21	7875	14	0.27	0.27
2 - Inpatient hospital accommodations in a private room			22	14	57	0.84	1.11
3 - Inpatient hospital comfort items			30	43	320	5.12	6.23
4 - Inpatient hospital custodial care			31	263	4669	84.73	90.96
4 - Cosmetic surgery not resulting from an accidental injury			32	4349	4694	0.49	91.45
5 - Psychiatric outpatient services in excess of fifty-two consultations per year			35	25	4709	0.29	91.74
6 - Outpatient psychiatric services			37	15	4712	0.06	91.80
7 - Outpatient personal care services			41	3	4713	0.02	91.82
8 - Orthodontia not resulting from accidental injury			42	7	4720	0.14	91.95
9 - Christian Science practitioner or sanatorium not listed in the Christian Science Journal			44	52	4772	1.01	92.97
10 - Non-emergency transportation			45	29	4801	0.57	93.53
11 - More than one eye or hearing examination during the accounting year			48	7	4808	0.14	93.67
12 - More than one pair of eyeglass frames every two accounting years			56	16	4824	0.31	93.98
13 - More than one set of eyeglass lenses during the accounting year			58	2	4826	0.04	94.02
14 - More than one hearing aid during the accounting year			59	4	4830	0.08	94.10
15 - Exceeds limit on eyeglass frames or hearing aids			60	3	4833	0.06	94.16
16 - Repairs to eyeglass frames and hearing aids			63	1	4834	0.02	94.18
17 - Diagnostic, screening, preventative, or rehabilitation services not otherwise specified in the scope of coverage			66	262	5096	5.10	99.28
18 - More than one piece of medical equipment, appliance or supply			71	1	5097	0.02	99.30
19 - Equipment, appliances or supplies costing more than \$25.00			73	1	5098	0.02	99.32
20 - Not medically necessary			74	35	5133	0.68	100.00
21 - Duplicate line item							
22 - Amount paid on another Explanation of Benefits							
23 - Service prior to enrollment (SAME AS 64)							
24 - Procedure done twice							
25 - Certificate of benefits stipulations on service not met							
26 - Prior authorization not approved							
27 - Participant not eligible for dental care							

(cont.)

VARIABLE DE15560 (cont.)

- 28 - Blood credit
- 29 - Over-the-counter drugs
- 30 - Deductible not met
- 31 - Participant's co-insurance portion
- 32 - Services covered by workmen's compensation or employer's liability laws
- 33 - Pass through (covered by other insurance; payment from other company was "passed through" to provider or participant)
- 34 - Prepayment made
- 35 - Services covered by accident insurance policies
- 36 - Medicare paid
- 37 - Discount
- 38 - Not covered prepayment and deductible
- 39 - Not covered prepayment and coinsurance
- 40 - Discount and deductible not met
- 41 - Discount and coinsurance
- 42 - Paid by other insurance carrier
- 43 - Paid by agency other than insurance company
- 44 - Services obtained outside Group Health Cooperative
- 45 - Plan benefit is 5% of covered charges
- 46 - Services obtained at Group Health Cooperative
- 47 - Allowance on over-the-counter-drugs per illness per accounting year has been met
- 48 - Services paid for by Group Health Cooperative
- 53 - Part paid by Group Health Cooperative; plan benefit = 5% or balance
- 54 - Charge information unavailable--charge coded as one cent
- 55 - Discount plus plan benefit is 5%
- 56 - Medicaid paid
- 57 - Company physical provided as fringe benefit--charge coded as one cent, but true charge unknown
- 58 - Workmen's compensation - charge coded as one cent, but true charge unknown
- 59 - Services rendered after termination date
- 60 - Claim is duplicate
- 61 - Participant not eligible
- 62 - Suspended
- 63 - No service
- 64 - Before enrollment date (SAME AS 23)
- 65 - Claim filed after time limit
- 66 - No charge
- 67 - Underpayment

(cont.)

VARIABLE DE15560 (cont.)

68 - Overpayment, deducted on another claim
69 - Overpayment, returned
70 - Overpayment, deducted on this claim, overpaid
on another claim
71 - Billed in error--patient not seen
72 - Prepayment made (SAME AS 34)
73 - Duplicate payment recovered
74 - Duplicate payment not recovered
80 - Prepayment for future services - no Maximum
Dollar Expenditure involved
81 - Prepayment - part applied to the Maximum
Dollar Expenditure

DE15560 describes the reason a charge was not covered
under the participant's HIE plan. The above code
values were designed to cover all line-item charges;
not all values are appropriate in every file.

VARIABLE DE15561 FFS FILE 10

Reimbursement

CODES

. - Not applicable, missing

DE15561 indicates the reimbursement amount for the
line-item charge shown in DE15558.

DE15561

NUMBER OF OBSERVATIONS 13008
NUMBER OF MISSING 0
MEAN 4.42
MEDIAN 3.75
MINIMUM VALUE 0.00
MAXIMUM VALUE 125.00
STANDARD DEVIATION 5.96
COEFFICIENT OF VARIATION 134.84
SKEWNESS 8.21
KURTOSIS 116.50

VARIABLE	DEI5596	FFS FILE 10
1st diagnosis related?		
CODES		
;	Not applicable, missing	
1	Yes	
2	No	
DEI5596	indicates whether the drug injected by the provider was medically related to the first diagnosis/problem.	

VARIABLE	DEI5522	FFS FILE 10
1st diagnosis		
CODES		
Blank	- Not applicable, missing	
DEI5522	indicates the code of the first condition diagnosed by the physician. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section I of "Codes Used."	

VARIABLE	DEI5523	FFS FILE 10
1st diagnosis qualifier		
CODES		
1 - Not applicable, missing		
2 - Rule out		
3 - Probable/possible/?/question of		
4 - With, associated with, complicated by,		
secondary to, due to		
5 - Not, turned out not to be, was not		
6 - Or, versus		
9 - Well-care code assigned*		
<p>DEI5523 indicates a diagnosis qualifier for the first diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible a diagnosis qualifier was used in the absence of a primary diagnosis.</p>		
<p>*NOTE: Value #9 is not a true diagnosis qualifier. Occasionally, health maintenance procedures were performed by the provider which did not pertain to any of the diagnoses on the MER. In such cases, coders assigned a well-care code from the H-ICDA-2, and it was notated in this variable.</p>		

DEI5523	VALUE	FREQ	CUM FREQ	%	CUM %
1	12009	101	12009	93.04	93.04
2	47	47	12056	0.36	93.41
3	93	93	12149	0.72	94.13
4	694	694	12843	5.38	99.50
9	64	64	12907	0.50	100.00

VARIABLE	DEI5524	FFS FILE 10
	1st associated diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DEI5524 indicates the associated diagnosis code when required by the diagnosis qualifier.	

VARIABLE	DEI5572	FFS FILE 10
	1st problem/symptom date	
	CODES	
	19010101 to 19820128	- Not applicable, missing
	19820101 to 19820128	- Symptom present most of life
	19820101 to 19820128	- Range on this file (YYYYMMDD)
	DEI5572 indicates the date that the first problem or symptom appeared, as reported by the participant. The value 19010101 was used when the participant responded that the symptom had been present most or all of his/her life.	

VARIABLE	DEI5597	FFS FILE	10
2nd diagnosis related?			
CODES			
· - Not applicable, missing			
1 - Yes			
2 - No			
DEI5597 indicates whether the drug injected by the provider was medically related to the second diagnosis/problem.			

DE15597	VALUE	FREQ	CUM FREQ	%	CUM %
		9618			
	1	1680	1680	49.56	49.56
	2	1710	3390	50.44	100.00

VARIABLE	DEI5525	FFS FILE 10
2nd diagnosis		
CODES		
Blank - Not applicable, missing		
DEI5525 indicates the code of the second condition diagnosed by the physician. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section 1 of "Codes Used."		

VARIABLE	DEI5526	FFS FILE 10
2nd diagnosis qualifier		
CODES		
1 - Not applicable, missing		
2 - Rule out		
3 - Probable/possible/?/question of		
4 - With, associated with, complicated by, secondary to, due to		
5 - Not, turned out not to be, was not		
6 - Or, versus		
9 - GS&A assigns well-care code*		
DEI5526 indicates a diagnosis qualifier for the second diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible a diagnosis qualifier was used in the absence of a primary diagnosis.		

*NOTE: See note on DEI5523.

DEI5526	VALUE	FREQ	CUM FREQ	%	CUM %
1	9550	2939	2939	84.99	84.99
2	49	2988	2988	1.42	86.41
3	79	3067	3067	2.29	88.69
4	216	3283	3283	6.25	94.94
5	1	3284	3284	0.03	94.97
9	174	3458	3458	5.03	100.00

VARIABLE	DE15527	FFS FILE 10
	2nd associated diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DE15527 indicates the associated diagnosis code	
	when required by the qualifier.	

VARIABLE	DE15575	FFS FILE 10
	2nd problem/symptom date	
	CODES	
	19010101 - Not applicable, missing	
	19010101 - Symptom present most of life	
	19710304 to 19811218 - Range on this file (YYYYMMDD)	
	DE15575 indicates the date that the second problem or	
	symptom appeared, as reported by the participant.	
	The value 19010101 was used when the participant	
	responded that the symptom had been present most	
	or all of his/her life.	

VARIABLE	DEI5577	FFS FILE 10	VALUE	FREQ	CUM FREQ	%	CUM %
Treatment history/status of the 2nd diagnosis							
CODES							
: - Not applicable, missing							
1 - Initial visit for acute condition							
2 - Initial visit for chronic condition							
3 - Repeat visit for acute condition							
4 - Repeat visit for chronic condition (routine)							
5 - Initial visit for flareup of a chronic condition							
6 - Well care or pregnancy-related							
7 - Repeat visit for flareup of a chronic condition							
8 - Acute; not specified as initial or repeat							
9 - Chronic; not specified as initial or repeat							
DEI5577 describes the patient's status for the second diagnosis/problem.							
DEI5577			1	9704	803	24.30	24.30
			2	83	886	2.51	26.82
			3	213	1099	6.45	33.26
			4	1047	2146	31.69	64.95
			5	85	2231	2.57	67.52
			6	930	3161	28.15	95.67
			7	78	3239	2.36	98.03
			8	49	3288	1.48	99.52
			9	16	3304	0.48	100.00
VARIABLE	DEI5598	FFS FILE 10	VALUE	FREQ	CUM FREQ	%	CUM %
3rd diagnosis related?							
CODES							
: - Not applicable, missing							
1 - Yes							
2 - No							
DEI5598 indicates whether the drug injected by the provider was medically related to the third diagnosis/problem.							
DEI5598			1	11892	479	42.92	42.92
			2	637	1116	57.08	100.00

VARIABLE	DEI5528	FFS FILE 10
3rd diagnosis		
CODES		
Blank - Not applicable, missing		
DEI5528 indicates the code of the third condition diagnosed by the physician. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section 1 of "Codes Used."		

VARIABLE	DEI5529	FFS FILE 10
3rd diagnosis qualifier		
CODES		
1 - Not applicable, missing		
2 - Rule out		
3 - Probable/possible/?/question of		
4 - With, associated with, complicated by, secondary to, due to		
5 - Not, turned out not to be, was not		
6 - Or, versus		
9 - GS&A assigns well-care code*		
DEI5529 indicates a diagnosis qualifier for the third diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible a diagnosis qualifier was used in the absence of a primary diagnosis.		

*NOTE: See note on DEI5523.

DEI5529	VALUE	FREQ	CUM FREQ	%	CUM %
1	11857	986	986	85.67	85.67
2	15	1001	1001	1.30	86.97
3	33	1034	1034	2.87	89.84
4	35	1069	1069	3.04	92.88
9	82	1151	1151	7.12	100.00

VARIABLE	DEI5530	FFS FILE 10
	3rd associated diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DEI5530 indicates the associated diagnosis code when required by the qualifier.	

VARIABLE	DEI5578	FFS FILE 10
	3rd problem/symptom date	
	CODES	
	19010101 : - Not applicable, missing	
	19741228 to 19811113 - Symptom present most of life	
	19741228 to 19811113 - Range on this file (YYYYMMDD)	
	DEI5578 indicates the date that the third problem or symptom appeared, as reported by the participant. The value 19010101 was used when the participant responded that the symptom had been present most or all of his/her life.	

VARIABLE DE15599

4th diagnosis related?

CODES

: - Not applicable, missing
1 - Yes
2 - No

DE15599 indicates whether the drug injected by the provider was medically related to the fourth diagnosis/problem.

VARIABLE DE15531 FFS FILE 10

4th diagnosis

CODES

Blank - Not applicable, missing

DE15528 indicates the code of the third condition diagnosed by the physician. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section 1 of "Codes Used."

VARIABLE DE15532 FFS FILE 10

4th diagnosis qualifier

CODES

- 1 - Not applicable, missing
- 2 - Rule out
- 3 - Probable/possible/?/question of
- 4 - With, associated with, complicated by, secondary to, due to
- 5 - Not, turned out not to be, was not
- 6 - Or, versus
- 9 - GS&A assigns well-care code*

DE15532 indicates a diagnosis qualifier for the fourth diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible for a diagnosis qualifier to be used in the absence of a primary diagnosis.

*NOTE: See note on DE15523.

DE15532	VALUE	FREQ	CUM FREQ	%	CUM %
	1	12593	336	80.96	80.96
	2	336	345	2.17	83.13
	3	11	356	2.65	85.78
	4	21	377	5.06	90.84
	9	38	415	9.16	100.00

VARIABLE	DE15533	FFS FILE 10
	4th associated diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DE15533 indicates the associated diagnosis code	
	when required by the qualifier.	

VARIABLE	DE15581	FFS FILE 10
	4th problem/symptom date	
	CODES	
	19010101 - Not applicable, missing	
	19810601 - Symptom present most of life	
	19750306 to 19810601 - Range on this file (YYYYMMDD)	
	DE15581 indicates the date that the fourth problem or	
	symptom appeared, as reported by the participant.	
	The value 19010101 was used when the participant	
	responded that the symptom had been present most	
	or all of his/her life.	

VARIABLE	DEI5583	FFS FILE 10
	Treatment history/status of the 4th diagnosis	
	CODES	
	. - Not applicable, missing 1 - Initial visit for acute condition 2 - Initial visit for chronic condition 3 - Repeat visit for acute condition 4 - Repeat visit for chronic condition (routine) 5 - Initial visit for flareup of a chronic condition 6 - Well care or pregnancy-related 7 - Repeat visit for flareup of a chronic condition 8 - Acute; not specified as initial or repeat 9 - Chronic; not specified as initial or repeat	
	DEI5583 describes the patient's treatment history/status for the fourth diagnosis/problem.	

DEI5583	VALUE	FREQ	CUM FREQ	%	CUM %
	1	12623	61	15.84	15.84
	2	61	72	2.86	18.70
	3	11	99	7.01	25.71
	4	27	302	52.73	78.44
	5	203	309	1.82	80.26
	6	7	381	18.70	98.96
	7	72	383	0.52	99.48
	8	2	385	0.52	100.00

VARIABLE	DEI5666	FFS FILE 10
	Prescription status of first drug	
	CODES	
	. - Not applicable, missing 1 - Prescription (legend) 2 - Over the counter (non-legend) 3 - Either (varies by state) 4 - Unknown	
	DEI5666 states whether the drug listed in DEI5589 was prescription or could be sold over the counter, whether it required a prescription in some states, but not in others, or whether information on the status of the drug was unobtainable.	

DEI5666	VALUE	FREQ	CUM FREQ	%	CUM %
	1	223	12081	94.49	94.49
	2	12081	12157	0.59	95.09
	3	76	12773	4.82	99.91
	4	616	12785	0.09	100.00
		12			

VARIABLE	DEI5589	FFS FILE 10
	NDC code of first drug	
	CODES	
	Blank - Not applicable, missing	
	DEI5589 indicates the first seven digits of the National Drug Code for the drug sold by the provider. A number of codes were added by the HIE to identify drugs not listed in the 1972 NDC Directory. All NDC and supplementary codes used here are defined in Section V of "Codes Used."	

VARIABLE	DEI5590	FFS FILE 10
	1st generic code of first drug	
	CODES	
	. - Not applicable, missing	
	DEI5590 identifies a generic component of the drug specified by NDC code in DEI5589. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE DE15591	FFS FILE 10
2nd generic code of first drug	
CODES	
. - Not applicable, missing	
DE15591 identifies a generic component of the drug specified by NDC code in DE15589. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE DE15592	FFS FILE 10
3rd generic code of first drug	
CODES	
. - Not applicable, missing	
DE15592 identifies a generic component of the drug specified by NDC code in DE15589. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE	DEI5593	FFS FILE 10
	4th generic code of first drug	
	CODES	
	. - Not applicable, missing	
	DEI5593 identifies a generic component of the drug specified by NDC code in DEI5589. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE	DEI5594	FFS FILE 10
	5th generic code of first drug	
	CODES	
	. - Not applicable, missing	
	DEI5594 identifies a generic component of the drug specified by NDC code in DEI5589. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE DE15595 FFS FILE 10

Drug therapeutic code of first drug

CODES

. - Not applicable, missing

DE15595 indicates the code for the therapeutic use of the drug specified in DE15589. Therapeutic codes used in this file are defined in Section VII of "Codes Used."

DE15595 VALUE	FREQ	CUM FREQ	%	CUM %
2	220	9	.07	0.07
3	1	10	0.01	0.08
5	15	15	0.04	0.12
6	22	37	0.17	0.29
7	36	73	0.28	0.57
8	395	468	3.09	3.66
9	6	474	0.05	3.71
11	1	475	0.01	3.71
12	2	477	0.02	3.73
13	4	481	0.03	3.76
14	387	868	3.03	6.79
16	25	893	0.20	6.98
17	26	919	0.20	7.19
18	78	997	0.61	7.80
20	39	1036	0.31	8.10
21	247	1283	1.93	10.03
22	9	1292	0.07	10.10
24	21	1313	0.16	10.27
25	34	1347	0.27	10.53
26	43	1390	0.34	10.87
27	9	1399	0.07	10.94
28	48	1447	0.38	11.32
29	67	1514	0.52	11.84
30	21	1535	0.16	12.00
31	2	1537	0.02	12.02
33	19	1556	0.15	12.17
35	704	2260	5.51	17.67
36	90	2350	0.70	18.38
37	251	2601	1.96	20.34
38	88	2689	0.69	21.03
41	154	2843	1.20	22.23
42	34	2877	0.27	22.50
43	39	2916	0.31	22.80
44	1	2917	0.01	22.81
45	3780	6697	29.56	52.37
46	46	6743	0.36	52.73
47	1	6744	0.01	52.74
48	863	7607	6.75	59.49
49	19	7626	0.15	59.63
50	5	7631	0.04	59.67
51	285	7916	2.23	61.90
53	140	8056	1.10	63.00
55	9	8065	0.07	63.07
57	37	8102	0.29	63.36

(cont.)

VARIABLE DE15595 (cont.)

VALUE	FREQ	CUM FREQ	%	CUM %
62	1	8103	0.01	63.36
67	1	8104	0.01	63.37
68	2	8106	0.02	63.39
70	1	8107	0.01	63.40
71	18	8125	0.14	63.54
72	1	8126	0.01	63.54
74	2	8128	0.02	63.56
76	1	8129	0.01	63.57
77	6	8135	0.05	63.61
78	22	8157	0.17	63.79
84	1	8158	0.01	63.79
85	223	8381	1.74	65.54
88	426	8807	3.33	68.87
89	3952	12759	30.90	99.77
91	6	12765	0.05	99.82
92	23	12788	0.18	100.00

DE15665

VARIABLE	DE15665	FFS FILE	10
Prescription status of second drug			
CODES			
1 - Not applicable, missing			
2 - Prescription (legend)			
3 - Over the counter (non-legend)			
4 - Either (varies by state)			
4 - Unknown			
DE15665 states whether the drug listed in DE15613 was prescription or could be sold over the counter, whether it required a prescription in some states but not in others, or whether information on the status of the drug was unobtainable.			

VARIABLE	DE15613	FFS FILE 10
	NDC code of second drug	
	CODES	
	Blank - Not applicable, missing	
	DE15613 indicates the seven-digit National Drug Code for (a) a second drug injected separately but on the same charge as the drug in DE15589, or (b) a second drug contained in the same charged injection. A number of codes were added by the HIE to identify drugs not listed in the 1972 NDC Directory. All NDC and supplementary codes used here are defined in Section V of "Codes Used."	

VARIABLE	DE15614	FFS FILE 10
	1st generic code of second drug	
	CODES	
	. - Not applicable, missing	
	DE15614 identifies a generic component of the drug specified by NDC code in DE15613. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE	DE15615	FFS FILE 10
	2nd generic code of second drug	
	CODES	
	. - Not applicable, missing	
	DE15615 identifies a generic component of the drug specified by NDC code in DE15613. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE	DE15616	FFS FILE 10
	3rd generic code of second drug	
	CODES	
	. - Not applicable, missing	
	DE15616 identifies a generic component of the drug specified by NDC code in DE15613. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE DE15617	FFS FILE 10
4th generic code of second drug	
CODES	
. - Not applicable, missing	
DE15617 identifies a generic component of the drug specified by NDC code in DE15613. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE DE15618	FFS FILE 10
5th generic code of second drug	
CODES	
. - Not applicable, missing	
DE15618 identifies a generic component of the drug specified by NDC code in DE15613. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE	DEI5619	FFS FILE 10
Drug therapeutic code of second drug		
CODES		
. - Not applicable, missing		
DEI5619 indicates the code for the therapeutic use of the drug specified in DEI5613. Therapeutic codes in this file are defined in Section VII of "Codes Used."		

DEI5619	VALUE	FREQ	CUM FREQ	%	CUM %
2	12185	3	3	0.37	0.37
5	3	2	5	0.24	0.61
7	5	5	10	0.61	1.22
8	107	107	117	13.00	14.22
14	68	68	185	8.26	22.48
16	2	2	187	0.24	22.72
17	3	3	190	0.37	23.09
18	63	63	253	7.66	30.74
20	38	38	291	4.62	35.36
21	17	17	308	2.07	37.42
22	2	2	310	0.24	37.67
24	2	2	312	0.24	37.91
25	4	4	316	0.49	38.40
26	1	1	317	0.12	38.52
27	2	2	319	0.24	38.76
28	44	44	363	5.35	44.11
29	11	11	374	1.34	45.44
30	1	1	375	0.12	45.57
31	7	7	382	0.85	46.42
35	87	87	469	10.57	56.99
36	9	9	478	1.09	58.08
37	34	34	512	4.13	62.21
38	19	19	531	2.31	64.52
41	14	14	545	1.70	66.22
42	5	5	550	0.61	66.83
43	15	15	565	1.82	68.65
45	26	26	591	3.16	71.81
46	5	5	596	0.61	72.42
48	8	8	604	0.97	73.39
51	12	12	616	1.46	74.85
57	3	3	619	0.37	75.21
71	1	1	620	0.12	75.33
78	3	3	623	0.37	75.70
85	118	118	741	14.34	90.04
88	34	34	775	4.13	94.17
89	48	48	823	5.83	100.00

VARIABLE	DEI5602	FFS FILE 10
Number of injections		
CODES		
. - Not applicable, missing		
DEI5602 indicates the number of injections given for the charge listed in DEI5558, Line-item charge.		

DEI5602	VALUE	FREQ	CUM FREQ	%	CUM %
1	12685	6	12685	97.56	97.56
2	244	12685	12929	1.88	99.44
3	14	14	12943	0.11	99.55
4	1	1	12944	0.01	99.55
5	42	42	12986	0.32	99.88
6	1	1	12987	0.01	99.89
7	2	2	12989	0.02	99.90
8	3	3	12992	0.02	99.92
10	1	1	12993	0.01	99.93
15	1	1	12994	0.01	99.94
16	1	1	12995	0.01	99.95
18	1	1	12996	0.01	99.95
40	1	1	12997	0.01	99.96
45	2	2	12999	0.02	99.98
61	1	1	13000	0.01	99.99
89	2	2	13002	0.02	100.00

XI. OUTPATIENT SERVICES BILLED BY INSTITUTIONS FFS FILE 11

INTRODUCTION

This codebook documents primary variables concerning outpatient services rendered to HIE participants at hospitals and health care facilities. For a routine hospital clinic visit, all services rendered may appear in this file, including the hospital's charge for the physician (or other provider) if he/she was functioning as a hospital employee. However, outpatient charges submitted by independent physicians will show up in File 06, Services Rendered by Physicians.

Specific information provided in this file includes the type of outpatient hospital service rendered, the charge for the service, the date and place of service, and variables indicating the diagnoses to which the service charge is related, as well as the treatment history/status of each diagnosis. Also included are the reasons/symptoms for the visit to the hospital, whether the visit was accident- or employment-related, and the referral physicians (if any). Further information given includes the amount of the charge that was not covered, the reason for such noncoverage, if any, and the amount reimbursed to the provider or participant by the HIE.

The units of observation in this file are line items for institutional outpatient services.¹ For an explanation of common variables used in this codebook, see the final subsection of Sec. II. Below we provide explanations for specific variables in this file.

CATEGORY OF HOSPITAL SERVICE

In this file, the variable Category of Hospital Service (DE15557) identifies the type of *outpatient* hospital service the participant received. This includes surgery and emergency room services when there was no subsequent admission. The most commonly used categories of

¹Analysts should note that the statistical frequency of a variable in this file represents the number of times it occurs in relation to the unit of observation, *not* the number of claims on which it appears.

service were pharmacy, X-ray, laboratory, supply, emergency room, and "hospital-based professional" charges; other categories include charges for more specialized services. This variable was designed for use in both inpatient and outpatient files; the inpatient categories listed in the variable are not appropriate to this file.

CODEBOOK FOR FFS FILE 11

OUTPATIENT SERVICES BILLED BY INSTITUTIONS

DIRECTORY OF VARIABLES - FFS FILE 11
OUTPATIENT SERVICES BILLED BY INSTITUTIONS

VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK	VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK
FILENAME	Name of file	297	DEI5522	1st diagnosis	311
PERSON	Person identifier	297	DEI5523	1st diagnosis qualifier	311
SITE	Site	297	DEI5524	1st associated diagnosis	312
INSTAT	Insurance status	298	DEI5572	1st problem/symptom date	312
CONTR	Contract year	298	DEI5574	Treatment history/status of the 1st diagnosis	313
DEI5553	Claim number	299	DEI5525	2nd diagnosis	313
DEI5502	Provider number	299	DEI5526	2nd diagnosis qualifier	314
DEI5555	Date of service	299	DEI5527	2nd associated diagnosis	314
DEI5584	Place of service	300	DEI5575	2nd problem/symptom date	315
DEI5503	1st reason/symptom for visit	300	DEI5577	Treatment history/status of the 2nd diagnosis	315
DEI5505	2nd reason/symptom for visit	301	DEI5528	3rd diagnosis	316
DEI5565	3rd reason/symptom for visit	301	DEI5529	3rd diagnosis qualifier	316
DEI5567	Previous visit to this doctor	302	DEI5530	3rd associated diagnosis	317
DEI5568	Provider referred from	302	DEI5578	3rd problem/symptom date	317
DEI5569	First provider referral	303	DEI5580	Treatment history/status of the 3rd diagnosis	318
DEI5570	Second provider referral	303	DEI5531	4th diagnosis	318
DEI5511	Accident related	304	DEI5532	4th diagnosis qualifier	319
DEI5512	Employment related	304	DEI5533	4th associated diagnosis	319
DEI5566	Date of injury	305	DEI5581	4th problem/symptom date	320
DEI5557	Category of hospital service	306	DEI5583	Treatment history/status of the 4th diagnosis	320
DEI5558	Line-item charge	307			
DEI5559	Noncovered charges	307			
DEI5560	Reason for noncoverage	308			
DEI5561	Reimbursement	310			

FILENAME			
VALUE	FREQ	CUM FREQ	CUM %
PE11AA	11494	11494	100.00

SITE			
VALUE	FREQ	CUM FREQ	CUM %
1	2069	2069	18.00
2	2233	4302	37.43
3	1915	6217	54.09
4	1722	7939	69.07
5	1297	9236	80.36
6	2258	11494	100.00

VARIABLE FILENAME FFS FILE 11

Name of file

FILENAME is a 6-digit code that uniquely identifies the file. This file name is PE11AA.

VARIABLE PERSON FFS FILE 11

Person identifier

PERSON is an 8-character alphanumeric code that uniquely identifies the participant in the HIE to whom the following data refer. The 2nd character of PERSON designates in which site a participant resided during enrollment in the HIE: A=Dayton; B=Seattle; E=Fitchburg; F=Franklin County; G=Charleston; H=Georgetown County.

VARIABLE SITE FFS FILE 11

Site

CODES

1 - Dayton, Ohio
2 - Seattle, Washington
3 - Fitchburg, Massachusetts
4 - Franklin County, Massachusetts
5 - Charleston, South Carolina
6 - Georgetown County, South Carolina

SITE identifies the participant's place of residence when enrolled.

INSTAT	VALUE	FREQ	CUM FREQ	%	CUM %
1	11460	11460	11460	99.70	99.70
2	34	34	11494	0.30	100.00

CONTR	VALUE	FREQ	CUM FREQ	%	CUM %
P1	732	732	732	6.37	6.37
P2	669	669	1401	5.82	12.19
P3	1004	1004	2405	8.74	20.92
01	2353	2353	4758	20.47	41.40
02	2455	2455	7213	21.36	62.75
03	2300	2300	9513	20.01	82.77
04	1007	1007	10520	8.76	91.53
05	974	974	11494	8.47	100.00

VARIABLE INSTAT FFS FILE 11

Insurance status

CODES

1 - Ever insured (includes HMO experimental group)

2 - Ever assigned to HMO control group

3 - Never insured

INSTAT describes the participant's insurance status in the Health Insurance Experiment.

VARIABLE CONTR FFS FILE 11

Contract year

CODES

P1 - First year (South Carolina 3 year enrollees)

P2 - Second year (South Carolina 3 year enrollees)

P3 - Third year (South Carolina 3 year enrollees)

01 - First year

02 - Second year

03 - Third year

04 - Fourth year

05 - Fifth year

CONTR identifies the participant's contract year of coverage for which the claim was filed under the HIE. A three-year South Carolina enrollment group also served as an uninsured control group for two years prior to the beginning of its contract period; P1 - P3 identify the medical insurance contract periods for this group. Thus, P1 indicates the first contract year for this group, but is the third contract year of the study.

VARIABLE	DEI5553	FFS FILE 11
	Claim number	
	DEI5553 indicates a claim identifier which is used to link the line items from a given MER.	

VARIABLE	DEI5502	FFS FILE 11
	Provider number	
	DEI5502 is an 8-character code which refers, in this file, to the hospital, nursing facility, or any other health care facility which billed the participant for outpatient service charges.	

VARIABLE	DEI5555	FFS FILE 11
	Date of service	
	CODES	
	19741115 to 19820129 - Date range on file (YYYYMMDD)	
	DEI5555 indicates the date on which the service was rendered. If a service was rendered over multiple dates, this variable is the initial date of service.	

DEI5584	VALUE	FREQ	CUM FREQ	%	CUM %
	4	126	126	1.10	1.10
	6	8879	9005	77.25	78.35
	7	1307	10312	11.37	89.72
	8	1169	11481	10.17	99.89
	9	13	11494	0.11	100.00

VARIABLE	DEI5584	FFS FILE	11
	Place of service		
	CODES		
	1 - Not applicable, missing		
	2 - Doctor's office		
	3 - Independent laboratory		
	4 - Patient's home		
	5 - Hospital		
	6 - Nursing home		
	7 - Emergency room		
	8 - Outpatient surgery		
	9 - Other outpatient hospital, including hospital clinic		
	DEI5584 indicates where the participant received outpatient services.		

VARIABLE	DEI5503	FFS FILE	11
	1st reason/symptom for visit		
	CODES		
	Blank - Not applicable, missing		
	DEI5503 indicates the code for the first reason the participant went to see a physician. All reason-for-visit codes used in the claims line-item files are listed in Section IV of "Codes Used."		

NOTE: NAMCS codes were entered without decimal points.
Any codes lacking definitions are coding errors.

VARIABLE	DEI5505	FFS FILE 11
	2nd reason/symptom for visit	
	CODES	
	Blank - Not applicable, missing	
	DEI5505 indicates the code for an additional reason the participant went to see the doctor. All reason-for-visit codes used in the claims line-item files are listed in Section IV of "Codes Used."	

VARIABLE	DEI5565	FFS FILE 11
	3rd reason/symptom for visit	
	CODES	
	Blank - Not applicable, missing	
	DEI5565 indicates the code for an additional reason the participant went to see the doctor. All reason-for-visit codes used in the claims line-item files are listed in Section IV of "Codes Used."	

DEI5567	VALUE	FREQ	CUM FREQ	%	CUM %
	1	401	8116	73.16	73.16
	2	8116	11093	26.84	100.00

VARIABLE DEI5567 FFS FILE 11

Previous visit to this doctor

CODES

1 - Yes

2 - No

DEI5567 indicates whether the participant had previously visited this doctor.

VARIABLE DEI5568 FFS FILE 11

Provider referred from

CODES

Blank - Not applicable, missing

DEI5568 indicates the provider number of the person or institution (if any) who referred the participant.

VARIABLE DEI5569 FFS FILE 11

First provider referral

CODES

Blank - Not applicable, missing

DEI5569 indicates the provider number of the first provider (if any) to whom the participant was referred.

VARIABLE DE15570 FFS FILE 11

Second provider referral

CODES

Blank - Not applicable, missing

DE15570 indicates the provider number of the second provider (if any) to whom the participant was referred.

VARIABLE DE15511 FFS FILE 11

Accident related

CODES

1 - Not applicable, missing

2 - Yes

3 - No

DE15511 states whether the illness or injury was accident related.

DE15511	VALUE	FREQ	CUM FREQ	%	CUM %
1	41	4356	4356	38.03	38.03
2	7097	11453	11453	61.97	100.00

VARIABLE	DEI5512	FFS FILE 11
	Employment related	
	CODES	
	1 - Not applicable, missing	
	2 - Yes	
	DEI5512 states whether the illness or injury was employment related.	

DEI5512	VALUE	FREQ	CUM FREQ	%	CUM %
	1	40	238	2.08	2.08
	2	11216	11454	97.92	100.00

VARIABLE	DEI5566	FFS FILE 11
	Date of injury	
	CODES	
	19250618 to 19820108 - Not applicable, missing	
	DEI5566 indicates the date (if any) the participant was injured.	

VARIABLE	DE15557	FFS FILE 11	DE15557 VALUE	FREQ	CUM FREQ	%	CUM %
Category of hospital service							
CODES							
1 - Room and board			1	1	1	0.01	0.01
2 - Pharmacy			1630	1630	1631	14.18	14.19
3 - X-ray			446	446	2077	3.88	18.07
4 - Lab			754	754	2831	6.56	24.63
5 - Miscellaneous hospital supplies			1616	1616	4447	14.06	38.69
6 - Special lab, non-invasive			30	30	4477	0.26	38.95
7 - Operating room, recovery supplies, cast room			479	479	4956	4.17	43.12
8 - Operating room, supplies and anesthesia			269	269	5225	2.34	45.46
9 - Professional: Hospital-based therapeutic services and related supplies			175	175	5400	1.52	46.98
10 - Professional: hospital-based pathologist			2	2	5402	0.02	47.00
11 - Professional: hospital-based radiologist			33	33	5435	0.29	47.29
12 - Professional: hospital-based other - medication administration fee			48	48	5483	0.42	47.70
13 - Kidney dialysis			30	30	5513	0.26	47.96
14 - Hospital-based professional in Emergency Room			4800	4800	10313	41.76	89.73
15 - Emergency Room			3	3	10316	0.03	89.75
16 - Special duty nurse			6	6	10322	0.05	89.80
17 - Blood, packed cells, etc.			31	31	10353	0.27	90.07
18 - Take-home drugs			6	6	10359	0.05	90.13
19 - Personal			1	1	10360	0.01	90.13
20 - Special lab, invasive (procedures and supplies)			2	2	10362	0.02	90.15
21 - Mental health procedures and supplies - mental health unit day care-electroconvulsive shock			1	1	10363	0.01	90.16
22 - Pharmacy (hospital's total charge for this category, divided by the length of stay)			1	1	10364	0.01	90.17
23 - X-ray (hospital's total charge for this category, divided by the length of stay)			2	2	10366	0.02	90.19
24 - Laboratory, regular (hospital's total charge for this category, divided by the length of stay)			1	1	10367	0.01	90.20
25 - Miscellaneous hospital supplies (hospital's total charge for this category, divided by the length of stay)			1	1	10368	0.01	90.20
26 - Special lab, non-invasive (hospital's total charge for this category, divided by the length of stay)			10	10	10378	0.09	90.29
27 - Therapeutic service - professional (hospital's total charge of this category, divided by the length of stay)			173	173	10551	1.51	91.80
28 - Lump sum daily charge, excluding professional fee			139	139	10690	1.21	93.01
29 - Lump sum daily charge, including professional fee			804	804	11494	7.00	100.00
30 - Miscellaneous, blood transportation charge, (cont.)							

VARIABLE DE15557 (cont.)

31 -	ambulance, cot for mother
32 -	Lump sum daily charge, excluding room and board
33 -	Hyperalimentation - supplies and service
34 -	Special surgical supplies (including cardiac pacemaker, Hunter tendon graft)
35 -	Lump sum daily charge - nursery
36 -	Insurance surcharge ("verticare")
37 -	Dental clinic: hospital-based
38 -	Anesthesia: professional (including anesthesia administration, anesthesia service, spinal block, etc.)
39 -	Operating room/anesthesia supplies
40 -	Anesthesia not otherwise specified
41 -	Emergency Room, including professional fee
42 -	Special blood procedures (including plasmaphoresis)
DE15557 categorizes the type of outpatient hospital or clinical services the participant received. Excluded are most physician services, except for certain hospital-based physician services.	

DE15558	NUMBER OF OBSERVATIONS	11494
	NUMBER OF MISSING	0
	MEAN	23.61
	MEDIAN	16.00
	MINIMUM VALUE	0.00
	MAXIMUM VALUE	640.00
	STANDARD DEVIATION	35.74
	COEFFICIENT OF VARIATION	151.36
	SKEWNESS	6.06
	KURTOSIS	55.15

VARIABLE DE15558	FFS FILE 11
Line-item charge	
DE15558 indicates the charge submitted to the HIE by the provider or participant for payment of the outpatient service referred to in DE15557.	

VARIABLE	DE15559	FFS FILE 11
	Noncovered charges	
	DE15559 indicates the amount of charged services	
	in DE15558 not covered by the insurance plan.	

DE15559	
NUMBER OF OBSERVATIONS	3981
NUMBER OF MISSING	7513
MEAN	13.55
MEDIAN	7.50
MINIMUM VALUE	0.00
MAXIMUM VALUE	352.00
STANDARD DEVIATION	19.97
COEFFICIENT OF VARIATION	147.43
SKEWNESS	6.05
KURTOSIS	60.50

VARIABLE	DE15560	FFS FILE 11	DE15560 VALUE	FREQ	CUM FREQ	%	CUM %
Reason for noncoverage							
CODES							
1 - Not applicable, missing			2	7513	3	0.08	0.08
1 - Inpatient hospital accommodations in a private room			21	6	9	0.15	0.23
2 - Inpatient hospital comfort items			22	18	27	0.45	0.68
3 - Inpatient hospital custodial care			25	11	38	0.28	0.96
4 - Cosmetic surgery not resulting from an accidental injury			30	60	98	1.51	2.46
5 - Psychiatric outpatient services in excess of fifty-two consultations per year			31	3181	3279	79.91	82.37
6 - Outpatient psychiatric services			32	166	3445	4.17	86.54
7 - Outpatient personal care services			33	4	3449	0.10	86.64
8 - Orthodontia not resulting from accidental injury			35	186	3635	4.67	91.31
9 - Christian Science practitioner or sanatorium not listed in the Christian Science Journal			36	1	3636	0.03	91.33
10 - Non-emergency transportation			37	1	3637	0.03	91.36
11 - More than one eye or hearing examination during the accounting year			42	50	3687	1.26	92.62
12 - More than one pair of eyeglass frames every two accounting years			44	124	3811	3.12	95.73
13 - More than one set of eyeglass lenses during the accounting year			45	29	3840	0.73	96.46
14 - More than one hearing aid during the accounting year			46	1	3841	0.03	96.48
15 - Exceeds limit on eyeglass frames or hearing aids			48	57	3898	1.43	97.92
16 - Repairs to eyeglass frames and hearing aids			56	43	3941	1.08	99.00
17 - Diagnostic, screening, preventative, or rehabilitation services not otherwise specified in the scope of coverage			58	7	3948	0.18	99.17
18 - More than one piece of medical equipment, appliance or supply			59	4	3952	0.10	99.27
19 - Equipment, appliances or supplies costing more than \$25.00			66	6	3958	0.15	99.42
20 - Not medically necessary			71	2	3960	0.05	99.47
21 - Duplicate line item			73	2	3962	0.05	99.52
22 - Amount paid on another Explanation of Benefits			74	19	3981	0.48	100.00
23 - Service prior to enrollment (SAME AS 64)							
24 - Procedure done twice							
25 - Certificate of benefits stipulations on service not met							
26 - Prior authorization not approved							
27 - Participant not eligible for dental care							

(cont.)

VARIABLE DE I5560 (cont.)

- 28 - Blood credit
- 29 - Over-the-counter drugs
- 30 - Deductible not met
- 31 - Participant's co-insurance portion
- 32 - Services covered by workmen's compensation or employer's liability laws
- 33 - Pass through (covered by other insurance; payment from other company was "passed through" to provider or participant)
- 34 - Prepayment made
- 35 - Services covered by accident insurance policies
- 36 - Medicare paid
- 37 - Discount
- 38 - Not covered prepayment and deductible
- 39 - Not covered prepayment and coinsurance
- 40 - Discount and deductible not met
- 41 - Discount and coinsurance
- 42 - Paid by other insurance carrier
- 43 - Paid by agency other than insurance company
- 44 - Services obtained outside Group Health Cooperative
- 45 - Plan benefit is 5% of covered charges
- 46 - Services obtained at Group Health Cooperative
- 47 - Allowance on over-the-counter-drugs per illness per accounting year has been met
- 48 - Services paid for by Group Health Cooperative
- 53 - Part paid by Group Health Cooperative; plan benefit = 5% or balance
- 54 - Charge information unavailable--charge coded as one cent
- 55 - Discount plus plan benefit is 5%
- 56 - Medicaid paid
- 57 - Company physical provided as fringe benefit--charge coded as one cent, but true charge unknown
- 58 - Workmen's compensation - charge coded as one cent, but true charge unknown
- 59 - Services rendered after termination date
- 60 - Claim is duplicate
- 61 - Participant not eligible
- 62 - Suspended
- 63 - No service
- 64 - Before enrollment date (SAME AS 23)
- 65 - Claim filed after time limit
- 66 - No charge
- 67 - Underpayment

(cont.)

VARIABLE DE15560 (cont.)

68 - Overpayment, deducted on another claim
69 - Overpayment, returned
70 - Overpayment, deducted on this claim, overpaid
on another claim
71 - Billed in error--patient not seen
72 - Prepayment made (SAME AS 34)
73 - Duplicate payment recovered
74 - Duplicate payment not recovered
80 - Prepayment for future services - no Maximum
Dollar Expenditure involved
81 - Prepayment - part applied to the Maximum
Dollar Expenditure

DE15560 describes the reason a charge was not covered
under the participant's HIE plan. The above code
values were designed to cover all line-item charges;
not all values are appropriate in every file.

DE15561

NUMBER OF OBSERVATIONS 11494
NUMBER OF MISSING 0
MEAN 18.92
MEDIAN 12.32
MINIMUM VALUE 0.00
MAXIMUM VALUE 640.00
STANDARD DEVIATION 33.49
COEFFICIENT OF VARIATION 177.06
SKEWNESS 6.33
KURTOSIS 61.54

VARIABLE DE15561 FFS FILE 11

Reimbursement

DE15561 indicates the reimbursement amount for the
line-item charge shown in DE15558.

VARIABLE DE1522 FFS FILE 11

1st diagnosis

CODES

Blank - Not applicable, missing

DE1522 indicates the code of the first condition diagnosed by the physician. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section I of "Codes Used."

VARIABLE DE1523 FFS FILE 11

1st diagnosis qualifier

CODES

- 1 - Not applicable, missing
- 2 - Rule out
- 3 - Probable/possible/?/question of
- 4 - With, associated with, complicated by, secondary to, due to
- 5 - Not, turned out not to be, was not
- 6 - Or, versus
- 9 - Well-care code assigned*

DE1523 indicates a diagnosis qualifier for the first diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible a diagnosis qualifier was used in the absence of a primary diagnosis.

*NOTE: Value #9 is not a true diagnosis qualifier. Occasionally, health maintenance procedures were performed by the provider which did not pertain to any of the diagnoses on the MER. In such cases, coders (cont.)

DE1523	VALUE	FREQ	CUM FREQ	%	CUM %
1	3801	6459	6459	83.96	83.96
2	99	6558	6558	1.29	85.25
3	272	6830	6830	3.54	88.78
4	856	7686	7686	11.13	99.91
6	4	7690	7690	0.05	99.96
9	3	7693	7693	0.04	100.00

VARIABLE DE15523 (cont.)

assigned a well-care code from the H-ICDA-2, and it was notated in this variable.

VARIABLE	DE15524	FFS FILE 11
	1st associated diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DE15524 indicates the associated diagnosis code when required by the diagnosis qualifier.	

VARIABLE	DE15572	FFS FILE 11
	1st problem/symptom date	
	CODES	
	19010101 - Not applicable, missing	
	19650909 to 19820128 - Symptom present most of life	
	19650909 to 19820128 - Range on this file (YYYYMMDD)	
	DE15572 indicates the date that the first problem or symptom appeared, as reported by the participant. The value 19010101 was used when the participant responded that the symptom had been present most or all of his/her life.	

DE15574	VALUE	FREQ	CUM FREQ	%	CUM %
	1	4430	5551	78.58	78.58
	2	5551	5602	0.72	79.30
	3	447	6049	6.33	85.63
	4	190	6239	2.69	88.32
	5	149	6388	2.11	90.43
	6	66	6454	0.93	91.37
	7	29	6483	0.41	91.78
	8	546	7029	7.73	99.51
	9	35	7064	0.50	100.00

VARIABLE DE15574 FFS FILE 11

Treatment history/status of the 1st diagnosis

CODES:

- 1 - Not applicable, missing
- 2 - Initial visit for acute condition
- 3 - Initial visit for chronic condition
- 4 - Repeat visit for acute condition
- 5 - Repeat visit for chronic condition (routine)
- 6 - Initial visit for flareup of a chronic condition
- 7 - Well care or pregnancy-related
- 8 - Repeat visit for flareup of a chronic condition
- 9 - Acute; not specified as initial or repeat
- 9 - Chronic; not specified as initial or repeat

DE15574 describes the patient's treatment history or status for the first diagnosis/problem.

VARIABLE DE15525 FFS FILE 11

2nd diagnosis

CODES

Blank - Not applicable, missing

DE15525 indicates the code of the second condition diagnosed by the physician. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section 1 of "Codes Used."

DEI5526	VALUE	FREQ	CUM FREQ	%	CUM %
	1	10509	764	77.56	77.56
	2	33	797	3.35	80.91
	3	80	877	8.12	89.04
	4	103	980	10.46	99.49
	9	5	985	0.51	100.00

VARIABLE	DEI5526	FFS FILE 11
	2nd diagnosis qualifier	
	CODES	
	1 - Not applicable, missing	
	2 - Rule out	
	3 - Probable/possible/?/question of	
	4 - With, associated with, complicated by,	
	secondary to, due to	
	5 - Not, turned out not to be, was not	
	6 - Or, versus	
	9 - Well-care code assigned*	
	DEI5526 indicates a diagnosis qualifier for the second	
	diagnosis. In some instances (i.e., codes 2, 3, 5),	
	it is possible a diagnosis qualifier was used	
	in the absence of a primary diagnosis.	

*NOTE: See note on DEI5523.

VARIABLE	DEI5527	FFS FILE 11
	2nd associated diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DEI5527 indicates the associated diagnosis code	
	when required by the qualifier.	

VARIABLE	DEI5575	FFS FILE 11
	2nd problem/symptom date	
	CODES	
	19010101 - Not applicable, missing	
	19820128 - Symptom present most of life	
	19710929 to 19820128 - Range on this file (YYYYMMDD)	
	DEI5575 indicates the date that the second problem or symptom appeared, as reported by the participant. The value 19010101 was used when the participant responded that the symptom had been present most or all of his/her life.	

VARIABLE	DEI5577	FFS FILE 11
	Treatment history/status of the 2nd diagnosis	
	CODES	
	- Not applicable, missing	
	1 - Initial visit for acute condition	
	2 - Initial visit for chronic condition	
	3 - Repeat visit for acute condition	
	4 - Repeat visit for chronic condition (routine)	
	5 - Initial visit for flareup of a chronic condition	
	6 - Well care or pregnancy-related	
	7 - Repeat visit for flareup of a chronic condition	
	8 - Acute; not specified as initial or repeat	
	9 - Chronic; not specified as initial or repeat	
	DEI5577 describes the patient's treatment history or status for the second diagnosis/problem.	

DEI5577	VALUE	FREQ	CUM FREQ	%	CUM %
1	10601	703	703	78.72	78.72
2	703	10	713	1.12	79.84
3	63	776	776	7.06	86.90
4	45	821	821	5.04	91.94
5	5	826	826	0.56	92.50
6	16	842	842	1.79	94.29
7	6	848	848	0.67	94.96
8	45	893	893	5.04	100.00

VARIABLE DE15528 FFS FILE 11

3rd diagnosis

CODES

Blank - Not applicable, missing

DE15528 indicates the code of the third condition diagnosed by the physician. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section I of "Codes Used."

VARIABLE DE15529 FFS FILE 11

3rd diagnosis qualifier

CODES

- Not applicable, missing
- 1 - No qualifier
- 2 - Rule out
- 3 - Probable/possible/?/question of
- 4 - With, associated with, complicated by, secondary to, due to
- 5 - Not, turned out not to be, was not
- 6 - Or, versus
- 9 - Well-care code assigned*

DE15529 indicates a diagnosis qualifier for the third diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible a diagnosis qualifier was used in the absence of a primary diagnosis.

*NOTE: See note on DE15523.

DE15529

VALUE

1
2
3
4

FREQ

11334
121
5
14
20

CUM
FREQ

121
126
140
160

%

75.63
3.13
8.75
12.50

CUM
%

75.63
78.75
87.50
100.00

VARIABLE	DEI5530	FFS FILE 11
	3rd associated diagnosis	
	CODES	
	Blank - Not applicable, missing	
	DEI5530 indicates the associated diagnosis code	
	when required by the qualifier.	

VARIABLE	DEI5578	FFS FILE 11
	3rd problem/symptom date	
	CODES	
	19010101	- Not applicable, missing
	19741229 to 19820101	- Symptom present most of life
		- Range on this file (YYYYMMDD)
	DEI5578 indicates the date that the third problem or	
	symptom appeared, as reported by the participant.	
	The value 19010101 was used when the participant	
	responded that the symptom had been present most	
	or all of his/her life.	

DEI5580	VALUE	FREQ	CUM FREQ	%	CUM %
	1	11350	101	70.14	70.14
	2	101	105	2.78	72.92
	3	14	119	9.72	82.64
	4	13	132	9.03	91.67
	5	3	135	2.08	93.75
	6	3	138	2.08	95.83
	7	2	140	1.39	97.22
	8	4	144	2.78	100.00

VARIABLE DEI5580 FFS FILE 11

Treatment history/status of the 3rd diagnosis

CODES

- 1 - Not applicable, missing
- 2 - Initial visit for acute condition
- 3 - Initial visit for chronic condition
- 4 - Repeat visit for acute condition
- 5 - Repeat visit for chronic condition (routine)
- 6 - Initial visit for flareup of a chronic condition
- 7 - Well care or pregnancy-related
- 8 - Repeat visit for flareup of a chronic condition
- 9 - Acute; not specified as initial or repeat
- 9 - Chronic; not specified as initial or repeat

DEI5580 describes the patient's treatment history or status for the third diagnosis/problem.

VARIABLE DEI5531 FFS FILE 11

4th diagnosis

CODES

Blank - Not applicable, missing

DEI5531 indicates the code of the fourth condition diagnosed by the physician. Codes were assigned in the order in which the diagnoses appeared on the claim. Diagnosis codes used in the HIE claims files are listed in Section 1 of "Codes Used."

DEI5532	VALUE	FREQ	CUM FREQ	%	CUM %
	1	11465	17	58.62	58.62
	4	17	29	41.38	100.00
		12			

VARIABLE DEI5532 FFS FILE 11

4th diagnosis qualifier

CODES

- 1 - Not applicable, missing
- 1 - Yes
- 1 - No qualifier given
- 2 - Rule out
- 3 - Probable/possible/?/question of
- 4 - With, associated with, complicated by, secondary to, due to
- 5 - Not, turned out not to be, was not
- 6 - Or, versus
- 9 - Well-care code assigned*

DEI5532 indicates a diagnosis qualifier for the fourth diagnosis. In some instances (i.e., codes 2, 3, 5), it is possible for a diagnosis qualifier to be used in the absence of a primary diagnosis.

*NOTE: See note on DEI5523.

VARIABLE DEI5533 FFS FILE 11

4th associated diagnosis

CODES

Blank - Not applicable, missing

DEI5533 indicates the associated diagnosis code when required by the qualifier.

VARIABLE	DEI5581	FFS FILE 11
	4th problem/symptom date	
	CODES	
	19010101 - Not applicable, missing	
	19741229 to 19800912 - Symptom present most of life	
	19741229 to 19800912 - Range on this file (YYYYMMDD)	
	DEI5581 indicates the date that the fourth problem or symptom appeared, as reported by the participant. The value 19010101 was used when the participant responded that the symptom had been present most or all of his/her life.	

VARIABLE	DEI5583	FFS FILE 11
	Treatment history/status of the 4th diagnosis	
	CODES	
	- Not applicable, missing	
	1 - Initial visit for acute condition	
	2 - Initial visit for chronic condition	
	3 - Repeat visit for acute condition	
	4 - Repeat visit for chronic condition (routine)	
	5 - Initial visit for flareup of a chronic condition	
	6 - Well care or pregnancy-related	
	7 - Repeat visit for flareup of a chronic condition	
	8 - Acute; not specified as initial or repeat	
	9 - Chronic; not specified as initial or repeat	
	DEI5583 describes the patient's treatment history or status for the fourth diagnosis/problem.	

DEI5583	VALUE	FREQ	CUM FREQ	%	CUM %
	1	11465	18	62.07	62.07
	4	18	26	27.59	89.66
	8	3	29	10.35	100.00

XII. SERVICES RENDERED BY DENTISTS FFS FILE 12

INTRODUCTION

This codebook documents primary variables concerning dental services rendered and billed by dentists to HIE participants. Most dental claims appear here, except for cases where a dentist performed an inpatient procedure as an employee of a hospital (see File 03) or an outpatient procedure as an employee of a hospital clinic (see File 11). In some cases, dentists acted as independent oral surgeons in hospitals; those claims are in File 06. Drugs prescribed by dentists can be found in File 13.

Dental benefits were the same for eligible participants.¹ All FFS participants were eligible for dental coverage, except during the first year of the study in Dayton. In Dayton, first year dental coverage applied only to members of the "free" plan (0 percent coinsurance) and to children in the other FFS plans. However, this practice was discontinued after the first year; thereafter, all FFS participants were eligible for dental services.²

Eligible participants also included those enrolled at GHC. Experimental group participants received the same dental coverage as eligible FFS participants on the "free" plan (0 percent coinsurance) and obtained their dental services from FFS dentists because dental care was not available at GHC. *GHC control group* participants were reimbursed 5 percent of all reported FFS dental charges.³

¹The dental benefits provided to eligible participants are listed in Appendix H.

²The variable, DEI5560, Reason for Noncoverage, will have a value of 27, ineligible for dental services, only for services rendered to coinsurance-paying adults in Dayton, year one.

³GHC control group members may have had private dental insurance; thus, they may not have reported all of their dental care to the HIE. Therefore, researchers may wish to drop GHC control group members from analyses of dental care usage.

Specific information provided in this file includes the reasons/symptoms for the visit to the dentist, the treatment category for the visit, the services rendered by the dentist, the charge for each service, the date and place of the service, and variables indicating whether the participant's visit was accident- or employment-related. Other variables indicate which tooth surfaces were treated, whether orthodontics or prosthodontics were involved, and whether the dentist prescribed any drugs. Also included are variables that indicate the amount of the charge that was not covered by HIE insurance, and the reason for such noncoverage, if applicable.

The units of observation in this file are line items for dental services.⁴ For an explanation of common file variables used in this codebook, see the final subsection of Sec. II. Below we provide explanations for specific variables in this file.

DENTAL PROCEDURE CODE

Variable DEI5625, ADA Procedure Code, indicates a four-digit American Dental Association (ADA) code that identifies the dental procedure or service rendered.⁵ ADA codes used in this file are found in Sec. VIII of *Codes Used*.

UNITS OF SERVICE

Variable DEI5602, Units of Service, has a new meaning within this file. Here, it indicates the number of instances of the procedure defined in DEI5625, ADA Procedure Code (number of X-rays, number of teeth filled, etc.). In File 10, DEI5602 is named "Number of Injections" and refers to the number of injections given to the participant.

⁴Analysts should note that the statistical frequency of a variable in this file represents the number of times it occurs in relation to the unit of observation, *not* the number of claims on which it appears.

⁵"Code on Dental Procedures and Nomenclature," *Journal of the American Dental Association*, Vol. 85, October 1972.

CODEBOOK FOR FFS FILE 12
SERVICES RENDERED BY DENTISTS

DIRECTORY OF VARIABLES - FFS FILE 12
SERVICES RENDERED BY DENTISTS

VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK	VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK
FILENAME	Name of file	325	DEI5559	Noncovered charges	332
PERSON	Person identifier	325	DEI5560	Reason for noncoverage	333
SITE	Site	325	DEI5561	Reimbursement	335
INSTAT	Insurance status	326	DEI5631	Treatment for orthodontic purposes	336
CONTYR	Contract year	326	DEI5630	Treatment category/status of visit	336
DEI5553	Claim number	327	DEI5620	Tooth number	336
DEI5502	Provider number	327	DEI5621	1st surface letter	337
DEI5555	Date of service	327	DEI5622	2nd surface letter	338
DEI5584	Place of service	328	DEI5623	3rd surface letter	339
DEI5503	1st reason/symptom for visit	328	DEI5624	4th surface letter	340
DEI5505	2nd reason/symptom for visit	329	DEI5626	Prosthesis or crown	341
DEI5511	Accident related	329	DEI5627	Initial placement	342
DEI5512	Employment related	330	DEI5628	Date of prior placement	342
DEI5566	Date of injury	330	DEI5632	Drugs prescribed	343
DEI5625	ADA Procedure code	331	DEI5629	Prior authorization	343
DEI5602	Units of service	331			
DEI5558	Line-item charge	332			

INSTAT	VALUE	FREQ	CUM FREQ	%	CUM %
	1	113889	113889	95.08	95.08
	2	5891	119780	4.92	100.00

CONTR	VALUE	FREQ	CUM FREQ	%	CUM %
	P1	5187	5187	4.33	4.33
	P2	4511	9698	3.77	8.10
	P3	4458	14156	3.72	11.82
	01	32607	46763	27.22	39.04
	02	25713	72476	21.47	60.51
	03	25440	97916	21.24	81.75
	04	9820	107736	8.20	89.95
	05	12044	119780	10.06	100.00

VARIABLE	INSTAT	FFS FILE 12
Insurance status		
CODES		
1 - Ever insured (includes HMO experimental group)		
2 - Ever assigned to HMO control group		
3 - Never insured		
INSTAT describes the participant's insurance status in the Health Insurance Experiment.		

VARIABLE	CONTR	FFS FILE 12
Contract year		
CODES		
P1 - First year (South Carolina 3 year enrollees)		
P2 - Second year (South Carolina 3 year enrollees)		
P3 - Third year (South Carolina 3 year enrollees)		
01 - First year		
02 - Second year		
03 - Third year		
04 - Fourth year		
05 - Fifth year		
CONTR identifies the participant's contract year of coverage for which the claim was filed under the HIE. A three-year South Carolina enrollment group also served as an uninsured control group for two years prior to the beginning of its contract period; P1 - P3 identify the medical insurance contract periods for this group. Thus, P1 indicates the first contract year for this group, but is the third contract year of the study.		

VARIABLE	DEI5553	FFS FILE 12
	Claim number	
	DEI5553 indicates a claim identifier which is used to link the line items from a given MER.	

VARIABLE	DEI5502	FFS FILE 12
	Provider number	
	DEI5502 is an 8-character code which refers, in this file, to the dentist who provided services for the participant. For further information on the provider, this number can be linked to information in the provider file.	

VARIABLE	DEI5555	FFS FILE 12
	Date of service	
	CODES	
	19741106 to 19820130 - Date range on file (YYYYMMDD)	
	DEI5555 indicates the date on which the service was rendered. If a service was rendered over multiple dates, this variable is the initial date of service.	

DEI5584	VALUE	FREQ	CUM FREQ	%	CUM %
1	118864	118864	118864	99.24	99.24
2	214	214	119078	0.18	99.41
3	22	22	119100	0.02	99.43
4	407	407	119507	0.34	99.77
5	1	1	119508	0.00	99.77
6	16	16	119524	0.01	99.79
7	109	109	119633	0.09	99.88
8	49	49	119682	0.04	99.92
9	98	98	119780	0.08	100.00

VARIABLE DEI5584 FFS FILE 12

Place of service

CODES

1 - Doctor's office
2 - Independent laboratory
3 - Patient's home
4 - Hospital
5 - Nursing home
6 - Emergency room
7 - Outpatient surgery
8 - Other outpatient hospital, including hospital clinic
9 - Other locations, including non-hospital clinics

DEI5584 indicates where the dentist rendered services.

VARIABLE DEI5503 FFS FILE 12

1st reason/symptom for visit

CODES

blank - Not applicable, missing

DEI5503 indicates the code for the first reason the participant went to see the dentist. Dental symptoms were coded using a coding system developed by the HIE. Reason/symptom for visit codes are listed in Section IV of "Codes Used."

VARIABLE DE15505 FFS FILE 12

2nd reason/symptom for visit

CODES

blank - Not applicable, missing

DE15505 indicates the code for an additional reason the participant went to see the dentist. Dental symptoms were coded using a coding system developed by the HIE. Reason/symptom for visit codes are listed in Section IV of "Codes Used."

VARIABLE DE15511 FFS FILE 12

Accident related

CODES

1 - Not applicable, missing

2 - Yes

3 - No

DE15511 states whether the reason for seeing the dentist was accident related.

DE15511	VALUE	FREQ	CUM FREQ	%	CUM %
1	302	630	630	0.53	0.53
2	118848	119478	119478	99.47	100.00

VARIABLE	DEI5512	FFS FILE 12
	Employment related	
	CODES	
	· - Not applicable, missing	
	1 - Yes	
	2 - No	
	DEI5512 states whether the reason for seeing the dentist was employment related.	

VARIABLE	DEI5566	FFS FILE 12
	Date of injury	
	CODES	
	· - Not applicable, missing	
	19010101 - Symptom present most of life	
	19550101 - 19811107 - Range of dates on file (YYYYMMDD)	
	DEI5566 indicates the date (if any) the participant was injured. The value 19010101 was used when the participant responded that the symptom had been present most or all of his/her life.	

DEI5512	VALUE	FREQ	CUM FREQ	%	CUM %
	1	299	30	0.03	0.03
	2	119451	119481	99.98	100.00

VARIABLE DE15625 FFS FILE 12

ADA procedure code

CODES

blank - Not applicable, missing

DE15625 indicates a four-digit American Dental Association procedure code for services provided by dentists. ADA codes used in this file are listed in Section VIII of "Codes Used."

VARIABLE DE15602

Units of service

CODES

. - Not applicable, missing

DE15602 indicates the number of instances of the procedure identified in DE15625, e.g., number of x-rays, number of teeth filled, etc.

DE15602

VALUE

FREQ

CUM
FREQ

%

CUM
%

1	116912	29	116912	97.63	97.63
2	1523	1523	118435	1.27	98.90
3	414	414	118849	0.35	99.25
4	427	427	119276	0.36	99.60
5	101	101	119377	0.08	99.69
6	196	196	119573	0.16	99.85
7	65	65	119638	0.05	99.91
8	41	41	119679	0.03	99.94
9	9	9	119688	0.01	99.95
10	27	27	119715	0.02	99.97
11	6	6	119721	0.01	99.98
12	5	5	119726	0.00	99.98
13	2	2	119728	0.00	99.98
14	17	17	119745	0.01	100.00
16	3	3	119748	0.00	100.00
18	1	1	119749	0.00	100.00
20	2	2	119751	0.00	100.00

<div> <div>VARIABLE</div> <div>DEI5558</div> <div>Line-item charge</div> <div>DEI5558 indicates the charge submitted to the HIE for the dental service listed in DEI5625, ADA Procedure Code.</div> </div>	FFS FILE 12		DEI5558
			NUMBER OF OBSERVATIONS
			NUMBER OF MISSING
			MEAN
			MEDIAN
			MINIMUM VALUE
			MAXIMUM VALUE
			STANDARD DEVIATION
			COEFFICIENT OF VARIATION
			SKEWNESS
			KURTOSIS
<div> <div>VARIABLE</div> <div>DEI5559</div> <div>Noncovered charges</div> <div>DEI5559 represents the amount of the charge in DEI5558 which was not covered by the insurance plan.</div> </div>	FFS FILE 12		DEI5559
			NUMBER OF OBSERVATIONS
			NUMBER OF MISSING
			MEAN
			MEDIAN
			MINIMUM VALUE
			MAXIMUM VALUE
			STANDARD DEVIATION
			COEFFICIENT OF VARIATION
			SKEWNESS
			KURTOSIS

119780
0
34.69
12.00
0.00
3000.00
84.80
244.45
10.29
182.87

45192
74588
19.08
6.25
0.00
3000.00
98.49
516.18
15.20
262.99

VARIABLE	DE15560	FFS FILE 12	DE15560	VALUE	FREQ	CUM FREQ	%	CUM %
Reason for noncoverage								
CODES:								
1 - Not applicable, missing			8		74588			
1 - Inpatient hospital accommodations in a private room			15		926			2.05
2 - Inpatient hospital comfort items			19		1			2.05
3 - Inpatient hospital custodial care			20		1			2.05
4 - Cosmetic surgery not resulting from an accidental injury			21		104			2.07
5 - Psychiatric outpatient services in excess of fifty-two consultations per year			22		342			2.30
6 - Outpatient psychiatric services			23		1382			3.06
7 - Outpatient personal care services			24		1383			3.06
8 - Orthodontia not resulting from accidental injury			25		1385			3.07
9 - Christian Science practitioner or sanatorium not listed in the Christian Science Journal			26		165			3.43
10 - Non-emergency transportation			27		21			3.48
11 - More than one eye or hearing examination during the accounting year			28		833			5.32
12 - More than one pair of eyeglass frames every two accounting years			29		3			5.33
13 - More than one set of eyeglass lenses during the accounting year			30		355			6.11
14 - More than one hearing aid during the accounting year			31		28806			63.74
15 - Exceeds limit on eyeglass frames or hearing aids			32		4			69.85
16 - Repairs to eyeglass frames and hearing aids			33		219			69.86
17 - Diagnostic, screening, preventative, or rehabilitation services not otherwise specified in the scope of coverage			34		21			70.35
18 - More than one piece of medical equipment, appliance or supply			35		31812			70.39
19 - Equipment, appliances or supplies costing more than \$25.00			36		8			70.41
20 - Not medically necessary			37		18			70.45
21 - Duplicate line item			38		31841			70.46
22 - Amount paid on another Explanation of Benefits			39		29			70.46
23 - Service prior to enrollment (SAME AS 64)			40		31870			70.52
24 - Procedure done twice			41		12			70.55
25 - Certificate of benefits stipulations on service not met			42		31882			70.55
26 - Prior authorization not approved			43		64			70.69
27 - Participant not eligible for dental care			44		5222			82.25
			45		2			82.25
			46		7			82.27
			47		235			82.79
			48		76			82.95
			49		58			83.08
			50		4			83.09
			51		37550			83.13
			52		16			83.13
			53		7474			99.66
			54		6			99.68
			55		14			99.71
			56		132			100.00

(cont.)

VARIABLE DE15560 (cont.)

- 28 - Blood credit
- 29 - Over-the-counter drugs
- 30 - Deductible not met
- 31 - Participant's co-insurance portion
- 32 - Services covered by workmen's compensation or employer's liability laws
- 33 - Pass through (covered by other insurance; payment from other company was "passed through" to provider or participant)
- 34 - Prepayment made
- 35 - Services covered by accident insurance policies
- 36 - Medicare paid
- 37 - Discount
- 38 - Not covered prepayment and deductible
- 39 - Not covered prepayment and coinsurance
- 40 - Discount and deductible not met
- 41 - Discount and coinsurance
- 42 - Paid by other insurance carrier
- 43 - Paid by agency other than insurance company
- 44 - Services obtained outside Group Health Cooperative
- 45 - Plan benefit is 5% of covered charges
- 46 - Services obtained at Group Health Cooperative
- 47 - Allowance on over-the-counter-drugs per illness per accounting year has been met
- 48 - Services paid for by Group Health Cooperative
- 53 - Part paid by Group Health Cooperative; plan benefit = 5% or balance
- 54 - Charge information unavailable--charge coded as one cent
- 55 - Discount plus plan benefit is 5%
- 56 - Medicaid paid
- 57 - Company physical provided as fringe benefit--charge coded as one cent, but true charge unknown
- 58 - Workmen's compensation - charge coded as one cent, but true charge unknown
- 59 - Services rendered after termination date
- 60 - Claim is duplicate
- 61 - Participant not eligible
- 62 - Suspended
- 63 - No service
- 64 - Before enrollment date (SAME AS 23)
- 65 - Claim filed after time limit
- 66 - No charge
- 67 - Underpayment

(cont.)

VARIABLE DE15560 (cont.)

68 - Overpayment, deducted on another claim
69 - Overpayment, returned
70 - Overpayment, deducted on this claim, overpaid
on another claim
71 - Billed in error--patient not seen
72 - Prepayment made (SAME AS 34)
73 - Duplicate payment recovered
74 - Duplicate payment not recovered
80 - Prepayment for future services - no Maximum
Dollar Expenditure involved
81 - Prepayment - part applied to the Maximum
Dollar Expenditure

DE15560 describes the reason a charge was not covered
under the participant's HIE plan. The above code
values were designed to cover all line-item charges;
not all values are appropriate in every file.

DE15561

NUMBER OF OBSERVATIONS 119779
NUMBER OF MISSING 1
MEAN 27.49
MEDIAN 10.00
MINIMUM VALUE 0.00
MAXIMUM VALUE 1800.00
STANDARD DEVIATION 60.08
COEFFICIENT OF VARIATION 218.53
SKEWNESS 4.45
KURTOSIS 34.95

VARIABLE DE15561 FFS FILE 12

Reimbursement

DE15561 indicates the reimbursement amount for the
line-item charge shown in DE15558.

VARIABLE	DEI5631	FFS FILE 12
Treatment for orthodontic purposes		
CODES		
: - Not applicable, missing		
1 - Yes		
2 - No		
DEI5631 states whether the treatment was for orthodontic purposes.		

DEI5631	VALUE	FREQ	CUM FREQ	%	CUM %
1	1	296	3009	2.52	2.52
2	2	116475	119484	97.48	100.00

VARIABLE	DEI5630	FFS FILE 12
Treatment category/status of visit		
CODES		
: - Not applicable, missing		
1 - Routine/well care		
2 - Initial for primary symptom		
3 - Repeat for primary symptom		
4 - Treatment given, not completed		
5 - Treatment given, completed		
6 - No treatment given, broken appointment		
7 - Urgent treatment given, not complete		
8 - Urgent treatment given, completed		
9 - Chronic; not specified as initial or repeat		
DEI5630 describes the type of patient visit and the general category of dental services rendered.		

DEI5630	VALUE	FREQ	CUM FREQ	%	CUM %
1	1	840	43612	36.67	36.67
2	2	43612	48190	3.85	40.52
3	3	4578	51133	2.47	42.99
4	4	2943	83558	27.26	70.25
5	5	32425	117592	28.61	98.87
6	6	34034	117605	0.01	98.88
7	7	13	118101	0.42	99.30
8	8	496	118101	0.71	100.00
		839	118940		

VARIABLE	DEI5620	FFS FILE 12
Tooth number		
CODES		
. - Missing or unobtainable		
00 - Non-tooth specific		
A-Z - Tooth identifiers - children (primary teeth)		
01-32 - Tooth identifiers - adults (permanent teeth)		
33 - Supernumerary (extra tooth)		
DEI5620 is a code that uniquely identifies each tooth.		

NOTE: See Appendix G, Dental MER, for location of tooth.

DEI5620	FREQ	CUM FREQ	%	CUM %
VALUE				
.	37			
A	447	447	0.37	0.37
B	346	793	0.29	0.66
C	171	964	0.14	0.81
D	72	1036	0.06	0.87
E	93	1129	0.08	0.94
F	82	1211	0.07	1.01
G	49	1260	0.04	1.05
H	174	1434	0.15	1.20
I	362	1796	0.30	1.50
J	478	2274	0.40	1.90
K	471	2745	0.39	2.29
L	394	3139	0.33	2.62
M	146	3285	0.12	2.74
O	18	3346	0.02	2.79
P	27	3373	0.02	2.82
Q	37	3410	0.03	2.85
R	138	3548	0.12	2.96
S	358	3906	0.30	3.26
T	494	4400	0.41	3.68
00	68560	72960	57.26	60.93
01	776	73736	0.65	61.58
02	2047	75783	1.71	63.29
03	2773	78556	2.32	65.60
04	1698	80254	1.42	67.02
05	1618	81872	1.35	68.37
06	1129	83001	0.94	69.32
07	1430	84431	1.19	70.51
08	1535	85966	1.28	71.79
09	1598	87564	1.34	73.13
10	1506	89070	1.26	74.38
11	1090	90160	0.91	75.30
12	1549	91709	1.29	76.59
13	1698	93407	1.42	78.01
14	2899	96306	2.42	80.43
15	2025	98331	1.69	82.12
16	796	99127	0.67	82.78
17	918	100045	0.77	83.55
18	2269	102314	1.90	85.45
19	3027	105341	2.53	87.97
20	1699	107040	1.42	89.39
21	1066	108106	0.89	90.28
22	487	108593	0.41	90.69
23	374	108967	0.31	91.00

(cont.)

VARIABLE DE15620 (cont..)

VALUE	FREQ	CUM FREQ	%	CUM %
24	367	109334	0.31	91.31
25	363	109697	0.30	91.61
26	395	110092	0.33	91.94
27	543	110635	0.45	92.39
28	1157	111792	0.97	93.36
29	1720	113512	1.44	94.80
30	3080	116592	2.57	97.37
31	2249	118841	1.88	99.25
32	881	119722	0.74	99.98
33	21	119743	0.02	100.00

DE15621

VARIABLE	DE15621	FFS FILE 12
1st Surface letter		
CODES		
blank - Missing or unobtainable		
B - Buccal		
C - Full crown		
D - Distal		
F - Frontal buccal		
I - Incisal		
L - Labial		
M - Mesial		
N - Lingual		
O - Occlusal		
T - 3/4 crown		
P - Non-specific		
DE15621 is an alphanumeric code which indicates the surface treated in the tooth described in DE15620.		

VALUE	FREQ	CUM FREQ	%	CUM %
.	346			
C	6564	6564	5.50	5.50
D	3920	10484	3.28	8.78
F	4687	15171	3.92	12.70
I	531	15702	0.45	13.15
L	4688	20390	3.93	17.07
M	1662	22052	1.39	18.46
O	12594	34646	10.55	29.01
P	84664	119310	70.89	99.90
T	124	119434	0.10	100.00

DE15622	VALUE	FREQ	CUM FREQ	%	CUM %
.	C	104297	2	0.01	0.01
.	D	5167	5169	33.37	33.39
.	F	520	5689	3.36	36.74
.	I	131	5820	0.85	37.59
.	L	487	6307	3.15	40.74
.	M	3412	9719	22.04	62.77
.	O	5763	15482	37.22	99.99
.	P	1	15483	0.01	100.00

VARIABLE DE15622 FFS FILE 12

2nd Surface letter

CODES

blank - Missing or unobtainable

B - Buccal

C - Full crown

D - Distal

F - Frontal buccal

I - Incisal

L - Labial

M - Mesial

N - Lingual

O - Occlusal

T - 3/4 crown

P - Non-specific

DE15622 is an alphanumeric code for a second surface that was treated in the tooth described in DE15620.

DEI5623	VALUE	FREQ	CUM FREQ	%	CUM %
:		114707			
D		718	718	14.15	14.15
F		111	829	2.19	16.34
I		55	884	1.08	17.43
L		40	924	0.79	18.21
M		3051	3975	60.14	78.36
O		1098	5073	21.64	100.00

VARIABLE	DEI5623	FFS	FILE	12
3rd Surface letter				
CODES				
blank - Missing or unobtainable				
B - Buccal				
C - Full crown				
D - Distal				
F - Frontal buccal				
I - Incisal				
L - Labial				
M - Mesial				
N - Lingual				
O - Occlusal				
T - 3/4 crown				
P - Non-specific				
DEI5623 is an alphanumeric code of a third surface that was treated in the tooth described in DEI5620.				

VARIABLE	DEI5624	FFS FILE 12
	4th Surface letter	
	CODES	
	blank - Missing or unobtainable	
	B - Buccal	
	C - Full crown	
	D - Distal	
	F - Frontal buccal	
	I - Incisal	
	L - Labial	
	M - Mesial	
	N - Lingual	
	O - Occlusal	
	T - 3/4 crown	
	P - Non-specific	
	DEI5624 is an alphanumeric code for the fourth surface that was treated in the tooth described in DEI5620.	

VARIABLE	DEI5626	FFS FILE 12
	Prosthesis or crown	
	CODES	
	- Missing or unobtainable	
	1 - Yes	
	2 - No	
	DEI5626 indicates whether the treated tooth was a replacement tooth or a crown.	

DEI5624	VALUE	FREQ	CUM FREQ	%	CUM %
	.	118701	.	.	.
	D	75	75	6.95	6.95
	F	15	90	1.39	8.34
	L	15	105	1.39	9.73
	M	964	1069	89.34	99.07
	O	10	1079	0.93	100.00

DEI5626	VALUE	FREQ	CUM FREQ	%	CUM %
	.	29	.	.	.
	1	9182	9182	7.67	7.67
	2	110569	119751	92.33	100.00

DEI5627	VALUE	FREQ	CUM FREQ	%	CUM %
	1	110793	7994	88.95	88.95
	2	993	8987	11.05	100.00

VARIABLE	DEI5627	FFS FILE 12
	Initial placement	
	CODES	
	1 - Missing or unobtainable	
	2 - Yes	
	2 - No	
	DEI5627 indicates whether the crown or replacement tooth was the initial placement.	

VARIABLE	DEI5628	FFS FILE 12
	Date of prior placement	
	CODES	
	19740100 to 19820800 - Not applicable, missing	
	19820800 - Date range on file (YYYYMMDD)	
	If the treated tooth is a prosthesis or crown, DEI5628 indicates the date of prior placement.	

NOTE: The date reflects the year and month of the prior placement. (Day value = 00).

VARIABLE	DEI5632	FFS FILE 12
Drugs prescribed		
CODES		
1 - Not applicable, missing		
2 - No		
DEI5632 indicates whether the dentist prescribed medication.		

DEI5632	VALUE	FREQ	CUM FREQ	%	CUM %
1	1427	1427	6646	5.62	5.62
2	6646	6646	118353	94.39	100.00

VARIABLE	DEI5629	FFS FILE 12
Prior authorization		
CODES		
1 - Not required		
2 - Required and approved		
3 - Required, submitted for determination, not approved		
4 - Required, not submitted in advance, performed but not approved		
DEI5629 describes whether prior authorization of the claim was required and if it was required, whether the request for authorization was approved or disapproved.		

DEI5629	VALUE	FREQ	CUM FREQ	%	CUM %
1	10249	10249	10249	85.53	85.53
2	17255	17255	119704	14.41	99.94
3	58	58	119762	0.05	99.99
4	18	18	119780	0.02	100.00

XIII. DRUGS PRESCRIBED BY DENTISTS FFS FILE 13

INTRODUCTION

This codebook documents primary variables concerning drugs prescribed or suggested by dentists or other dental providers according to the MER submitted by the provider. These records indicate only that certain drugs were prescribed or suggested, but *do not* indicate if the prescription was filled. Thus, no charges for drugs are listed in this file; prescriptions are considered part of the dentist's service charge for the visit, and these charges are found in File 12, Services Rendered by Dentists. For reports of drugs purchased, see File 15, Drugs Purchased.

This file includes records concerning HMO participants. No dental services were available at GHC; however, GHC experimental group participants were provided with dental coverage by the HIE, and GHC control group participants were reimbursed 5 percent of their claimed dental charges by the HIE.

Specific information provided in this file includes the prescribed or suggested drug, the prescriber identifier, and variables which indicate the generic and therapeutic codes for each drug. Other variables indicate the reasons/symptoms for the visit to the dentist, the treatment category of the visit, and whether the visit was for orthodontic purposes. Also included are variables indicating whether the medication was a prescription or over-the-counter drug, and whether the visit was accident- or employment-related. If the visit was accident-related, another variable indicates the date of injury.

The units of observation in this file are line items representing drug prescriptions or suggestions.¹ For an explanation of common variables used in this codebook, see the final subsection of Sec. II. Below we provide explanations for specific variables in this file.

¹Analysts should note that the statistical frequency of a variable in this file represents the number of times it occurs in relation to the unit of observation, *not* the number of claims on which it appears.

NDC CODE

DEI5589 indicates the first seven digits of the National Drug Code (NDC) identifier of the prescribed drug. (The last two digits of the national nine-digit code number represent trade package size and were not used by the HIE.) Codes were taken from the *National Drug Code Directory*, June 1972, whenever possible.² A number of supplementary codes were added by the HIE to identify drugs not listed in the 1972 NDC Directory. NDC and supplementary codes used in the claims files are defined in Sec. V of *Codes Used*.

GENERIC CODES

DEI5590 - DEI5594 indicate codes that identify up to five generic components of the prescribed drug. This generic coding system was developed by the HIE; code definitions are found in Sec. VI of *Codes Used*.

DRUG THERAPEUTIC CODE

DEI5595 indicates a code identifying the therapeutic use category of the drug. Codes were taken from the American Medical Association's *AMA Drug Evaluations, 1973*,³ by assigning a code number that represents the chapter number of the drug's therapeutic category. Therapeutic codes are defined in Sec. VII of *Codes Used*.

²Public Health Service, U.S. Dept. of Health and Human Services, Washington, D.C. 20204, June 1972.

³Second edition, Publishing Sciences Group, Inc., Acton, MA.

CODEBOOK FOR FFS FILE 13
DRUGS PRESCRIBED BY DENTISTS

DIRECTORY OF VARIABLES - FFS FILE 13

DRUGS PRESCRIBED BY DENTISTS

VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK	VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK
FILENAME	Name of file	349	DEI5566	Date of injury	354
PERSON	Person identifier	349	DEI5630	Treatment category/status of visit	355
SITE	Site	349	DEI5631	Treatment for orthodontic purposes	355
INSTAT	Insurance status	350	DEI5666	Prescription status	356
CONTR	Contract year	350	DEI5589	NDC codes	356
DEI5553	Claim number	351	DEI5590	1st generic code	357
DEI5502	Provider number	351	DEI5591	2nd generic code	357
DEI5584	Place of service	352	DEI5592	3rd generic code	358
DEI5503	1st reason/symptom for visit	352	DEI5593	4th generic code	358
DEI5505	2nd reason/symptom for visit	353	DEI5594	5th generic code	359
DEI5511	Accident related	353	DEI5595	Drug therapeutic code	359
DEI5512	Employment related	354			

FILENAME			
FILENAME	VALUE	FREQ	CUM FREQ
PE13AA	2089	2089	100.00
			100.00

SITE			
SITE	VALUE	FREQ	CUM FREQ
1	290	290	13.88
2	798	1088	38.20
3	162	1250	52.08
4	228	1478	59.84
5	212	1690	70.75
6	399	2089	80.90
			100.00

VARIABLE	FILENAME	FFS FILE 13
Name of file		
FILENAME is a 6-digit code that uniquely identifies the file. This file name is PE13AA.		

VARIABLE	PERSON	FFS FILE 13
Person identifier		
PERSON is an 8-character alphanumeric code that uniquely identifies the participant in the HIE to whom the following data refer. The 2nd character of PERSON designates in which site a participant resided during enrollment in the HIE: A=Dayton; B=Seattle; E=Fitchburg; F=Franklin County; G=Charleston; H=Georgetown County.		

VARIABLE	SITE	FFS FILE 13
Site		
CODES		
1 - Dayton, Ohio		
2 - Seattle, Washington		
3 - Fitchburg, Massachusetts		
4 - Franklin County, Massachusetts		
5 - Charleston, South Carolina		
6 - Georgetown County, South Carolina		
SITE identifies the participant's place of residence when enrolled.		

VARIABLE	INSTAT	FFS FILE 13
Insurance status		
CODES		
1 - Ever insured (includes HMO experimental group)		
2 - Ever assigned to HMO control group		
3 - Never insured		
INSTAT describes the participant's insurance status in the Health Insurance Experiment.		

INSTAT	FREQ	CUM FREQ	%	CUM %
1	2012	2012	96.31	96.31
2	77	2089	3.69	100.00

VARIABLE	CONTR	FFS FILE 13
Contract year		
CODES		
P1 - First year (South Carolina 3 year enrollees)		
P2 - Second year (South Carolina 3 year enrollees)		
P3 - Third year (South Carolina 3 year enrollees)		
01 - First year		
02 - Second year		
03 - Third year		
04 - Fourth year		
05 - Fifth year		
CONTR identifies the participant's contract year of coverage for which the claim was filed under the HIE. A three-year South Carolina enrollment group also served as an uninsured control group for two years prior to the beginning of its contract period; P1 - P3 identify the medical insurance contract periods for this group. Thus, P1 indicates the first contract year for this group, but is the third contract year of the study.		

CONTR	FREQ	CUM FREQ	%	CUM %
P1	188	188	9.00	9.00
P2	141	329	6.75	15.75
P3	122	451	5.84	21.59
01	540	991	25.85	47.44
02	400	1391	19.15	66.59
03	363	1754	17.38	83.96
04	149	1903	7.13	91.10
05	186	2089	8.90	100.00

VARIABLE	DEI5553	FFS FILE 13
	Claim number	
	DEI5553 indicates the claim identifier which is used to link the line items from a given MER.	

VARIABLE	DEI5502	FFS FILE 13
	Provider number	
	DEI5502 is an 8-character code which refers, in this file, to the dentist who prescribed drugs for the participant. For further information on the provider, this number can be linked to information in the provider file.	

DEI5584	VALUE	FREQ	CUM FREQ	%	CUM %
	1	2013	2013	96.36	96.36
	2	13	2026	0.62	96.98
	4	45	2071	2.15	99.14
	6	1	2072	0.05	99.19
	7	16	2088	0.77	99.95
	8	1	2089	0.05	100.00

VARIABLE DEI5584 FFS FILE 13

Place of service

CODES

1 - Doctor's office
 2 - Independent laboratory
 3 - Patient's home
 4 - Hospital
 5 - Nursing home
 6 - Emergency room
 7 - Outpatient surgery
 8 - Other outpatient hospital, including hospital clinic
 9 - Other locations, including non-hospital clinics

DEI5584 indicates where the dentist rendered the prescription.

VARIABLE DEI5503 FFS FILE 13

1st reason/symptom for visit

CODES

blank - Not applicable, missing

DEI5503 indicates the code for the first reason the participant went to see the dentist. Dental symptoms were coded using a coding system developed by the HIE. Reason/symptom for visit codes are listed in Section IV of "Codes Used."

VARIABLE

DE15505

FFS FILE 13

2nd reason/symptom for visit

CODES

blank - Not applicable, missing

DE15505 indicates the code for an additional reason the participant went to see the dentist. Dental symptoms were coded using a coding system developed by the HIE. Reason/symptom for visit codes are listed in Section IV of "Codes Used."

VARIABLE

DE15511

FFS FILE 13

Accident related

CODES

- Not applicable, missing

1 - Yes

2 - No

DE15511 states whether the reason for seeing the dentist was accident-related.

DE15511	VALUE	FREQ	CUM FREQ	%	CUM %
	1	3	25	1.20	1.20
	2	2061	2086	98.80	100.00

DEI5512	VALUE	FREQ	CUM FREQ	%	CUM %
	2	2086	2086	100.00	100.00

VARIABLE	DEI5512	FFS FILE 13
	Employment related	
	CODES	
	1 - Not applicable, missing	
	2 - Yes	
	DEI5512 states whether the reason for seeing the dentist was employment related.	

VARIABLE	DEI5566	FFS FILE 13
	Date of injury	
	CODES	
	19010101 - Not applicable, missing	
	19751009 to 19810515 - Symptom present most of life	
	DEI5566 indicates the date (if any) the participant was injured.	

VARIABLE	DEI5630	FFS FILE 13
	Treatment category/status of visit	
	CODES	
	1 - Not applicable, missing 2 - Routine/well care 3 - Repeat for primary symptom 4 - Treatment given, not completed 5 - Treatment given, completed 6 - No treatment given, broken appointment 7 - Urgent treatment given, not complete 8 - Urgent treatment given, completed 9 - Chronic; not specified as initial or repeat	
	DEI5630 describes the type of patient visit and the general category of dental services rendered.	

DEI5630	VALUE	FREQ	CUM FREQ	%	CUM %
1	9	148	148	7.12	7.12
2	165	313	313	7.93	15.05
3	51	364	364	2.45	17.50
4	815	1179	1179	39.18	56.68
5	764	1943	1943	36.73	93.41
7	74	2017	2017	3.56	96.97
8	63	2080	2080	3.03	100.00

VARIABLE	DEI5631	FFS FILE 13
	Treatment for orthodontic purposes	
	CODES	
	1 - Not applicable, missing 1 - Yes 2 - No	
	DEI5631 states whether the treatment was for orthodontic purposes.	

DEI5631	VALUE	FREQ	CUM FREQ	%	CUM %
1	4	29	29	1.39	1.39
2	2056	2085	2085	98.61	100.00

DEI5666	VALUE	FREQ	CUM FREQ	%	CUM %
	1	5	5	95.83	95.83
	2	1997	1997	3.07	98.90
	3	64	2061	0.05	98.94
	4	1	2062	1.06	100.00
		22	2084		

VARIABLE	DEI5666	FFS FILE 13
	Prescription status	
	CODES	
	1 - Not applicable, missing	
	2 - Prescription (legend)	
	3 - Over the counter (non-legend)	
	4 - Either (varies by state)	
	4 - Unknown	
	DEI5666 states whether the drug listed in DEI5589 was prescription or could be sold over the counter, whether it required a prescription in some states but not in others, or whether information on the status of the drug was unobtainable.	

VARIABLE	DEI5589	FFS FILE 13
	NDC code	
	CODES	
	Blank - Not applicable, missing	
	DEI5589 indicates the first seven digits of the National Drug Code for the drug prescribed or suggested by the dentist. A number of codes were added by the HIE to identify drugs not listed in the 1972 NDC Directory. All NDC and supplementary codes used in the claims line-item files can be found in Section V of "Codes Used."	

VARIABLE	DEI5590	FFS FILE 13
	1st generic code	
	CODES	
	. - Not applicable, missing	
	DEI5590 identifies a generic component of the drug specified by NDC code in DEI5589. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE	DEI5591	FFS FILE 13
	2nd generic code	
	CODES	
	. - Not applicable, missing	
	DEI5591 identifies a generic component of the drug specified by NDC code in DEI5589. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE	DE15592	FFS FILE 13
	3rd generic code	
	CODES	
	. - Not applicable, missing	
	DE15592 identifies a generic component of the drug specified by NDC code in DE15589. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE	DE15593	FFS FILE 13
	4th generic code	
	CODES	
	. - Not applicable, missing	
	DE15593 identifies a generic component of the drug specified by NDC code in DE15589. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE	DEI5594	FFS FILE 13
	5th generic code	
	CODES	
	. - Not applicable, missing	
	DEI5594 identifies a generic component of the drug specified by NDC code in DEI5589. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

DEI5595	VALUE
14	1267
17	2
18	1
20	4
21	38
22	33
26	395
27	10
28	37
30	2
35	1
44	14
45	4
46	1
48	1
49	210
50	16
53	26
67	16
68	1
79	1
91	1
92	7

FREQ	CUM FREQ	%	CUM %
1267	2	0.24	0.24
2	3	0.12	0.37
1	7	0.49	0.85
4	45	4.62	5.47
38	78	4.02	9.49
33	473	48.05	57.54
395	483	1.22	58.76
10	520	4.50	63.26
37	522	0.24	63.50
2	523	0.12	63.63
1	537	1.70	65.33
14	541	0.49	65.82
4	542	0.12	65.94
1	543	0.12	66.06
1	753	25.55	91.61
210	769	1.95	93.55
16	795	3.16	96.72
26	811	1.95	98.66
16	812	0.12	98.78
1	813	0.12	98.91
1	814	0.12	99.03
1	815	0.12	99.15
7	822	0.85	100.00

VARIABLE	DEI5595	FFS FILE 13
	Drug therapeutic code	
	CODES	
	. - Not applicable, missing	
	DEI5595 indicates the code for a therapeutic use of the drug specified in DEI5589. Codes were taken from the AMA Drug Evaluations, 1973, by assigning a code number which corresponds with the chapter number in which the drug's therapeutic use is described. Therapeutic codes used in this file are listed and defined in Section VII of "Codes Used."	

XIV. DRUGS PURCHASED FFS FILE 15

INTRODUCTION

This codebook documents primary variables concerning drugs purchased by HIE participants from nonphysician drug providers, i.e., pharmacies and other drug suppliers. HIE insurance plans covered all prescription-only drugs and, for certain conditions, some over-the-counter drugs.¹

Drugs purchased directly from a physician (or other independent provider of medical services) are shown in File 08. Charges for drugs sold as part of care rendered by an institution can be found under the categories "pharmacy" and "take-home drugs" in the variable Category of Service (DEI5557) in File 01 (inpatient) and File 11 (outpatient).²

Specific information provided in this file includes each drug purchased and its generic code(s) and therapeutic use code(s). Other variables indicate the quantity, form, strength, and dosage instructions for the drug purchased, the number of refills authorized, the date of the prescription and date it was filled, and whether the prescription was placed over the telephone. Also included are variables identifying the drug provider, the prescriber, the charge for each drug, and the amount of the charge that was covered by the HIE.

The units of observation in this file are line items for purchased drugs.³ For an explanation of common variables used in this codebook, see the final subsection of Sec. II. Below we provide explanations for specific variables in this file.

¹For a listing of nonprescription drugs covered by the HIE for certain conditions, see Appendix D.

²However, such drugs could not be specifically identified, and no quantities could be provided.

³Analysts should note that the statistical frequency of a variable in this file represents the number of times it occurs in relation to the unit of observation, *not* the number of claims on which it appears.

LINKING PRESCRIPTION VARIABLES

We repeat this information for any users who did not encounter it in the introduction to File 08; also note that prescription element information in this file was filled in by the provider of the drug rather than the physician.

Prescriptions contain a variety of specific data. To reconstruct a prescription, the user must consider several variables, as described below:

- The numerical amount of the drug indicated in DEI5589 (NDC Code) is found in the variable DEI5588, Amount Sold (e.g., 30).
- The variable DEI5667, Dosage Instructions-Quantity, indicates the prescribed or suggested numerical quantity of each dosage (e.g., one).
- Both of these variables must be linked with DEI5668, Dosage Instructions-Form, to know in what form the quantity given is measured (e.g., tablet, ounce).
- The prescribed or suggested frequency for administering the drug (e.g., twice daily) is given in DEI5669, and these instructions are modified if necessary in DEI5670.
- The numerical dosage strength (e.g., 250) of the drug is given in DEI5586, and this number must be linked to its appropriate unit of measure (e.g., milligrams), given in DEI5587, Dosage Strength Unit.

NDC CODE

DEI5589 indicates the first seven digits of the National Drug Code identifier of the prescribed drug. (The last two digits of the national nine-digit code number represent trade package size and were not used by the HIE.) Codes were taken from the *National Drug Code Directory*, June 1972, whenever possible.⁴ A number of supplementary codes were added by the HIE to identify drugs not listed in the 1972 NDC Directory. NDC and

⁴Public Health Service, U.S. Dept. of Health and Human Services, Washington, D.C. 20204, June 1972.

supplementary codes used in the claims files are defined in Sec. V of *Codes Used*.

GENERIC CODES

DEI5590 - DEI5594 indicate codes that identify up to five generic components of the prescribed drug (DEI5589). This generic coding system was developed by the HIE; code definitions are found in Sec. VI of *Codes Used*.

DRUG THERAPEUTIC CODES

DEI5595, DEI5658, DEI5659, DEI5660, and DEI5661 indicate up to five therapeutic purposes for the prescribed drug (DEI5589). Codes were taken from the American Medical Association's *AMA Drug Evaluations*, 1973,⁵ by assigning a code number that represents the chapter number of the drug's therapeutic category. Therapeutic codes are defined in Sec. VII of *Codes Used*.

⁵Second edition, Publishing Sciences Group, Inc., Acton, MA.

CODEBOOK FOR FFS FILE 15

DRUGS PURCHASED

DIRECTORY OF VARIABLES - FFS FILE 15

DRUGS PURCHASED

VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK	VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK
FILENAME	Name of file	367	DE15592	3rd generic code	377
PERSON	Person identifier	367	DE15593	4th generic code	378
SITE	Site	367	DE15594	5th generic code	378
INSTAT	Insurance status	368	DE15595	First therapeutic code	379
CONTR	Contract year	368	DE15658	Second therapeutic code	381
DE15553	Claim number	369	DE15659	Third therapeutic code	382
DE15502	Provider number	369	DE15660	Fourth therapeutic code	384
DE15603	Date dispensed	369	DE15661	Fifth therapeutic code	385
DE15604	Prescriber/suggester identifier	370	DE15588	Amount sold	385
DE15650	Date of prescription	370	DE15667	Dosage instructions -- quantity	386
DE15653	Telephone prescriptions	371	DE15668	Dosage instructions -- form	387
DE15558	Line-item charge	371	DE15669	Dosage instructions -- frequency	388
DE15559	Noncovered charges	371	DE15670	Dosage instructions -- flexibility	389
DE15560	Reason for noncoverage	372	DE15586	Dosage strength	389
DE15561	Reimbursement	374	DE15587	Dosage strength unit	390
DE15566	Prescription status of drug	375	DE15652	Number of refills authorized	390
DE15589	NDC code	375			
DE15649	Generic/brand indicator	376			
DE15590	1st generic code	376			
DE15591	2nd generic code	377			

FILENAME				
VALUE	FREQ	CUM FREQ	%	CUM %
PE15AA	85691	85691	100.00	100.00

SITE				
VALUE	FREQ	CUM FREQ	%	CUM %
1	23339	23339	27.24	27.24
2	17449	40788	20.36	47.60
3	9671	50459	11.29	58.89
4	10507	60966	12.26	71.15
5	8342	69308	9.74	80.88
6	16383	85691	19.12	100.00

VARIABLE	FILENAME	FFS FILE 15
Name of file		
FILENAME	is a 6-digit code that uniquely identifies the file. This file name is PE15AA.	

VARIABLE	PERSON	FFS FILE 15
Person identifier		
PERSON	is an 8-character alphanumeric code that uniquely identifies the participant in the HIE to whom the following data refer. The 2nd character of PERSON designates in which site a participant resided during enrollment in the HIE: A=Dayton; B=Seattle; E=Fitchburg; F=Franklin County; G=Charleston; H=Georgetown County.	

VARIABLE	SITE	FFS FILE 15
Site		
CODES		
	1 - Dayton, Ohio	
	2 - Seattle, Washington	
	3 - Fitchburg, Massachusetts	
	4 - Franklin County, Massachusetts	
	5 - Charleston, South Carolina	
	6 - Georgetown County, South Carolina	
SITE	identifies the participant's place of residence when enrolled.	

VARIABLE	INSTAT	FFS FILE 15
Insurance status		
CODES		
1 - Ever insured (includes HMO experimental group)		
2 - Ever assigned to HMO control group		
3 - Never insured		
INSTAT describes the participant's insurance status in the Health Insurance Experiment.		

INSTAT	VALUE	FREQ	CUM FREQ	%	CUM %
1	85527	85527	85527	99.81	99.81
2	164	164	85691	0.19	100.00

VARIABLE	CONTRY	FFS FILE 15
Contract year		
CODES		
P1 - First year (South Carolina 3 year enrollees)		
P2 - Second year (South Carolina 3 year enrollees)		
P3 - Third year (South Carolina 3 year enrollees)		
01 - First year		
02 - Second year		
03 - Third year		
04 - Fourth year		
05 - Fifth year		
CONTRY identifies the participant's contract year of coverage for which the claim was filed under the HIE. A three-year South Carolina enrollment group also served as an uninsured control group for two years prior to the beginning of its contract period; P1 - P3 identify the medical insurance contract periods for this group. Thus, P1 indicates the first contract year for this group, but is the third contract year of the study.		

CONTRY	VALUE	FREQ	CUM FREQ	%	CUM %
P1	4663	4663	4663	5.44	5.44
P2	4988	4988	9651	5.82	11.26
P3	5255	5255	14906	6.13	17.40
01	19533	19533	34439	22.80	40.19
02	18461	18461	52900	21.54	61.73
03	17616	17616	70516	20.56	82.29
04	7442	7442	77958	8.69	90.98
05	7733	7733	85691	9.02	100.00

VARIABLE	DEI5553	FFS FILE 15
	Claim number	
	DEI5553 indicates a claim identifier which is used to link the line items from a given MER.	

VARIABLE	DEI5502	FFS FILE 15
	Provider number	
	DEI5502 is an 8-character code which refers, in this file, to the pharmacy or other nonphysician provider from whom the participant purchased prescription or over-the-counter drugs.	

VARIABLE	DEI5603	FFS FILE 15
	Date dispensed	
	CODES	
	19741102 to 19820130 - Date range on file (YYYYMMDD)	
	DEI5603 indicates the date the drug prescription was filled.	

VARIABLE	DE15604	FFS FILE 15
	Prescriber/suggester identifier	
	DE15604 indicates the identifier number of the provider who prescribed or suggested the drug.	

VARIABLE	DE15650	FFS FILE 15
	Date of prescription	
	CODES	
	19151020 to 19820130 - Not applicable, missing	
	DE15650 indicates the date the drug prescription was issued. This date is not necessarily the same as the date the drug was sold (see DE15603).	

VARIABLE	DEI5653	FFS FILE 15
	Telephone prescription	
	CODES	
	1 - Not applicable, missing	
	2 - Yes	
	2 - No	
	DEI5653 states whether the prescription was initially phoned in by the provider who prescribed the drug. A hard copy of the prescription may or may not have been written.	

VARIABLE	DEI5558	FFS FILE 15
	Line-item charge	
	DEI5558 indicates the charge submitted to the HIE for the drug listed in DEI5589, NDC Code.	

VARIABLE	DEI5559	FFS FILE 15
	Noncovered charges	
	CODES	
	1 - Not applicable, missing	
	DEI5559 indicates the amount of charged services in DEI5558 not covered by the insurance plan.	

DEI5653	VALUE	FREQ	CUM FREQ	%	CUM %
1	545	22776	22776	26.75	26.75
2	62370	85146	85146	73.25	100.00

DEI5558	NUMBER OF OBSERVATIONS	85691
	NUMBER OF MISSING	0
	MEAN	7.18
	MEDIAN	5.75
	MINIMUM VALUE	0.00
	MAXIMUM VALUE	630.00
	STANDARD DEVIATION	6.19
	COEFFICIENT OF VARIATION	86.28
	SKEWNESS	18.01
	KURTOSIS	1331.94

DEI5559	NUMBER OF OBSERVATIONS	33749
	NUMBER OF MISSING	51942
	MEAN	4.08
	MEDIAN	3.00
	MINIMUM VALUE	0.00
	MAXIMUM VALUE	157.50
	STANDARD DEVIATION	3.80
	COEFFICIENT OF VARIATION	93.12
	SKEWNESS	5.00
	KURTOSIS	103.16

VARIABLE	DEI5560	FFS FILE 15	DEI5560 VALUE	FREQ	CUM FREQ	%	CUM %
Reason for noncoverage							
CODES							
1 - Not applicable, missing			10	51942	1	0.00	0.00
2 - Inpatient hospital accommodations in a private room			11	1	1	0.00	0.01
3 - Inpatient hospital comfort items			20	13	15	0.04	0.04
4 - Inpatient hospital custodial care			21	48	63	0.14	0.19
5 - Cosmetic surgery not resulting from an accidental injury			22	212	275	0.63	0.82
6 - Psychiatric outpatient services in excess of fifty-two consultations per year			24	1	276	0.00	0.82
7 - Outpatient psychiatric services			25	51	327	0.15	0.97
8 - Outpatient personal care services			27	1	328	0.00	0.97
9 - Orthodontia not resulting from accidental injury listed in the Christian Science Journal			29	3112	3440	9.22	10.19
10 - Non-emergency transportation			30	1288	4728	3.82	14.01
11 - More than one eye or hearing examination during the accounting year			31	27919	32647	82.73	96.74
12 - More than one pair of eyeglass frames every two accounting years			32	107	32754	0.32	97.05
13 - More than one set of eyeglass lenses during the accounting year			35	7	32761	0.02	97.07
14 - Exceeds limit on eyeglass frames or hearing aids			37	21	32782	0.06	97.14
15 - Repairs to eyeglass frames and hearing aids			40	4	32786	0.01	97.15
16 - Diagnostic, screening, preventative, or rehabilitation services not otherwise specified in the scope of coverage			41	24	32810	0.07	97.22
17 - More than one piece of medical equipment, appliance or supply			42	29	32839	0.09	97.30
18 - Equipment, appliances or supplies costing more than \$25.00			43	2	32841	0.01	97.31
19 - Not medically necessary			44	251	33092	0.74	98.05
20 - Duplicate line item			45	150	33242	0.44	98.50
21 - Amount paid on another Explanation of Benefits			46	1	33243	0.00	98.50
22 - Service prior to enrollment (SAME AS 64)			47	12	33255	0.04	98.54
23 - Procedure done twice			48	3	33258	0.01	98.55
24 - Certificate of benefits stipulations on service not met			54	1	33259	0.00	98.55
25 - Prior authorization not approved			56	248	33507	0.74	99.28
26 - Participant not eligible for dental care			58	3	33510	0.01	99.29
27 - Blood credit			59	7	33517	0.02	99.31
			60	23	33540	0.07	99.38
			61	1	33541	0.00	99.38
			66	12	33553	0.04	99.42
			71	7	33560	0.02	99.44
			74	188	33748	0.56	100.00
			81	1	33749	0.00	100.00

(cont.)

VARIABLE DE15560 (cont.)

29 - Over-the-counter drugs
30 - Deductible not met
31 - Participant's co-insurance portion
32 - Services covered by workmen's compensation or employer's liability laws
33 - Pass through (covered by other insurance; payment from other company was "passed through")
34 - Prepayment made
35 - Services covered by accident insurance policies
36 - Medicare paid
37 - Discount
38 - Not covered prepayment and deductible
39 - Not covered prepayment and coinsurance
40 - Discount and deductible not met
41 - Discount and coinsurance
42 - Paid by other insurance carrier
43 - Paid by agency other than insurance company
44 - Services obtained outside Group Health Cooperative
45 - Plan benefit is 5% of covered charges
46 - Services obtained at Group Health Cooperative
47 - Allowance on over-the-counter-drugs per illness per accounting year has been met
48 - Services paid for by Group Health Cooperative
53 - Part paid by Group Health Cooperative; plan benefit = 5% or balance
54 - Charge information unavailable--charge coded as one cent
55 - Discount plus plan benefit is 5%
56 - Medicaid paid
57 - Company physical provided as fringe benefit--charge coded as one cent, but true charge unknown
58 - Workmen's compensation - charge coded as one cent, but true charge unknown
59 - Services rendered after termination date
60 - Claim is duplicate
61 - Participant not eligible
62 - Suspended
63 - No service
64 - Before enrollment date (SAME AS 23)
65 - Claim filed after time limit
66 - No charge
67 - Underpayment
68 - Overpayment, deducted on another claim
69 - Overpayment, returned

(cont.)

VARIABLE DE15560 (cont.)

70	- Overpayment, deducted on this claim, overpaid on another claim
71	- Billed in error--patient not seen
72	- Prepayment made (SAME AS 34)
73	- Duplicate payment recovered
74	- Duplicate payment not recovered
80	- Prepayment for future services - no Maximum Dollar Expenditure involved
81	- Prepayment - part applied to the Maximum Dollar Expenditure
DE15560 describes the reason a charge was not covered under the participant's HIE plan. The above code values were designed to cover all line-item charges; not all values are appropriate in every file.	

VARIABLE	DE15561	FFS FILE 15
Reimbursement		
DE15561 indicates the reimbursement amount for the line-item charge shown in DE15558.		

DE15561

NUMBER OF OBSERVATIONS	85691
NUMBER OF MISSING	0
MEAN	5.57
MEDIAN	4.50
MINIMUM VALUE	0.00
MAXIMUM VALUE	472.50
STANDARD DEVIATION	6.19
COEFFICIENT OF VARIATION	111.19
SKEWNESS	10.76
KURTOSIS	507.61

VARIABLE DE15666		FFS FILE 15					
Prescription status of drug							
CODES							
1 - Not applicable, missing							
2 - Prescription (legend)							
3 - Over the counter (non-legend)							
4 - Either (varies by state)							
4 - Unknown							
DE15666 states whether the drug was prescription-only or could be sold over the counter; or whether it required a prescription in some states but not in others; or whether the information about the status of the drug was unobtainable.							
VALUE	FREQ	CUM FREQ	%	CUM %			
1	79313	79313	92.60	92.60			
2	5466	84779	6.38	98.98			
3	842	85621	0.98	99.96			
4	34	85655	0.04	100.00			

VARIABLE DE1589		FFS FILE 15	
NDC code			
CODES			
Blank - Not applicable, missing			
DE1589 indicates the first seven digits of the National Drug Code for the drug sold by the provider. A number of codes were added by the HIE to identify drugs not listed in the 1972 NDC Directory. All NDC and supplementary codes used in the claims line-item files can be found in Section V of "Codes Used."			

DEI5649	VALUE	FREQ	CUM FREQ	%	CUM %
	1	638	8638	10.16	10.16
	2	76415	85053	89.84	100.00

VARIABLE	DEI5649	FFS FILE 15
	Generic/brand indicator	
	CODES	
	1 - Not applicable, missing	
	2 - Generic	
	2 - Brand	
	DEI5649 indicates whether the drug prescribed by the provider was a brand name or the generic form of the drug.	

VARIABLE	DEI5590	FFS FILE 15
	1st generic code	
	CODES	
	1 - Not applicable, missing	
	DEI5590 identifies a generic component of the drug specified by NDC code in DEI5589. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE	DEI5591	FFS FILE 15
	2nd generic code	
	CODES	
	. - Not applicable, missing	
	DEI5591 identifies a generic component of the drug specified by NDC code in DEI5589. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE	DEI5592	FFS FILE 15
	3rd generic code	
	CODES	
	. - Not applicable, missing	
	DEI5592 identifies a generic component of the drug specified by NDC code in DEI5589. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE	DEI5593	FFS FILE 15
	4th generic code	
	CODES	
	. - Not applicable, missing	
	DEI5593 identifies a generic component of the drug specified by NDC code in DEI5589. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE	DEI5594	FFS FILE 15
	5th generic code	
	CODES	
	. - Not applicable, missing	
	DEI5594 identifies a generic component of the drug specified by NDC code in DEI5589. Generic substances were identified using a coding system developed by the Health Insurance Experiment. Depending on the composition of the drug, from one to five generic components are specified for each drug. Generic codes are listed in Section VI of "Codes Used."	

VARIABLE	DEI5595	FFS FILE 15
First therapeutic code		
CODES		
.	- Not applicable, missing	
DEI5595	indicates the code for a therapeutic use of the drug specified in DEI5589. Codes were taken from the AMA Drug Evaluations, 1973, by assigning a code number which corresponds with the chapter number in which the drug's therapeutic use is described. Therapeutic codes are listed in Section VII of "Codes Used."	

DEI5595	VALUE	FREQ	CUM FREQ	%	CUM %
1	93	93	93	0.52	0.52
2	445	445	445	2.02	2.54
3	1729	1729	2174	1.40	3.94
4	1196	304	3370	0.36	4.29
5	42	42	3716	0.05	4.34
6	6806	6806	10522	7.95	12.29
7	77	77	10599	0.09	12.38
8	658	658	11257	0.77	13.15
9	141	141	11398	0.17	13.32
11	13	13	11411	0.02	13.33
12	1521	1521	12932	1.78	15.11
13	439	439	13371	0.51	15.62
14	1947	1947	15318	2.28	17.90
15	10	10	15328	0.01	17.91
16	354	354	15682	0.41	18.32
17	361	361	16043	0.42	18.74
18	128	128	16171	0.15	18.89
19	7	7	16178	0.01	18.90
20	3189	3189	19367	3.73	22.63
21	374	374	19741	0.44	23.06
22	7743	7743	27484	9.05	32.11
24	442	442	27926	0.52	32.63
25	1130	1130	29056	1.32	33.95
26	1345	1345	30401	1.57	35.52
27	1746	1746	32147	2.04	37.56
28	1943	1943	34090	2.27	39.83
29	1343	1343	35433	1.57	41.40
30	273	273	35706	0.32	41.71
31	112	112	35818	0.13	41.84
32	2039	2039	37857	2.38	44.23
33	994	994	38851	1.16	45.39
34	13	13	38864	0.02	45.40
35	2488	2488	41352	2.91	48.31
36	122	122	41474	0.14	48.45
37	5394	5394	46868	6.30	54.75
38	18	18	46886	0.02	54.77
39	1248	1248	48134	1.46	56.23
41	1654	1654	49788	1.93	58.17
42	353	353	50141	0.41	58.58
43	1221	1221	51362	1.43	60.00
44	1609	1609	52971	1.88	61.88
45	1534	1534	54505	1.79	63.68
46	4398	4398	58903	5.14	68.81
47	42	42	58945	0.05	68.86

(cont.)

(cont.)

VARIABLE DE15595 (cont.)

VALUE	FREQ	CUM FREQ	%	CUM %
48	6182	65127	7.22	76.09
49	711	65838	0.83	76.92
50	2273	68111	2.66	79.57
51	103	68214	0.12	79.69
52	88	68302	0.10	79.79
53	2378	70680	2.78	82.57
55	1271	71951	1.49	84.06
56	340	72291	0.40	84.45
57	373	72664	0.44	84.89
58	6	72670	0.01	84.90
60	2168	74838	2.53	87.43
61	116	74954	0.14	87.57
62	201	75155	0.24	87.80
64	291	75446	0.34	88.14
65	185	75631	0.22	88.36
66	165	75796	0.19	88.55
67	148	75944	0.17	88.72
68	1494	77438	1.75	90.47
69	322	77760	0.38	90.84
70	15	77775	0.02	90.86
71	712	78487	0.83	91.69
72	144	78631	0.17	91.86
73	567	79198	0.66	92.52
74	153	79351	0.18	92.70
76	3	79354	0.00	92.71
78	1792	81146	2.09	94.80
79	857	82003	1.00	95.80
80	638	82641	0.75	96.55
81	399	83040	0.47	97.01
82	177	83217	0.21	97.22
83	157	83374	0.18	97.40
84	2	83376	0.00	97.40
85	647	84023	0.76	98.16
86	33	84056	0.04	98.20
87	1	84057	0.00	98.20
88	76	84133	0.09	98.29
89	30	84163	0.04	98.32
90	5	84168	0.01	98.33
91	60	84228	0.07	98.40
92	1369	85597	1.60	100.00
93	1	85598	0.00	100.00

VARIABLE DE15658		FFS FILE 15	
Second therapeutic code			
CODES			
. - Not applicable, missing			
DE15658 indicates the code for a second therapeutic use of the drug identified in DE15589. Therapeutic codes are listed in Section VII of "Codes Used."			
DE15658	VALUE	FREQ	CUM FREQ
1	60116	1	1
2	454	454	455
3	947	1402	1402
4	163	1565	1565
5	28	1593	1593
6	164	1757	1757
7	3723	5480	5480
8	14	5494	5494
11	4	5498	5498
13	40	5538	5538
14	114	5652	5652
16	213	5865	5865
17	35	5900	5900
18	81	5981	5981
21	64	6045	6045
22	13	6058	6058
24	105	6163	6163
25	47	6210	6210
26	1329	7539	7539
27	26	7565	7565
28	2556	10121	10121
29	377	10498	10498
30	820	11318	11318
31	883	12201	12201
32	458	12659	12659
33	51	12710	12710
34	7	12717	12717
35	176	12893	12893
36	4	12897	12897
37	12	12909	12909
40	247	13156	13156
41	19	13175	13175
42	235	13410	13410
43	102	13512	13512
44	872	14384	14384
45	579	14963	14963
46	79	15042	15042
48	44	15086	15086
50	8	15094	15094
51	7	15101	15101
53	26	15127	15127
55	53	15180	15180
57	31	15211	15211
58	5	15216	15216
			(cont.)
			0.00
			1.78
			5.48
			6.12
			6.23
			6.87
			21.43
			21.48
			21.50
			21.65
			22.10
			22.93
			23.07
			23.39
			23.64
			23.69
			24.10
			24.28
			29.48
			29.58
			39.57
			41.05
			44.25
			47.71
			49.50
			49.70
			49.72
			50.41
			50.43
			50.48
			51.44
			51.52
			52.43
			52.83
			56.24
			58.51
			58.82
			58.99
			59.02
			59.05
			59.15
			59.36
			59.48
			59.50

VARIABLE DE15658 (cont.)

VALUE	FREQ	CUM FREQ	%	CUM %
60	63	15279	0.25	59.74
61	930	16209	3.64	63.38
62	249	16458	0.97	64.35
64	210	16668	0.82	65.17
67	70	16738	0.27	65.45
68	1267	18005	4.95	70.40
69	4	18009	0.02	70.42
70	1	18010	0.00	70.42
71	4179	22189	16.34	86.76
73	75	22264	0.29	87.05
74	354	22618	1.38	88.44
75	8	22626	0.03	88.47
78	276	22902	1.08	89.55
79	11	22913	0.04	89.59
80	20	22933	0.08	89.67
81	13	22946	0.05	89.72
82	21	22967	0.08	89.80
83	5	22972	0.02	89.82
85	708	23680	2.77	92.59
87	29	23709	0.11	92.70
88	1225	24934	4.79	97.49
92	641	25575	2.51	100.00

DE15659

VARIABLE	DE15659	FFS FILE	15
Third therapeutic code			
CODES			
. - Not applicable, missing			
DE15659 indicates the code for a third therapeutic use of the drug identified in DE15589. Therapeutic codes are listed in Section VII of "Codes Used."			

VALUE	FREQ	CUM FREQ	%	CUM %
4	74761	5	0.05	0.05
6	947	952	8.66	8.71
8	20	972	0.18	8.89
13	1	973	0.01	8.90
14	8	981	0.07	8.98
17	583	1564	5.33	14.31
18	41	1605	0.38	14.68
20	9	1614	0.08	14.77
22	9	1623	0.08	14.85
24	1	1624	0.01	14.86
26	49	1673	0.45	15.31
27	17	1690	0.16	15.46
30	2554	4244	23.37	38.83
31	30	4274	0.27	39.10
32	79	4353	0.72	39.83
33	1	4354	0.01	39.84
34	3	4357	0.03	39.86
35	381	4738	3.49	43.35

(cont.)

VARIABLE DE15659 (cont.)

VALUE	FREQ	CUM FREQ	%	CUM %
39	74	4812	0.68	44.03
41	112	4924	1.03	45.05
42	9	4933	0.08	45.13
43	44	4977	0.40	45.54
44	11	4988	0.10	45.64
45	458	5446	4.19	49.83
46	39	5485	0.36	50.18
52	1	5486	0.01	50.19
53	1	5487	0.01	50.20
54	1	5488	0.01	50.21
55	3	5491	0.03	50.24
57	2	5493	0.02	50.26
59	120	5613	1.10	51.35
60	63	5676	0.58	51.93
61	10	5686	0.09	52.02
62	55	5741	0.50	52.53
63	874	6615	8.00	60.52
66	2	6617	0.02	60.54
67	2	6619	0.02	60.56
68	89	6708	0.81	61.37
69	27	6735	0.25	61.62
70	53	6788	0.49	62.10
71	275	7063	2.52	64.62
72	3	7066	0.03	64.65
73	43	7109	0.39	65.04
74	287	7396	2.63	67.67
75	199	7595	1.82	69.49
78	25	7620	0.23	69.72
79	1	7621	0.01	69.73
80	2349	9970	21.49	91.22
81	4	9974	0.04	91.25
85	898	10872	8.22	99.47
88	56	10928	0.51	99.98
92	2	10930	0.02	100.00

DEI5660	VALUE	FREQ	CUM FREQ	%	CUM %
	2	81252	12	0.27	0.27
	4	12	18	0.14	0.41
	7	12	30	0.27	0.68
	13	2	32	0.05	0.72
	18	1	33	0.02	0.74
	20	5	38	0.11	0.86
	22	4	42	0.09	0.95
	24	1	43	0.02	0.97
	26	7	50	0.16	1.13
	27	1	51	0.02	1.15
	29	15	66	0.34	1.49
	31	2524	2590	56.86	58.35
	35	12	2602	0.27	58.62
	39	1	2603	0.02	58.64
	41	5	2608	0.11	58.75
	42	29	2637	0.65	59.41
	43	2	2639	0.05	59.45
	44	45	2684	1.01	60.46
	45	7	2691	0.16	60.62
	55	7	2698	0.16	60.78
	59	2	2700	0.05	60.83
	60	4	2704	0.09	60.92
	62	35	2739	0.79	61.70
	69	2	2741	0.05	61.75
	71	136	2877	3.06	64.81
	72	24	2901	0.54	65.35
	73	34	2935	0.77	66.12
	74	3	2938	0.07	66.19
	78	1	2939	0.02	66.21
	80	875	3814	19.71	85.92
	81	1	3815	0.02	85.94
	85	306	4121	6.89	92.84
	88	318	4439	7.16	100.00

VARIABLE	DEI5660	FFS FILE	15
Fourth therapeutic code			
CODES			
. - Not applicable, missing			
DEI5660 indicates the code for a fourth therapeutic use of the drug identified in DEI5589. Therapeutic codes are listed in Section VII of "Codes Used."			

DEI5661	VALUE	FREQ	CUM FREQ	%	CUM %
.	.	85489	12	5.94	5.94
1	1	12	13	0.50	6.44
5	5	1	14	0.50	6.94
16	16	29	42	14.36	20.79
22	22	4	46	1.98	22.77
37	37	23	69	11.39	34.16
42	42	4	73	1.98	36.14
45	45	3	76	1.49	37.62
46	46	1	77	0.50	38.12
59	59	2	79	0.99	39.11
62	62	2	81	0.99	40.10
73	73	1	82	0.50	40.59
75	75	23	105	11.39	51.98
78	78	3	108	1.49	53.47
80	80	51	159	25.25	78.71
88	88	43	202	21.29	100.00

VARIABLE DEI5661 FFS FILE 15

Fifth therapeutic code

CODES

. - Not applicable, missing

DEI5661 indicates the code for a fifth therapeutic use of the drug identified in DEI5589. Therapeutic codes are listed in Section VII of "Codes Used."

VARIABLE DEI5588 FFS FILE 15

Amount Sold

CODES

. - Not applicable, missing

DEI5588 indicates a number which identifies the amount of the drug sold (e.g., 40). Refer to DEI5668, dosage form, for an indication of the appropriate unit.

VARIABLE	DEI5667	FFS FILE 15
Dosage instructions - quantity		
CODES		
· - Not applicable, missing		
0 - One quarter		
1 - One, 1/2 to one		
2 - Two		
3 - Three		
4 - Four		
5 - Five		
6 - Six		
7 - Varies		
8 - Eight		
9 - Half (use 1/2 only)		
10 - Ten		
11 - 1 1/2, 1 - 1 1/2, 1/2 - 1 1/2		
12 - Three-quarters		
13 - One-third		
14 - Two-thirds		
15 - Fifteen		
20 - Twenty		
21 - One or two		
22 - Two or three		
23 - Three or four		
24 - Four or five		
25 - Five or six		
26 - Sparingly		
27 - Liberally		
28 - To, into, on, apply (e.g. cream)		
29+ - Values over 28 indicate actual dosage quantity		
99 - As directed (only instruction)		
DEI5667 indicates the dosage amount for each use of the drug listed in DEI5589. This quantity refers to the form of the drug given in DEI5668.		
NOTE: Code value 16 appears in the frequencies but is not a true code value and is believed to be a result of data entry errors.		

DEI5667	VALUE	FREQ	CUM FREQ	%	CUM %
	0	373	127	0.15	0.15
	1	58467	58594	68.53	68.68
	2	4906	63500	5.75	74.43
	3	917	64417	1.08	75.50
	4	750	65167	0.88	76.38
	5	630	65797	0.74	77.12
	6	114	65911	0.13	77.25
	7	29	65940	0.03	77.29
	8	86	66026	0.10	77.39
	9	1442	67468	1.69	79.08
	10	111	67579	0.13	79.21
	11	423	68002	0.50	79.70
	12	216	68218	0.25	79.96
	13	35	68253	0.04	80.00
	14	100	68353	0.12	80.12
	15	71	68424	0.08	80.20
	16	4	68428	0.01	80.20
	20	18	68446	0.02	80.23
	21	2429	70875	2.85	83.07
	22	172	71047	0.20	83.27
	23	114	71161	0.13	83.41
	24	23	71184	0.03	83.43
	25	12	71196	0.01	83.45
	26	44	71240	0.05	83.50
	27	9	71249	0.01	83.51
	28	6396	77645	7.50	91.01
	29	15	77660	0.02	91.02
	30	45	77705	0.05	91.08
	32	2	77707	0.00	91.08
	35	1	77708	0.00	91.08
	40	4	77712	0.01	91.09
	44	1	77713	0.00	91.09
	50	2	77715	0.00	91.09
	55	7	77722	0.01	91.10
	60	3	77725	0.00	91.10
	65	1	77726	0.00	91.10
	70	3	77729	0.00	91.11
	80	3	77732	0.00	91.11
	85	2	77734	0.00	91.11
	87	1	77735	0.00	91.11
	88	1	77736	0.00	91.11
	90	7	77743	0.01	91.12
	91	1	77744	0.00	91.12
			(cont.)		

VARIABLE DE15667 (cont.)

VALUE	FREQ	CUM FREQ	%	CUM %
93	1	77745	0.00	91.12
95	1	77746	0.00	91.13
98	3	77749	0.00	91.13
99	7569	85318	8.87	100.00

DE15668

VARIABLE DE15668 FFS FILE 15

Dosage instructions - form

CODES

- 0 - Not applicable, missing
- 1 - Capsule, tablet, suppository
- 2 - Teaspoonful(s)
- 3 - Teaspoonful(s)
- 4 - Drop(s)
- 5 - Milliliter (ml) or cubic centimeter (cc)
- 6 - Applicator full
- 7 - Affected area, e.g. cream
- 8 - Units

DE15668 states the dosage form for each use of the drug listed in DE15589.

VALUE	FREQ	CUM FREQ	%	CUM %
0	373	158	0.19	0.19
1	158	64655	75.60	75.78
2	64497	64909	0.30	76.08
3	254	73737	10.35	86.43
4	8828	75659	2.25	88.68
5	1922	77499	2.16	90.84
6	1840	77856	0.42	91.25
7	357	84530	7.82	99.08
8	6674	85318	0.92	100.00
	788			

DEI5669	VALUE	FREQ	CUM FREQ	%	CUM %
0	373	15	15	0.02	0.02
1	45	60	75	0.05	0.07
2	216	276	351	0.25	0.32
3	1153	1429	1429	1.35	1.68
4	7349	8778	8778	8.61	10.29
5	9	8787	8787	0.01	10.30
6	19317	28104	28104	22.64	32.94
8	13175	41279	41279	15.44	48.38
9	20396	61675	61675	23.91	72.29
12	11573	73248	73248	13.57	85.85
17	89	73337	73337	0.10	85.96
18	37	73374	73374	0.04	86.00
19	78	73452	73452	0.09	86.09
20	11	73463	73463	0.01	86.11
21	7	73470	73470	0.01	86.11
22	276	73746	73746	0.32	86.44
23	470	74216	74216	0.55	86.99
24	1653	75869	75869	1.94	88.93
25	75	75944	75944	0.09	89.01
26	1357	77301	77301	1.59	90.60
27	3	77304	77304	0.00	90.61
28	17	77321	77321	0.02	90.63
98	111	77432	77432	0.13	90.76
99	7886	85318	85318	9.24	100.00

VARIABLE DEI5669 FFS FILE 15

Dosage instructions - frequency

CODES

- 0 - Not applicable, missing
- 1 - Every half hour
- 2 - Every 2 hours, 2-3 hours, or 12 times a day
- 3 - Every 3 hours, 3-4 hours, or 8 times a day
- 4 - Every 4 hours, 4-6 hours, or 5-6 times a day (baby feedings)
- 6 - Every six hours, 4 times a day, 3-4 times a day, after meals and at bedtime
- 8 - Every 8 hours, 3 times a day, 2-3 times a day, after meals
- 9 - Every day, at bedtime
- 12 - Every 12 hours, 2 times a day
- 17 - 3 times a week (or 2 weeks a month)
- 18 - Once a week
- 19 - Twice a week (or 1 week a month)
- 20 - Once a month
- 21 - Twice a month
- 22 - Every other day (QOD)
- 23 - 20 or 21 days a month, 5 days a week, 3 weeks a month
- 24 - As directed (UD)
- 25 - 25 days each month
- 26 - As needed (PRN)
- 27 - Every 3 weeks
- 28 - STAT (immediately)
- 98 - No instructions as to time
- 99 - As directed (only instructions)

DEI5669 states the prescribed frequency of use for the drug listed in DEI5589.

NOTE: Code value 5 appears in the frequencies but is not a true code value and is believed to be a result of data entry errors.

VARIABLE	DEI5670	FFS FILE 15
	Dosage instructions - flexibility	
	CODES	
	<ul style="list-style-type: none"> - Not applicable, missing 0 - No additional instructions 1 - As needed (PRN) 2 - May repeat if necessary (SOS) 3 - Averaged (dosage tapering to 0) 	
	DEI5670 modifies the prescribed dosage frequency given in DEI5669 for the drug listed in DEI5589.	

DEI5670	VALUE	FREQ	CUM FREQ	%	CUM %
0	0	373	77805	91.19	91.19
1	1	77805	85187	8.65	99.85
2	2	7382	85209	0.03	99.87
3	3	22	85318	0.13	100.00
		109			

VARIABLE	DEI5586	FFS FILE 15
	Dosage strength	
	CODES	
	<ul style="list-style-type: none"> - Not applicable, missing 48888 - 400,000 units 99999 - Standard fixed combination drug 	
	DEI5586 indicates a number which identifies the actual dosage strength of the drug, as measured in the dosage units given in DEI5587.	

VARIABLE	DEI5587	FFS FILE 15
Dosage strength unit		
CODES		
1 - Not applicable, missing		
2 - grams (gm)		
3 - milligrams/cubic centimeter (mg/cc), or milligrams/milliliter (mg/ml)		
4 - units/cubic centimeter (u/cc), or units/milliliter (u/ml)		
5 - milligram/vial (gm/vial)		
6 - grams/vial (gm/vial)		
7 - percent (%)		
8 - grains (gr)		
9 - units (u)		
10 - micrograms (mcg)		
11 - 100ths or percent (.00 or %)		
12 - micrograms/cubic centimeter (mcg/cc)		
13 - units/gram (u/gm)		
14 - milligrams/gram (mg/gm)		
99 - Standard fixed dosage (SF, STD); no specified strength unit		
DEI5587 indicates the unit in which the strength of the drug is measured.		
DEI5587	VALUE	FREQ CUM %
1	164	35568 41.59
2	35568	114 0.13
3	4108	39790 46.52
4	706	40496 47.35
5	22	40518 47.38
6	2	40520 47.38
7	1750	42270 49.42
8	721	42991 50.27
9	639	43630 51.01
10	3686	47316 55.32
11	2092	49408 57.77
12	309	49717 58.13
13	37	49754 58.17
14	72	49826 58.26
99	35701	85527 100.00
DEI5652	VALUE	FREQ CUM %
AN	722	17904 21.07
00	17904	48653 57.26
01	30749	57346 67.49
02	8693	57346 67.49
03	5625	62971 74.11
04	6138	69109 81.33
05	2383	71492 84.14
06	7342	78834 92.78
07	2279	81113 95.46
08	190	81303 95.69
	165	81468 95.88
		(cont.)
DEI5652	VALUE	FREQ CUM %
AN	722	17904 21.07
00	17904	48653 57.26
01	30749	57346 67.49
02	8693	57346 67.49
03	5625	62971 74.11
04	6138	69109 81.33
05	2383	71492 84.14
06	7342	78834 92.78
07	2279	81113 95.46
08	190	81303 95.69
	165	81468 95.88
		(cont.)
Number of refills authorized		
CODES		
Blank - Not applicable, missing		
AN - As needed		
DEI5652 indicates the number of refills which were originally authorized by the provider.		

VARIABLE DE15652 (cont.)

VALUE	FREQ	CUM FREQ	%	CUM %
09	108	81576	0.13	96.01
10	691	82267	0.81	96.82
11	598	82865	0.70	97.52
12	1661	84526	1.96	99.48
13	27	84553	0.03	99.51
14	32	84585	0.04	99.55
15	70	84655	0.08	99.63
16	6	84661	0.01	99.64
17	8	84669	0.01	99.65
18	8	84677	0.01	99.66
19	6	84683	0.01	99.66
20	154	84837	0.18	99.85
21	2	84839	0.00	99.85
22	2	84841	0.00	99.85
23	2	84843	0.00	99.85
24	9	84852	0.01	99.86
25	1	84853	0.00	99.86
26	1	84854	0.00	99.87
28	1	84855	0.00	99.87
29	1	84856	0.00	99.87
30	24	84880	0.03	99.90
31	1	84881	0.00	99.90
32	6	84887	0.01	99.90
36	12	84899	0.01	99.92
40	1	84900	0.00	99.92
50	18	84918	0.02	99.94
60	6	84924	0.01	99.95
79	2	84926	0.00	99.95
81	2	84928	0.00	99.95
90	1	84929	0.00	99.95
99	40	84969	0.05	100.00

XV. SUPPLIES PURCHASED FROM PHARMACIES FFS FILE 16

INTRODUCTION

This codebook documents primary variables concerning supplies purchased primarily from pharmacies.¹ Supplies purchased directly from a physician (or other independent provider of medical services) are shown in File 09. Supplies purchased from nonpharmacy supply outlets (including eyeglasses and hearing aids) are documented in File 18. Charges for outpatient supplies sold as part of outpatient care rendered by an institution can be found under "miscellaneous hospital supplies" in the Category of Service variable (DEI5557) in File 11.²

Specific information provided in this file includes the type of supply purchased, the date the supply was purchased, and the number of units purchased. Other variables indicate the supply provider, the prescriber (if the supply was prescribed), the charge for the supply, and the amount of the charge that was covered by the HIE.

The units of observation in this file are line items for supplies purchased from pharmacies.³ For an explanation of common file variables used in this codebook, see the final subsection of Sec. II. Below we provide explanations for specific variables in this file.

SUPPLY CODE

The variable DEI5601 identifies the supply purchased from the provider. Each supply was identified using a coding system developed by the HIE. Supply codes are listed in Sec. III of *Codes Used*.

¹A few cases of purchases from nonpharmacy supply outlets are also found on this file.

²However, such supplies could not be specifically identified, and no quantities could be provided.

³Analysts should note that the statistical frequency of a variable in this file represents the number of times it occurs in relation to the unit of observation, *not* the number of claims on which it appears.

DIAGNOSIS/PROBLEM CODE

DEI5605, Diagnosis/Problem Code, indicates the primary condition to which the supply is related. To make reporting easier for participants and providers, this information was requested only when the supply purchased was over \$25.00. However, the information was often missing, either because the seller failed to record diagnostic information or submitted the wrong MER form.

CODEBOOK FOR FFS FILE 16

SUPPLIES PURCHASED FROM PHARMACIES

DIRECTORY OF VARIABLES - FFS FILE 16
 SUPPLIES PURCHASED FROM PHARMACIES

VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK	VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK
FILENAME	Name of file	397	DEI5604	Prescriber/suggester identifier	400
PERSON	Person identifier	397	DEI5558	Line-item charge	400
SITE	Site	397	DEI5559	Noncovered charges	400
INSTAT	Insurance status	398	DEI5560	Reason for noncoverage	401
CONTYR	Contract year	398	DEI5561	Reimbursement	403
DEI5553	Claim number	399	DEI5605	Diagnosis/Problem code	404
DEI5502	Provider number	399	DEI5601	Supply code	404
DEI5603	Date dispensed	399	DEI5602	Amount sold	405

FILENAME	VALUE	FREQ	CUM FREQ	%	CUM %
	PE16AA	1635	1635	100.00	100.00

SITE	VALUE	FREQ	CUM FREQ	%	CUM %
	1	386	386	23.61	23.61
	2	390	776	23.85	47.46
	3	244	1020	14.92	62.39
	4	202	1222	12.36	74.74
	5	193	1415	11.80	86.54
	6	220	1635	13.46	100.00

VARIABLE	FILENAME	FFS FILE 16
	Name of file	
	FILENAME is a 6-digit code that uniquely identifies the file. This file name is PE16AA.	

VARIABLE	PERSON	FFS FILE 16
	Person identifier	
	PERSON is an 8-character alphanumeric code that uniquely identifies the participant in the HIE to whom the following data refer. The 2nd character of PERSON designates in which site a participant resided during enrollment in the HIE: A=Dayton; B=Seattle; E=Fitchburg; F=Franklin County; G=Charleston; H=Georgetown County.	

VARIABLE	SITE	FFS FILE 16
	Site	
	CODES	
	1 - Dayton, Ohio	
	2 - Seattle, Washington	
	3 - Fitchburg, Massachusetts	
	4 - Franklin County, Massachusetts	
	5 - Charleston, South Carolina	
	6 - Georgetown County, South Carolina	
	SITE identifies the participant's place of residence when enrolled.	

VARIABLE	INSTAT	FFS FILE 16
Insurance status		
CODES		
1	Ever insured (includes HMO experimental group)	
2	Ever assigned to HMO control group	
3	Never insured	
INSTAT describes the participant's insurance status in the Health Insurance Experiment.		

INSTAT	VALUE	FREQ	CUM FREQ	%	CUM %
	1	1625	1625	99.39	99.39
	2	10	1635	0.61	100.00

VARIABLE	CONTR	FFS FILE 16
Contract year		
CODES		
P1	First year (South Carolina 3 year enrollees)	
P2	Second year (South Carolina 3 year enrollees)	
P3	Third year (South Carolina 3 year enrollees)	
01	First year (South Carolina 3 year enrollees)	
02	Second year	
03	Third year	
04	Fourth year	
05	Fifth year	
CONTR identifies the participant's contract year of coverage for which the claim was filed under the HIE. A three-year South Carolina enrollment group also served as an uninsured control group for two years prior to the beginning of its contract period; P1 - P3 identify the medical insurance contract periods for this group. Thus, P1 indicates the first contract year for this group, but is the third contract year of the study.		

CONTR	VALUE	FREQ	CUM FREQ	%	CUM %
	P1	69	69	4.22	4.22
	P2	61	130	3.73	7.95
	P3	66	196	4.04	11.99
	01	410	606	25.08	37.06
	02	397	1003	24.28	61.35
	03	368	1371	22.51	83.85
	04	146	1517	8.93	92.78
	05	118	1635	7.22	100.00

VARIABLE DE15553	FFS FILE 16
Claim number	
DE15553 indicates a claim identifier which is used to link the line items from a given MER.	

VARIABLE DE15502	FFS FILE 16
Provider number	
DE15502 is an 8-character code which refers, in this file, to the pharmacy where the participant purchased medical supplies.	

VARIABLE DE15603	FFS FILE 16
Date dispensed	
CODES	
19741108 to 19820130 - Date range on file (YYMMDD)	
DE15603 indicates the date the supply was sold.	

VARIABLE DE15604	FFS FILE 16
Prescriber/suggester identifier	
CODES	
blank - Not applicable, missing	
DE15604 indicates the identifier number of the provider who prescribed or suggested the initial supply.	

VARIABLE DE15558	FFS FILE 16
Line-item charge	
DE15558 indicates the charge submitted to the HIE for the supply listed in DE15601, Supply Code.	

VARIABLE DE15559	FFS FILE 16
Noncovered charges	
DE15559 indicates the amount of charged services in DE15558 not covered by the insurance plan.	

DE15558	
NUMBER OF OBSERVATIONS	1635
NUMBER OF MISSING	0
MEAN	8.99
MEDIAN	5.27
MINIMUM VALUE	0.00
MAXIMUM VALUE	1081.00
STANDARD DEVIATION	33.10
COEFFICIENT OF VARIATION	368.14
SKENNESS	25.43
KURTOSIS	748.32
DE15559	
NUMBER OF OBSERVATIONS	507
NUMBER OF MISSING	1128
MEAN	5.44
MEDIAN	2.42
MINIMUM VALUE	0.00
MAXIMUM VALUE	95.00
STANDARD DEVIATION	8.50
COEFFICIENT OF VARIATION	156.18
SKENNESS	4.70
KURTOSIS	33.07

VARIABLE	DE15560	FFS FILE 16	DE15560 VALUE	FREQ	CUM FREQ	%	CUM %
Reason for noncoverage							
CODES							
1 - Not applicable, missing			20	1128	11	2.17	2.17
2 - Inpatient hospital accommodations in a private room			21	11	13	0.39	2.56
3 - Inpatient hospital comfort items			22	2	15	0.39	2.96
4 - Inpatient hospital custodial care			25	44	59	8.68	11.64
5 - Cosmetic surgery not resulting from an accidental injury			29	63	122	12.43	24.06
6 - Psychiatric outpatient services in excess of fifty-two consultations per year			30	37	159	7.30	31.36
7 - Outpatient psychiatric services			31	321	480	63.31	94.68
8 - Outpatient personal care services			32	4	484	0.79	95.46
9 - Orthodontia not resulting from accidental injury			35	2	486	0.39	95.86
10 - Christian Science practitioner or sanatorium not listed in the Christian Science Journal			45	10	496	1.97	97.83
11 - Non-emergency transportation			56	2	498	0.39	98.23
12 - More than one eye or hearing examination during the accounting year			66	4	502	0.79	99.01
13 - More than one pair of eyeglass frames every two accounting years			74	5	507	0.99	100.00
14 - More than one set of eyeglass lenses during the accounting year							
15 - More than one hearing aid during the accounting year							
16 - Exceeds limit on eyeglass frames or hearing aids							
17 - Repairs to eyeglass frames and hearing aids							
18 - Diagnostic, screening, preventative, or rehabilitation services not otherwise specified in the scope of coverage							
19 - More than one piece of medical equipment, appliance or supply							
20 - Equipment, appliances or supplies costing more than \$25.00							
21 - Not medically necessary							
22 - Duplicate line item							
23 - Amount paid on another Explanation of Benefits							
24 - Service prior to enrollment (SAME AS 64)							
25 - Procedure done twice							
26 - Certificate of benefits stipulations on service not met							
27 - Prior authorization not approved							
28 - Participant not eligible for dental care							

(cont.)

VARIABLE DE15560 (cont.)

28 - Blood credit
29 - Over-the-counter drugs
30 - Deductible not met
31 - Participant's co-insurance portion
32 - Services covered by workmen's compensation or
 employer's liability laws
33 - Pass through (covered by other insurance;
 payment from other company was "passed through"
 to provider or participant)
34 - Prepayment made
35 - Services covered by accident insurance policies
36 - Medicare paid
37 - Discount
38 - Not covered prepayment and deductible
39 - Not covered prepayment and coinsurance
40 - Discount and deductible not met
41 - Discount and coinsurance
42 - Paid by other insurance carrier
43 - Paid by agency other than insurance company
44 - Services obtained outside Group Health
 Cooperative
45 - Plan benefit is 5% of covered charges
46 - Services obtained at Group Health Cooperative
47 - Allowance on over-the-counter-drugs per illness
 per accounting year has been met
48 - Services paid for by Group Health Cooperative
53 - Part paid by Group Health Cooperative; plan benefit
 = 5% or balance
54 - Charge information unavailable--charge coded
 as one cent
55 - Discount plus plan benefit is 5%
56 - Medicaid paid
57 - Company physical provided as fringe benefit--
 charge coded as one cent, but true charge unknown
58 - Workmen's compensation - charge coded as one cent,
 but true charge unknown
59 - Services rendered after termination date
60 - Claim is duplicate
61 - Participant not eligible
62 - Suspended
63 - No service
64 - Before enrollment date (SAME AS 23)
65 - Claim filed after time limit
66 - No charge
67 - Underpayment

(cont.)

VARIABLE DE15560 (cont.)

68 - Overpayment, deducted on another claim
69 - Overpayment, returned
70 - Overpayment, deducted on this claim, overpaid
on another claim
71 - Billed in error--patient not seen
72 - Prepayment made (SAME AS 34)
73 - Duplicate payment recovered
74 - Duplicate payment not recovered
80 - Prepayment for future services - no Maximum
Dollar Expenditure involved
81 - Prepayment - part applied to the Maximum
Dollar Expenditure

DE15560 describes the reason a charge was not covered
under the participant's HIE plan. The above code
values were designed to cover all line-item charges;
not all values are appropriate in every file.

DE15561

NUMBER OF OBSERVATIONS 1635
NUMBER OF MISSING 0
MEAN 7.30
MEDIAN 4.00
MINIMUM VALUE 0.00
MAXIMUM VALUE 1081.00
STANDARD DEVIATION 32.26
COEFFICIENT OF VARIATION 441.73
SKEWNESS 26.53
KURTOSIS 810.80

VARIABLE DE15561 FFS FILE 16

Reimbursement

DE15561 indicates the reimbursement amount for the
line-item charge shown in DE15558.

VARIABLE	DEI5605	FFS FILE 16
	Diagnosis/Problem code	
	CODES	
	blank - Not applicable, missing	
	DEI5605 indicates the code of the primary condition diagnosed by the provider. Codes were taken from the Hospital--International Classification of Diseases, Adapted 2nd Edition (H-ICDA-2), September 1973. This variable applies only when the supply purchased was over \$25.00. Diagnosis codes are listed in Section I of "Codes Used."	

VARIABLE	DEI5601	FFS FILE 16
	Supply code	
	DEI5601 identifies the supply sold by the provider. Each supply was identified using a coding system developed by the HIE. Supply codes are listed in Section III of "Codes Used."	

VARIABLE	DEI5602	FFS FILE 16
Amount sold		
CODES		
.	- Not applicable, missing	
DEI5602	indicates a number which identifies the amount of the supplies sold. This number must be linked with the type of supply given in DEI5601.	
DEI5602	VALUE	FREQ
1	24	448
2	448	564
3	116	578
4	14	592
5	14	606
6	7	613
8	1	614
9	1	615
10	72	687
11	1	688
12	18	706
14	1	707
15	9	716
18	1	717
20	67	784
22	1	785
24	6	791
25	6	797
26	1	798
28	1	799
30	129	928
31	1	929
35	1	930
36	12	942
40	60	1002
44	2	1004
48	5	1009
50	69	1078
60	124	1202
62	1	1203
65	3	1206
66	1	1207
70	4	1211
72	9	1220
75	2	1222
80	3	1225
86	2	1227
90	1	1228
99	106	1334
100	214	1548
120	11	1559
130	1	1560
150	12	1572
160	1	1573
		(cont..)
		27.81
		27.81
		7.20
		35.01
		35.88
		0.87
		36.75
		0.87
		37.62
		0.44
		38.05
		38.11
		0.06
		38.18
		0.06
		42.64
		4.47
		42.71
		0.06
		43.82
		1.12
		43.89
		0.06
		44.44
		0.56
		44.51
		0.06
		44.67
		4.16
		48.73
		0.06
		49.10
		0.37
		49.47
		0.37
		49.53
		0.06
		49.60
		0.06
		57.60
		8.01
		57.67
		0.06
		57.73
		0.06
		58.47
		0.75
		3.72
		62.20
		0.12
		62.32
		0.31
		62.63
		66.92
		4.28
		74.61
		7.70
		74.67
		0.06
		74.86
		0.19
		74.92
		0.06
		75.17
		0.25
		75.73
		0.56
		75.85
		0.12
		76.04
		0.19
		76.16
		0.12
		76.23
		0.06
		82.81
		6.58
		13.28
		96.09
		0.68
		96.77
		0.06
		96.83
		0.75
		97.58
		0.06
		97.64

VARIABLE DE15602 (cont.)

VALUE	FREQ	CUM FREQ	%	CUM %
170	1	1574	0.06	97.70
180	1	1575	0.06	97.77
200	11	1586	0.68	98.45
202	1	1587	0.06	98.51
260	1	1588	0.06	98.57
300	4	1592	0.25	98.82
381	2	1594	0.12	98.95
600	1	1595	0.06	99.01
992	4	1599	0.25	99.26
999	12	1611	0.75	100.00

XVI. SUPPLIES PURCHASED FROM NONPHARMACY SUPPLIERS FFS FILE 18

INTRODUCTION

This codebook documents primary variables concerning supplies, including eyeglasses and hearing aids, purchased from opticians, supply houses, and other nonpharmacy supply outlets.¹ Supplies purchased from pharmacies are documented in File 16. Supplies purchased directly from a physician (or other independent provider of medical services), including eyeglasses and hearing aids, are shown in File 09. Charges for outpatient supplies sold as part of outpatient care rendered by an institution can be found under "miscellaneous hospital supplies" in the variable Category of Service (DEI5557) in File 11.²

Specific information provided in this file includes the type of supply purchased, the date the supply was purchased, and the number of units purchased. Other variables indicate the supply provider, the prescriber (if the supply was prescribed), the charge for the supply, and the amount of the charge that was covered by the HIE.

The units of observation in this file are line items for supplies purchased.³ For an explanation of common variables used in this codebook, see the final subsection of Sec. II. Below we provide explanations for specific variables in this file.

¹A few cases of supply purchases from pharmacies are also found on this file.

²However, such supplies could not be specifically identified, and no quantities could be provided.

³Analysts should note that the statistical frequency of a variable in this file represents the number of times it occurs in relation to the unit of observation, *not* the number of claims on which it appears.

SUPPLY CODE

The variable DEI5601 identifies the supply purchased from the provider. Each supply was identified using a coding system developed by the HIE. Supply codes are listed in Sec. III of *Codes Used*.

DIAGNOSIS/PROBLEM CODE

The variable DEI5605, Diagnosis/Problem Code, indicates the primary condition to which the supply is related. This information was often missing, either because the seller failed to record diagnostic information or submitted the wrong MER form.

SECOND NONCOVERED CHARGES AND REASON FOR NONCOVERAGE

This file contains many charges for eyewear (eyeglasses, contact lenses). The HIE had a limit on the amount of eyewear that could be purchased. Any expense beyond that limit would not be covered. Thus, there can exist two reasons for noncoverage of charges in this file--one for the portion of charges that exceeded the limit, and one for coinsurance charges on the remaining portion. The variable DEI5562, Second Noncovered Charges, indicates, if necessary, a second amount in the line-item charge (DEI5558) that was not covered by the HIE. An additional variable, DEI5563, is included to explain the reason for this noncoverage.

CODEBOOK FOR FFS FILE 18

SUPPLIES PURCHASED FROM NONPHARMACY SUPPLIERS

DIRECTORY OF VARIABLES - FFS FILE 18
SUPPLIES PURCHASED FROM NONPHARMACY SUPPLIERS

VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK	VARIABLE NAME	DESCRIPTION	PAGE # IN CODEBOOK
FILENAME	Name of file	411	DE15558	Line-item charge	414
PERSON	Person identifier	411	DE15559	First noncovered charges	414
SITE	Site	411	DE15560	1st reason for noncoverage	415
INSTAT	Insurance status	412	DE15562	2nd noncovered charges	417
CONTR	Contract year	412	DE15563	2nd reason for noncoverage	418
DE15553	Claim number	413	DE15561	Reimbursement	420
DE15502	Provider number	413	DE15605	Diagnosis/Problem code	421
DE15603	Date dispensed	413	DE15601	Supply code	421
DE15604	Prescriber/suggester identifier	414	DE15602	Amount sold	422

FILENAME	VALUE	FREQ	CUM FREQ	%	CUM %
	PE18AA	4196	4196	100.00	100.00

SITE	VALUE	FREQ	CUM FREQ	%	CUM %
	1	923	923	22.00	22.00
	2	1328	2251	31.65	53.65
	3	422	2673	10.06	63.70
	4	817	3490	19.47	83.17
	5	365	3855	8.70	91.87
	6	341	4196	8.13	100.00

VARIABLE	FILENAME	FFS FILE 18
Name of file		
FILENAME	is a 6-digit code that uniquely identifies the file. This file name is PE18AA.	

VARIABLE	PERSON	FFS FILE 18
Person identifier		
PERSON	is an 8-character alphanumeric code that uniquely identifies the participant in the HIE to whom the following data refer. The 2nd character of PERSON designates in which site a participant resided during enrollment in the HIE: A=Dayton; B=Seattle; E=Fitchburg; F=Franklin County; G=Charleston; H=Georgetown County.	

VARIABLE	SITE	FFS FILE 18
Site		
CODES		
	1 - Dayton, Ohio	
	2 - Seattle, Washington	
	3 - Fitchburg, Massachusetts	
	4 - Franklin County, Massachusetts	
	5 - Charleston, South Carolina	
	6 - Georgetown County, South Carolina	
SITE	identifies the participant's place of residence when enrolled.	

VARIABLE	INSTAT	FREQ	CUM FREQ	%	CUM %
Insurance status	VALUE				
CODES					
1 - Ever insured (includes HMO experimental group)	1	4154	4154	99.00	99.00
2 - Ever assigned to HMO control group	2	42	4196	1.00	100.00
3 - Never insured					
INSTAT describes the participant's insurance status in the Health Insurance Experiment.					

CONTRY	VALUE	FREQ	CUM FREQ	%	CUM %
P1	P1	165	165	3.93	3.93
P2	P2	123	288	2.93	6.86
P3	P3	119	407	2.84	9.70
01	01	1038	1445	24.74	34.44
02	02	873	2318	20.81	55.24
03	03	1032	3350	24.60	79.84
04	04	340	3690	8.10	87.94
05	05	506	4196	12.06	100.00

VARIABLE	DEI5553	FFS FILE 18
	Claim number	
	DEI5553 indicates a claim identifier which is used to link the line items from a given MER.	

VARIABLE	DEI5502	FFS FILE 18
	Provider number	
	DEI5502 is an 8-character code which refers, in this file, to the optician, supply house, or other nonpharmacy provider from whom the participant purchased supplies, including eyeglasses and hearing aids.	

NOTE: A few cases of supply purchases from pharmacies are recorded on this file.

VARIABLE	DEI5603	FFS FILE 18
	Date dispensed	
	CODES	
	19741209 to 19820113 - Date range on file (YYYYMMDD)	
	DEI5603 indicates the date the supply was sold.	

VARIABLE	DEI5604	FFS FILE 18
	Prescriber/suggester identifier	
	CODES	
	blank - Not applicable, missing	
	DEI5604 indicates the identifier number of the provider who prescribed or suggested the initial supply.	

VARIABLE	DEI5558	FFS FILE 18
	Line-item charge	
	DEI5558 indicates the charge submitted to the HIE for the supply listed in DEI5601, Supply Code.	

VARIABLE	DEI5559	FFS FILE 18
	1st noncovered charges	
	DEI5559 indicates the first amount of charged services in DEI5558, Line-item charge, which were not covered by the insurance plan.	

DEI5558	NUMBER OF OBSERVATIONS	4196
	NUMBER OF MISSING	0
	MEAN	44.41
	MEDIAN	35.00
	MINIMUM VALUE	0.00
	MAXIMUM VALUE	1418.00
	STANDARD DEVIATION	64.86
	COEFFICIENT OF VARIATION	146.04
	SKEWNESS	9.01
	KURTOSIS	109.83
DEI5559	NUMBER OF OBSERVATIONS	2339
	NUMBER OF MISSING	1857
	MEAN	20.43
	MEDIAN	13.00
	MINIMUM VALUE	0.00
	MAXIMUM VALUE	361.32
	STANDARD DEVIATION	27.34
	COEFFICIENT OF VARIATION	133.82
	SKEWNESS	5.67
	KURTOSIS	45.42

VARIABLE	DEI5560	FFS FILE 18	DEI5560 VALUE	FREQ	CUM FREQ	%	CUM %
1st reason for noncoverage				1857			
CODES				119	119	5.09	5.09
1 - Not applicable, missing			12	81	200	3.46	8.55
2 - Inpatient hospital accommodations in a private room			13	701	901	29.97	38.52
3 - Inpatient hospital comfort items			15	14	915	0.60	39.12
4 - Inpatient hospital custodial care			16	1	916	0.04	39.16
5 - Cosmetic surgery not resulting from an accidental injury			18	243	1159	10.39	49.55
6 - Psychiatric outpatient services in excess of fifty-two consultations per year			20	2	1161	0.09	49.64
7 - Outpatient psychiatric services			21	7	1168	0.30	49.94
8 - Outpatient personal care services			22	182	1350	7.78	57.72
9 - Orthodontia not resulting from accidental injury listed in the Christian Science Journal			25	31	1381	1.33	59.04
10 - Non-emergency transportation			30	834	2215	35.66	94.70
11 - More than one eye or hearing examination during the accounting year			31	2	2217	0.09	94.78
12 - More than one pair of eyeglass frames every two accounting years			32	1	2218	0.04	94.83
13 - More than one set of eyeglass lenses during the accounting year			35	24	2242	1.03	95.85
14 - More than one hearing aid during the accounting year			37	2	2244	0.09	95.94
15 - Exceeds limit on eyeglass frames or hearing aids			40	3	2247	0.13	96.07
16 - Repairs to eyeglass frames and hearing aids			42	1	2248	0.04	96.11
17 - Diagnostic, screening, preventative, or rehabilitation services not otherwise specified in the scope of coverage			43	6	2254	0.26	96.37
18 - More than one piece of medical equipment, appliance or supply			44	22	2276	0.94	97.31
19 - Equipment, appliances or supplies costing more than \$25.00			45	2	2278	0.09	97.39
20 - Not medically necessary			46	52	2330	2.22	99.62
21 - Duplicate line item			48	3	2333	0.13	99.74
22 - Amount paid on another Explanation of Benefits			63	6	2339	0.26	100.00
23 - Service prior to enrollment (SAME AS 64)			66				
24 - Procedure done twice							
25 - Certificate of benefits stipulations on service not met							
26 - Prior authorization not approved							
27 - Participant not eligible for dental care							

(cont.)

VARIABLE DE15560 (cont.)

- 28 - Blood credit
- 29 - Over-the-counter drugs
- 30 - Deductible not met
- 31 - Participant's co-insurance portion
- 32 - Services covered by workmen's compensation or employer's liability laws
- 33 - Pass through (covered by other insurance; payment from other company was "passed through" to provider or participant)
- 34 - Prepayment made
- 35 - Services covered by accident insurance policies
- 36 - Medicare paid
- 37 - Discount
- 38 - Not covered prepayment and deductible
- 39 - Not covered prepayment and coinsurance
- 40 - Discount and deductible not met
- 41 - Discount and coinsurance
- 42 - Paid by other insurance carrier
- 43 - Paid by agency other than insurance company
- 44 - Services obtained outside Group Health Cooperative
- 45 - Plan benefit is 5% of covered charges
- 46 - Services obtained at Group Health Cooperative
- 47 - Allowance on over-the-counter-drugs per illness per accounting year has been met
- 48 - Services paid for by Group Health Cooperative
- 53 - Part paid by Group Health Cooperative; plan benefit = 5% or balance
- 54 - Charge information unavailable--charge coded as one cent
- 55 - Discount plus plan benefit is 5%
- 56 - Medicaid paid
- 57 - Company physical provided as fringe benefit--charge coded as one cent, but true charge unknown
- 58 - Workmen's compensation - charge coded as one cent, but true charge unknown
- 59 - Services rendered after termination date
- 60 - Claim is duplicate
- 61 - Participant not eligible
- 62 - Suspended
- 63 - No service
- 64 - Before enrollment date (SAME AS 23)
- 65 - Claim filed after time limit
- 66 - No charge
- 67 - Underpayment

(cont.)

VARIABLE DE15560 (cont.)

68	- Overpayment, deducted on another claim
69	- Overpayment, returned
70	- Overpayment, deducted on this claim, overpaid on another claim
71	- Billed in error--patient not seen
72	- Prepayment made (SAME AS 34)
73	- Duplicate payment recovered
74	- Duplicate payment not recovered
80	- Prepayment for future services - no Maximum Dollar Expenditure involved
81	- Prepayment - part applied to the Maximum Dollar Expenditure
DE15560 describes the first reason a charge was not covered under the participant's HIE plan and refers to first noncovered charge reported in DE15559. The above code values were designed to cover all line-item charges; not all values are appropriate in every file.	

VARIABLE	DE15562	FFS FILE 18
2nd noncovered charges		
DE15562 indicates an additional amount of charged services (if any) in DE15558 which were not covered by the insurance plan.		

DE15562

NUMBER OF OBSERVATIONS	417
NUMBER OF MISSING	3779
MEAN	20.46
MEDIAN	13.75
MINIMUM VALUE	1.00
MAXIMUM VALUE	281.95
STANDARD DEVIATION	24.84
COEFFICIENT OF VARIATION	121.42
SKEWNESS	6.64
KURTOSIS	61.90

VARIABLE	DEI5563	FFS FILE 18	VALUE	FREQ	CUM FREQ	%	CUM %
2nd reason for noncoverage							
CODES							
1 - Not applicable, missing			12	3779	2	0.48	0.48
2 - Inpatient hospital accommodations in a private room			13	2	4	0.48	0.96
3 - Inpatient hospital comfort items			15	19	23	4.56	5.52
4 - Inpatient hospital custodial care			20	5	28	1.20	6.72
5 - Cosmetic surgery not resulting from an accidental injury			21	1	29	0.24	6.95
6 - Psychiatric outpatient services in excess of fifty-two consultations per year			25	9	38	2.16	9.11
7 - Outpatient psychiatric services			30	6	44	1.44	10.55
8 - Outpatient personal care services			31	347	391	83.21	93.77
9 - Orthodontia not resulting from accidental injury listed in the Christian Science Journal			37	3	394	0.72	94.48
10 - Non-emergency transportation			41	4	398	0.96	95.44
11 - More than one eye or hearing examination during the accounting year			44	5	403	1.20	96.64
12 - More than one pair of eyeglass frames every two accounting years			45	13	416	3.12	99.76
13 - More than one set of eyeglass lenses during the accounting year			48	1	417	0.24	100.00
14 - More than one hearing aid during the accounting year							
15 - Exceeds limit on eyeglass frames or hearing aids							
16 - Repairs to eyeglass frames and hearing aids							
17 - Diagnostic, screening, preventative, or rehabilitation services not otherwise specified in the scope of coverage							
18 - More than one piece of medical equipment, appliance or supply							
19 - Equipment, appliances or supplies costing more than \$25.00							
20 - Not medically necessary							
21 - Duplicate line item							
22 - Amount paid on another Explanation of Benefits							
23 - Service prior to enrollment (SAME AS 64)							
24 - Procedure done twice							
25 - Certificate of benefits stipulations on service not met							
26 - Prior authorization not approved							
27 - Participant not eligible for dental care (cont.)							

VARIABLE DE15563 (cont.)

- 28 - Blood credit
- 29 - Over-the-counter drugs
- 30 - Deductible not met
- 31 - Participant's co-insurance portion
- 32 - Services covered by workmen's compensation or employer's liability laws
- 33 - Pass through (covered by other insurance; payment from other company was "passed through" to provider or participant)
- 34 - Prepayment made
- 35 - Services covered by accident insurance policies
- 36 - Medicare paid
- 37 - Discount
- 38 - Not covered prepayment and deductible
- 39 - Not covered prepayment and coinsurance
- 40 - Discount and deductible not met
- 41 - Discount and coinsurance
- 42 - Paid by other insurance carrier
- 43 - Paid by agency other than insurance company
- 44 - Services obtained outside Group Health Cooperative
- 45 - Plan benefit is 5% of covered charges
- 46 - Services obtained at Group Health Cooperative
- 47 - Allowance on over-the-counter-drugs per illness per accounting year has been met
- 48 - Services paid for by Group Health Cooperative
- 53 - Part paid by Group Health Cooperative; plan benefit = 5% or balance
- 54 - Charge information unavailable--charge coded as one cent
- 55 - Discount plus plan benefit is 5%
- 56 - Medicaid paid
- 57 - Company physical provided as fringe benefit--charge coded as one cent, but true charge unknown
- 58 - Workmen's compensation - charge coded as one cent, but true charge unknown
- 59 - Services rendered after termination date
- 60 - Claim is duplicate
- 61 - Participant not eligible
- 62 - Suspended
- 63 - No service
- 64 - Before enrollment date (SAME AS 23)
- 65 - Claim filed after time limit
- 66 - No charge
- 67 - Underpayment

(cont.)

VARIABLE DE15563 (cont.)

68 - Overpayment, deducted on another claim
69 - Overpayment, returned
70 - Overpayment, deducted on this claim, overpaid on another claim
71 - Billed in error--patient not seen
72 - Prepayment made (SAME AS 34)
73 - Duplicate payment recovered
74 - Duplicate payment not recovered
80 - Prepayment for future services - no Maximum Dollar Expenditure involved
81 - Prepayment - part applied to the Maximum Dollar Expenditure
DE15563 describes an additional reason a charge was not covered under the participant's HIE plan and refers to the noncovered charge reported in DE15562. The above code values were designed to cover all line-item charges; not all values are appropriate in every file.

VARIABLE	DE15561	FFS FILE 18
Reimbursement		
DE15561 indicates the reimbursement amount for the line-item charge shown in DE15558.		

DE15561	
NUMBER OF OBSERVATIONS	4196
NUMBER OF MISSING	0
MEAN	30.99
MEDIAN	25.00
MINIMUM VALUE	0.00
MAXIMUM VALUE	1418.00
STANDARD DEVIATION	57.36
COEFFICIENT OF VARIATION	185.07
SKEWNESS	10.05
KURTOSIS	147.76

VARIABLE	DEI5605	FFS FILE 18
	Diagnosis/Problem code	
	CODES	
	blank - Not applicable, missing	
	DEI5605 indicates the code of the primary condition diagnosed by the provider. Codes were taken from the Hospital--International Classification of Diseases, Adapted 2nd Edition (H-ICDA-2), September, 1973. Diagnosis codes used in the HIE claims files are listed in Section I of "Codes Used."	

VARIABLE	DEI5601	FFS FILE 18
	Supply code	
	CODES	
	. - Not applicable, missing	
	DEI5601 identifies the supply sold by the provider. Each supply is identified using a coding system developed by the HIE. Supply codes are listed in Section III of "Codes Used."	

VARIABLE	DEI5602	FFS FILE 18
Amount sold		
CODES		
.	- Not applicable, missing	
DEI5602 indicates the number of units of the supply sold by the provider (e.g., 1). This quantity refers to the type of supply given in DEI5601, Supply Code.		

DEI5602	VALUE	FREQ	CUM FREQ	%	CUM %
1	2135	2135	2135	50.88	50.88
2	1920	1920	4055	45.76	96.64
3	34	34	4089	0.81	97.45
4	46	46	4135	1.10	98.55
5	23	23	4158	0.55	99.09
6	6	6	4164	0.14	99.24
8	10	10	4174	0.24	99.48
9	5	5	4175	0.02	99.50
10	5	5	4180	0.12	99.62
11	2	2	4182	0.05	99.67
12	6	6	4188	0.14	99.81
20	1	1	4189	0.02	99.83
30	1	1	4190	0.02	99.86
50	3	3	4193	0.07	99.93
96	1	1	4194	0.02	99.95
99	2	2	4196	0.05	100.00

Appendix A

PARTICIPATION INCENTIVE PAYMENTS

HIE-insured families were paid a participation incentive (PI) if their HIE plans could conceivably impose a greater financial burden than their existing health insurance policies.¹ Calculated yearly, the PI consisted of (1) an amount calculated to be the *maximum* difference between what the family would have to pay for health care under its HIE insurance plan and what it would have paid under its existing insurance plan, unless (2) the premium a family paid to maintain its existing insurance exceeded the maximum difference. In that case, the family was paid an amount equal to the premium payment.

The calculation of item 1 ignored the family's actual medical expenses. To illustrate, consider family X whose HIE plan specified 95 percent coinsurance up to a maximum out-of-pocket expenditure of \$450, above which care was free.² Family X's existing insurance specified a \$100 deductible, above which the family had to pay 20 percent coinsurance. Under its HIE policy, the family had to spend \$473.68 for medical services (with the 5 percent reimbursement) to reach the \$450 out-of-pocket maximum. For the same charge under its existing insurance, the family would have paid \$100 (the deductible) plus 20 percent of the amount between \$100 and \$473.68. The maximum difference was thus $473.68 - 100 - 0.2 (473.68 - 100) = 298.94$. Family X was entitled to \$298.94 per year for that portion of its participation incentive.

The total PI could not exceed the MDE specified in the family's HIE plan unless the family's share of its insurance premium exceeded the MDE. For example, if family X paid an insurance premium of \$300, its

¹Participation incentive payments were not offered to families receiving free care (plan A, described on p. 3) who had no premium to pay, families who had no health insurance before the experiment, and families whose other policies had equal or less generous terms, under all circumstances, than their HIE plan.

²In HIE terminology, maximum out-of-pocket expenditure is called "maximum dollar expenditure," or MDE.

total PI entitlement was \$450, not \$598.94 (300 + 298.94). If the family paid a premium of \$600, its PI was \$600 because the premium exceeded the MDE of \$450. On the other hand, a family who had a high MDE in its HIE plan and an existing insurance policy with 0 percent coinsurance, no deductible, and an employer-paid premium was entitled to the full MDE amount. The purpose of PI payments was to ensure that a family was no worse off financially by participating in the experiment--whether because of the cost of its insurance premium or the "worse" terms of its HIE insurance plan compared with its existing policy.³

As encouragement for families to complete their assigned enrollment terms, a portion of the family's annual PI was withheld until the last year of the term.⁴ The family received its full annual PI that last year, and the amount previously withheld was paid as part of a completion bonus when the family completed the physical screening examination and medical health questionnaire at exit.⁵

To measure enrollees' responsiveness to PI payments, a subset of families received their full annual PI in the next-to-last, as well as the last, year of their term. That "super PI bonus" was offered to 44.4 percent of the families assigned to insurance plans requiring 95 percent coinsurance, the highest rate (plans K-N, described on p. 3). Super PI

³Calculation of PI is further described in Clasquin and Brown, op. cit. The formula on p. 20 of that report should read $PI = \max[K \times PG, PR]$.

⁴The percentage of PI withheld depended on the site and assigned enrollment term, as follows:

	<i>3-yr Term</i>	<i>5-yr Term</i>
Dayton	25	15
Seattle	25	15
Fitchburg	33.3	25
Franklin Co.	33.3	25
Charleston	33.3	20
Georgetown Co.	33.3	20

If the discounted PI was not enough to reimburse the cost of the family's insurance premium, however, the family received the full amount of its premium. The difference between the premium and the discounted PI was then subtracted from the withheld amount.

⁵The rest of the completion bonus was the largest annual PI to which the family had been entitled during its enrollment (minus the withheld amount) or \$120, whichever was greater.

recipients represented all sites and both terms of enrollment except Dayton enrollees assigned to three-year terms, who had already begun their next-to-last year when super PI was instituted. Within the 95 percent coinsurance plans, super PI recipients were chosen using the "finite selection model." That model was developed by Rand to assign enrollees to experimental insurance plans so that, across plans, families resembled each other in 24 health and socioeconomic characteristics.⁶

⁶The finite selection model is described in Morris, *op. cit.*

Appendix B

HIE DATA FILES

This appendix identifies the data files that the HIE has either issued or expects to issue, grouped in topical series. As a tape of each file is issued, a companion codebook is published as a Rand Note. One Note may contain the codebooks for several files. In addition to issuing files and codebooks, HIE staff will prepare a user's guide to provide assistance in understanding and using the HIE database for analysis.

The list below cites codebooks for the files that have been issued, and file names for those not yet issued. At this time it is impossible to predict exact issue dates for future files and codebooks. This preliminary list is to alert prospective users to the variety of subject matter covered by the HIE database and to the existence of related files that should be used together.

Before ordering a file or codebook, be sure to verify its availability with the Rand Publications Department, using the reference numbers cited below (e.g., MS3).

ISSUED TO DATE

Master Sample Series

MS1. *Vol. 1: Codebook for Eligibility-Family Changes File*, by S. M. Polich and C. d'Arc Taylor, The Rand Corporation, N-2264/1-HHS, May 1986.

MS2. *Vol. 2: Codebook for Full Sample Demographic File*, by S. M. Polich et al., The Rand Corporation, N-2264/2-HHS, May 1986.

Aggregated Claims Series

AC1. *Vol. 1: Codebook for Fee-for-Service Annual Expenditures and Visit Counts*, by C. E. Peterson, M. Nelsen, and E. S. Bloomfield, The Rand Corporation, N-2360/1-HHS, May 1986.

ISSUED TO DATE (cont.)

Aggregated Claims Series (cont.)

AC2, AC3, AC4. *Vol. 2: Codebooks for Fee-for-Service Visits-- Outpatient, Inpatient, Dental*, by C. E. Peterson, M. Nelsen, D. L. Wesley, and E. S. Bloomfield, The Rand Corporation, N-2360/2-HHS, June 1986.

- AC2. FFS outpatient visits
- AC3. FFS inpatient visits
- AC4. FFS dental visits

AC5, AC6. *Vol. 3: Codebooks for Fee-for-Service Treatment Episodes and Annual Fee-for-Service Episode Counts*, by C. E. Peterson, C. d'Arc Taylor, and E. S. Bloomfield, The Rand Corporation, N-2360/3-HHS, June 1986.

- AC5. FFS treatment episodes
- AC6. FFS annual episode counts

Claims Line-Items Series

LI1 to LI14. *Vol. 1: Codebooks for Fee-for-Service Claims*, by C. E. Peterson, M. Nelsen, D. L. Wesley, E. S. Bloomfield, and S. M. Polich, The Rand Corporation, N-2347/1-HHS, June 1986.

- LI1. FFS data: hospital inpatient services
- LI2. FFS data: inpatient physician procedures billed by institutions
- LI3. FFS data: drugs prescribed by physicians
- LI4. FFS data: supplies prescribed by physicians
- LI5. FFS data: services rendered by physicians
- LI6. FFS data: drugs sold by physicians
- LI7. FFS data: supplies sold by physicians
- LI8. FFS data: injections administered by physicians
- LI9. FFS data: outpatient services billed by institutions
- LI10. FFS data: services rendered by dentists
- LI11. FFS data: drugs prescribed by dentists
- LI12. FFS data: drugs purchased
- LI13. FFS data: supplies purchased from pharmacies
- LI14. FFS data: supplies purchased from nonpharmacy suppliers

HIE Reference Series

RF1. *Codes Used in HIE Claims: Diagnoses, Symptoms, Procedures, Drugs, and Supplies*, by M. Nelsen and C. A. Edwards, The Rand Corporation, N-2349/1-HHS, May 1986.

TO BE ISSUED

Master Sample Series

MS3. Supplemental data file

Aggregated Claims Series

AC7. HMO and Seattle FFS annual expenditures and visit counts

AC8. HMO and Seattle FFS outpatient visits

AC9. HMO and Seattle FFS inpatient visits

Claims Line-Items Series

LI15. Seattle HMO data: hospital inpatient services

LI16. Seattle HMO data: inpatient physician services

LI17. Seattle HMO data: drugs prescribed by physicians

LI18. Seattle HMO data: supplies prescribed by physicians

LI19. Seattle HMO data: services rendered by physicians

LI20. Seattle HMO data: drugs dispensed by physicians

LI21. Seattle HMO data: supplies dispensed by physicians

LI22. Seattle HMO data: injections administered by physicians

LI23. Seattle HMO data: outpatient services provided by institutions

LI24. Seattle HMO data: drugs dispensed

LI25. Seattle HMO data: supplies dispensed

LI26. Seattle FFS data for HMO comparison: hospital inpatient services

LI27. Seattle FFS data for HMO comparison: inpatient physician procedures billed by institutions

LI28. Seattle FFS data for HMO comparison: outpatient services rendered by physicians

LI29. Seattle FFS data for HMO comparison: injections administered by physicians

HIE Reference Series

RF2. Providers cited in HIE data

TO BE ISSUED (cont.)

Medical Disorder Series

- MD1. Adult medical disorders at enrollment and exit
- MD2. Infant and child medical disorders at enrollment and exit

Health Status and Attitude Series

- HS1. Adults at enrollment and exit
- HS2. Children at enrollment and exit

Medical History Questionnaire Series

- MH1A. Dayton adults at enrollment, Form A
- MH1B. Dayton adults at enrollment, Form B
- MH2A. NonDayton adults at enrollment, Form A
- MH2B. NonDayton adults at enrollment, Form B
- MH3A. Adults at exit, Form A
- MH3B. Adults at exit, Form B
- MH4A. Dayton children at enrollment, Form A
- MH4B. Dayton children at enrollment, Form B
- MH5A. NonDayton children at enrollment, Form A
- MH5B. NonDayton children at enrollment, Form B
- MH6A. Children at exit, Form A
- MH6B. Children at exit, Form B
- MH7A. Dayton infants at enrollment, Form A
- MH7B. Dayton infants at enrollment, Form B
- MH8A. NonDayton infants at enrollment, Form A
- MH8B. NonDayton infants at enrollment, Form B
- MH9A. Infants at exit, Form A
- MH9B. Infants at exit, Form B

Appendix C

FILE DICTIONARIES

This appendix contains the 14 file dictionaries for the character version of the fee-for-service claims line-item files. Each dictionary has two parts: basic identifying data, and listing by location.

Table C.1

FFS FILE 01

BASIC IDENTIFYING DATA

Data file name	PE01AA01.PUF.DATA
Creation date	November 25, 1985
Variable format	Character
Total number of data elements	39
Header length (bytes)	20
Primary data length (bytes)	264
Record length (bytes)	284

Table C.2

FFS FILE 01
LISTING BY LOCATION

Name	Location	Length	Type	Name	Location	Length	Type
FILENAME	1	6	A	DEI5557	133	8	I
PERSON	7	8	A	DEI5558	141	8	F
SITE	15	1	A	DEI5559	149	8	F
INSTAT	16	1	A	DEI5560	157	8	I
CONTYR	17	2	A	DEI5562	165	8	F
FILLER	19	2	A	DEI5563	173	8	I
DEI5553	21	8	A	DEI5561	181	8	F
DEI5502	29	8	A	DEI5522	189	8	A
DEI5513	37	8	I	DEI5523	197	8	I
DEI5555	45	8	I	DEI5524	205	8	A
DEI5514	53	8	I	DEI5525	213	8	A
DEI5520	61	8	I	DEI5526	221	8	I
DEI5521	69	8	A	DEI5527	229	8	A
DEI5515	77	8	A	DEI5528	237	8	A
DEI5508	85	8	A	DEI5529	245	8	I
DEI5509	93	8	A	DEI5530	253	8	A
DEI5519	101	8	I	DEI5531	261	8	A
DEI5511	109	8	I	DEI5532	269	8	I
DEI5512	117	8	I	DEI5533	277	8	A
DEI5556	125	8	I				

NOTE: "Type" refers to whether the variable values are alphanumeric (A), integer (I), or fixed-decimal in 8.2 format (F). Missing values are represented differently for each type: A = bbbbbbbb, I = bbbbbbb., and F = bbbbb.bb ("b" meaning blank). To obtain the appropriate positive and missing values, read all values as alphanumeric, then convert "I" data to integers and "F" data to 8.2 format.

Table C.3
FFS FILE 03
BASIC IDENTIFYING DATA

Data file name	PE03AA01.PUF.DATA
Creation date	November 27, 1985
Variable format	Character
Total number of data elements	36
Header length (bytes)	20
Primary data length (bytes)	240
Record length (bytes)	260

Table C.4

FFS FILE 03
LISTING BY LOCATION

Name	Location	Length	Type	Name	Location	Length	Type
FILENAME	1	6	A	DEI5609	117	8	F
PERSON	7	8	A	DEI5519	125	8	I
SITE	15	1	A	DEI5558	133	8	F
INSTAT	16	1	A	DEI5559	141	8	F
CONTYR	17	2	A	DEI5560	149	8	I
FILLER	19	2	A	DEI5561	157	8	F
DEI5553	21	8	A	DEI5522	165	8	A
DEI5502	29	8	A	DEI5523	173	8	I
DEI5513	37	8	I	DEI5524	181	8	A
DEI5555	45	8	I	DEI5525	189	8	A
DEI5514	53	8	I	DEI5526	197	8	I
DEI5520	61	8	I	DEI5527	205	8	A
DEI5515	69	8	A	DEI5528	213	8	A
DEI5508	77	8	A	DEI5529	221	8	I
DEI5509	85	8	A	DEI5530	229	8	A
DEI5511	93	8	I	DEI5531	237	8	A
DEI5512	101	8	I	DEI5532	245	8	I
DEI5606	109	8	I	DEI5533	253	8	A

NOTE: "Type" refers to whether the variable values are alphanumeric (A), integer (I), or fixed-decimal in 8.2 format (F). Missing values are represented differently for each type: A = bbbbbbbb, I = bbbbbbb., and F = bbbbbb.bb ("b" meaning blank). To obtain the appropriate positive and missing values, read all values as alphanumeric, then convert "I" data to integers and "F" data to 8.2 format.

Table C.5
FFS FILE 04
BASIC IDENTIFYING DATA

Data file name	PE04AA01.PUF.DATA
Creation date	November 27, 1985
Variable format	Character
Total number of data elements	52
Header length (bytes)	20
Primary data length (bytes)	368
Record length (bytes)	388

Table C.6

FFS FILE 04
LISTING BY LOCATION

Name	Location	Length	Type	Name	Location	Length	Type
FILENAME	1	6	A	DEI5525	181	8	A
PERSON	7	8	A	DEI5526	189	8	I
SITE	15	1	A	DEI5527	197	8	A
INSTAT	16	1	A	DEI5575	205	8	I
CONTYR	17	2	A	DEI5577	213	8	I
FILLER	19	2	A	DEI5598	221	8	I
DEI5553	21	8	A	DEI5528	229	8	A
DEI5502	29	8	A	DEI5529	237	8	I
DEI5503	37	8	A	DEI5530	245	8	A
DEI5505	45	8	A	DEI5578	253	8	I
DEI5565	53	8	A	DEI5580	261	8	I
DEI5567	61	8	I	DEI5599	269	8	I
DEI5568	69	8	A	DEI5531	277	8	A
DEI5569	77	8	A	DEI5532	285	8	I
DEI5570	85	8	A	DEI5533	293	8	A
DEI5571	93	8	A	DEI5581	301	8	I
DEI5511	101	8	I	DEI5583	309	8	I
DEI5512	109	8	I	DEI5632	317	8	I
DEI5566	117	8	I	DEI5666	325	8	I
DEI5596	125	8	I	DEI5589	333	8	A
DEI5522	133	8	A	DEI5590	341	8	I
DEI5523	141	8	I	DEI5591	349	8	I
DEI5524	149	8	A	DEI5592	357	8	I
DEI5572	157	8	I	DEI5593	365	8	I
DEI5574	165	8	I	DEI5594	373	8	I
DEI5597	173	8	I	DEI5595	381	8	I

NOTE: "Type" refers to whether the variable values are alphanumeric (A), integer (I), or fixed-decimal in 8.2 format (F). Missing values are represented differently for each type: A = bbbbbbbb, I = bbbbbbb., and F = bbbbbb.bb ("b" meaning blank). To obtain the appropriate positive and missing values, read all values as alphanumeric, then convert "I" data to integers and "F" data to 8.2 format.

Table C.7

FFS FILE 05
BASIC IDENTIFYING DATA

Data file name	PE05AA01.PUF.DATA
Creation date	November 27, 1985
Variable format	Character
Total number of data elements	44
Header length (bytes)	20
Primary data length (bytes)	304
Record length (bytes)	324

Table C.8
FFS FILE 05
LISTING BY LOCATION

Name	Location	Length	Type	Name	Location	Length	Type
FILENAME	1	6	A	DEI5572	149	8	I
PERSON	7	8	A	DEI5574	157	8	I
SITE	15	1	A	DEI5597	165	8	I
INSTAT	16	1	A	DEI5525	173	8	A
CONTYR	17	2	A	DEI5526	181	8	I
FILLER	19	2	A	DEI5527	189	8	A
DEI5553	21	8	A	DEI5575	197	8	I
DEI5502	29	8	A	DEI5577	205	8	I
DEI5503	37	8	A	DEI5598	213	8	I
DEI5505	45	8	A	DEI5528	221	8	A
DEI5565	53	8	A	DEI5529	229	8	I
DEI5567	61	8	I	DEI5530	237	8	A
DEI5568	69	8	A	DEI5578	245	8	I
DEI5569	77	8	A	DEI5580	253	8	I
DEI5570	85	8	A	DEI5599	261	8	I
DEI5511	93	8	I	DEI5531	269	8	A
DEI5512	101	8	I	DEI5532	277	8	I
DEI5566	109	8	I	DEI5533	285	8	A
DEI5596	117	8	I	DEI5581	293	8	I
DEI5522	125	8	A	DEI5583	301	8	I
DEI5523	133	8	I	DEI5601	309	8	I
DEI5524	141	8	A	DEI5654	317	8	I

NOTE: "Type" refers to whether the variable values are alphanumeric (A), integer (I), or fixed-decimal in 8.2 format (F). Missing values are represented differently for each type: A = bbbbbbbb, I = bbbbbbb., and F = bbbbb.bb ("b" meaning blank). To obtain the appropriate positive and missing values, read all values as alphanumeric, then convert "I" data to integers and "F" data to 8.2 format.

Table C.9

FFS FILE 06
BASIC IDENTIFYING DATA

Data file name	PE06AA01.PUF.DATA
Creation date	November 27, 1985
Variable format	Character
Total number of data elements	53
Header length (bytes)	20
Primary data length (bytes)	376
Record length (bytes)	396

Table C.10
FFS FILE 06
LISTING BY LOCATION

Name	Location	Length	Type	Name	Location	Length	Type
FILENAME	1	6	A	DEI5559	181	8	F
PERSON	7	8	A	DEI5560	189	8	I
SITE	15	1	A	DEI5561	197	8	F
INSTAT	16	1	A	DEI5596	205	8	I
CONTYR	17	2	A	DEI5522	213	8	A
FILLER	19	2	A	DEI5523	221	8	I
DEI5553	21	8	A	DEI5524	229	8	A
DEI5502	29	8	A	DEI5572	237	8	I
DEI5555	37	8	I	DEI5574	245	8	I
DEI5584	45	8	I	DEI5597	253	8	I
DEI5503	53	8	A	DEI5525	261	8	A
DEI5505	61	8	A	DEI5526	269	8	I
DEI5565	69	8	A	DEI5527	277	8	A
DEI5567	77	8	I	DEI5575	285	8	I
DEI5568	85	8	A	DEI5577	293	8	I
DEI5569	93	8	A	DEI5598	301	8	I
DEI5570	101	8	A	DEI5528	309	8	A
DEI5571	109	8	A	DEI5529	317	8	I
DEI5511	117	8	I	DEI5530	325	8	A
DEI5512	125	8	I	DEI5578	333	8	I
DEI5566	133	8	I	DEI5580	341	8	I
DEI5606	141	8	I	DEI5599	349	8	I
DEI5607	149	8	I	DEI5531	357	8	A
DEI5608	157	8	I	DEI5532	365	8	I
DEI5609	165	8	F	DEI5533	373	8	A
DEI5558	173	8	F	DEI5581	381	8	I
				DEI5583	389	8	I

NOTE: "Type" refers to whether the variable values are alphanumeric (A), integer (I), or fixed-decimal in 8.2 format (F). Missing values are represented differently for each type: A = bbbbbbbb, I = bbbbbbb., and F = bbbbbb.bb ("b" meaning blank). To obtain the appropriate positive and missing values, read all values as alphanumeric, then convert "I" data to integers and "F" data to 8.2 format.

Table C.11

FFS FILE 08
BASIC IDENTIFYING DATA

Data file name	PE08AA01.PUF.DATA
Creation date	November 27, 1985
Variable format	Character
Total number of data elements	63
Header length (bytes)	20
Primary data length (bytes)	456
Record length (bytes)	476

Table C.12
FFS FILE 08
LISTING BY LOCATION

Name	Location	Length	Type	Name	Location	Length	Type
FILENAME	1	6	A	DEI5526	229	8	I
PERSON	7	8	A	DEI5527	237	8	A
SITE	15	1	A	DEI5575	245	8	I
INSTAT	16	1	A	DEI5577	253	8	I
CONTYR	17	2	A	DEI5598	261	8	I
FILLER	19	2	A	DEI5528	269	8	A
DEI5553	21	8	A	DEI5529	277	8	I
DEI5502	29	8	A	DEI5530	285	8	A
DEI5555	37	8	I	DEI5578	293	8	I
DEI5584	45	8	I	DEI5580	301	8	I
DEI5503	53	8	A	DEI5599	309	8	I
DEI5505	61	8	A	DEI5531	317	8	A
DEI5565	69	8	A	DEI5532	325	8	I
DEI5567	77	8	I	DEI5533	333	8	A
DEI5568	85	8	A	DEI5581	341	8	I
DEI5569	93	8	A	DEI5583	349	8	I
DEI5570	101	8	A	DEI5666	357	8	I
DEI5511	109	8	I	DEI5589	365	8	A
DEI5512	117	8	I	DEI5590	373	8	I
DEI5566	125	8	I	DEI5591	381	8	I
DEI5558	133	8	F	DEI5592	389	8	I
DEI5559	141	8	F	DEI5593	397	8	I
DEI5560	149	8	I	DEI5594	405	8	I
DEI5561	157	8	F	DEI5595	413	8	I
DEI5596	165	8	I	DEI5588	421	8	I
DEI5522	173	8	A	DEI5667	429	8	I
DEI5523	181	8	I	DEI5668	437	8	I
DEI5524	189	8	A	DEI5669	445	8	I
DEI5572	197	8	I	DEI5670	453	8	I
DEI5574	205	8	I	DEI5586	461	8	I
DEI5597	213	8	I	DEI5587	469	8	I
DEI5525	221	8	A				

NOTE: "Type" refers to whether the variable values are alphanumeric (A), integer (I), or fixed-decimal in 8.2 format (F). Missing values are represented differently for each type: A = bbbbbb., I = bbbbbb., and F = bbbbbb.bb ("b" meaning blank). To obtain the appropriate positive and missing values, read all values as alphanumeric, then convert "I" data to integers and "F" data to 8.2 format.

Table C.13

FFS FILE 09
BASIC IDENTIFYING DATA

Data file name	PE09AA01.PUF.DATA
Creation date	November 27, 1985
Variable format	Character
Total number of data elements	53
Header length (bytes)	20
Primary data length (bytes)	376
Record length (bytes)	396

Table C.14
FFS FILE 09
LISTING BY LOCATION

Name	Location	Length	Type	Name	Location	Length	Type
FILENAME	1	6	A	DEI5561	181	8	F
PERSON	7	8	A	DEI5596	189	8	I
SITE	15	1	A	DEI5522	197	8	A
INSTAT	16	1	A	DEI5523	205	8	I
CONTYR	17	2	A	DEI5524	213	8	A
FILLER	19	2	A	DEI5572	221	8	I
DEI5553	21	8	A	DEI5574	229	8	I
DEI5502	29	8	A	DEI5597	237	8	I
DEI5555	37	8	I	DEI5525	245	8	A
DEI5584	45	8	I	DEI5526	253	8	I
DEI5503	53	8	A	DEI5527	261	8	A
DEI5505	61	8	A	DEI5575	269	8	I
DEI5565	69	8	A	DEI5577	277	8	I
DEI5567	77	8	I	DEI5598	285	8	I
DEI5568	85	8	A	DEI5528	293	8	A
DEI5569	93	8	A	DEI5529	301	8	I
DEI5570	101	8	A	DEI5530	309	8	A
DEI5571	109	8	A	DEI5578	317	8	I
DEI5511	117	8	I	DEI5580	325	8	I
DEI5512	125	8	I	DEI5599	333	8	I
DEI5566	133	8	I	DEI5531	341	8	A
DEI5558	141	8	F	DEI5532	349	8	I
DEI5559	149	8	F	DEI5533	357	8	A
DEI5560	157	8	I	DEI5581	365	8	I
DEI5562	165	8	F	DEI5583	373	8	I
DEI5563	173	8	I	DEI5601	381	8	I
				DEI5602	389	8	I

NOTE: "Type" refers to whether the variable values are alphanumeric (A), integer (I), or fixed-decimal in 8.2 format (F). Missing values are represented differently for each type: A = bbbbbbbb, I = bbbbbbb., and F = bbbbbb.bb ("b" meaning blank). To obtain the appropriate positive and missing values, read all values as alphanumeric, then convert "I" data to integers and "F" data to 8.2 format.

Table C.15

FFS FILE 10
BASIC IDENTIFYING DATA

Data file name	PE10AA01.PUF.DATA
Creation date	November 27, 1985
Variable format	Character
Total number of data elements	69
Header length (bytes)	20
Primary data length (bytes)	504
Record length (bytes)	524

Table C.16

FFS FILE 10
LISTING BY LOCATION

Name	Location	Length	Type	Name	Location	Length	Type
FILENAME	1	6	A	DEI5597	245	8	I
PERSON	7	8	A	DEI5525	253	8	A
SITE	15	1	A	DEI5526	261	8	I
INSTAT	16	1	A	DEI5527	269	8	A
CONTYR	17	2	A	DEI5575	277	8	I
FILLER	19	2	A	DEI5577	285	8	I
DEI5553	21	8	A	DEI5598	293	8	I
DEI5502	29	8	A	DEI5528	301	8	A
DEI5555	37	8	I	DEI5529	309	8	I
DEI5584	45	8	I	DEI5530	317	8	A
DEI5503	53	8	A	DEI5578	325	8	I
DEI5505	61	8	A	DEI5580	333	8	I
DEI5565	69	8	A	DEI5599	341	8	I
DEI5567	77	8	I	DEI5531	349	8	A
DEI5568	85	8	A	DEI5532	357	8	I
DEI5569	93	8	A	DEI5533	365	8	A
DEI5570	101	8	A	DEI5581	373	8	I
DEI5571	109	8	A	DEI5583	381	8	I
DEI5511	117	8	I	DEI5666	389	8	I
DEI5512	125	8	I	DEI5589	397	8	A
DEI5566	133	8	I	DEI5590	405	8	I
DEI5606	141	8	I	DEI5591	413	8	I
DEI5607	149	8	I	DEI5592	421	8	I
DEI5609	157	8	F	DEI5593	429	8	I
DEI5558	165	8	F	DEI5594	437	8	I
DEI5559	173	8	F	DEI5595	445	8	I
DEI5560	181	8	I	DEI5665	453	8	I
DEI5561	189	8	F	DEI5613	461	8	A
DEI5596	197	8	I	DEI5614	469	8	I
DEI5522	205	8	A	DEI5615	477	8	I
DEI5523	213	8	I	DEI5616	485	8	I
DEI5524	221	8	A	DEI5617	493	8	I
DEI5572	229	8	I	DEI5618	501	8	I
DEI5574	237	8	I	DEI5619	509	8	I
				DEI5602	517	8	I

NOTE: "Type" refers to whether the variable values are alphanumeric (A), integer (I), or fixed-decimal in 8.2 format (F). Missing values are represented differently for each type: A = bbbbbbbb, I = bbbbbbb., and F = bbbbb.bb ("b" meaning blank). To obtain the appropriate positive and missing values, read all values as alphanumeric, then convert "I" data to integers and "F" data to 8.2 format.

Table C.17

FFS FILE 11
BASIC IDENTIFYING DATA

Data file name	PE11AA01.PUF.DATA
Creation date	November 27, 1985
Variable format	Character
Total number of data elements	45
Header length (bytes)	20
Primary data length (bytes)	312
Record length (bytes)	332

Table C.18

FFS FILE 11
LISTING BY LOCATION

Name	Location	Length	Type	Name	Location	Length	Type
FILENAME	1	6	A	DEI5560	157	8	I
PERSON	7	8	A	DEI5561	165	8	F
SITE	15	1	A	DEI5522	173	8	A
INSTAT	16	1	A	DEI5523	181	8	I
CONTYR	17	2	A	DEI5524	189	8	A
FILLER	19	2	A	DEI5572	197	8	I
DEI5553	21	8	A	DEI5574	205	8	I
DEI5502	29	8	A	DEI5525	213	8	A
DEI5555	37	8	I	DEI5526	221	8	I
DEI5584	45	8	I	DEI5527	229	8	A
DEI5503	53	8	A	DEI5575	237	8	I
DEI5505	61	8	A	DEI5577	245	8	I
DEI5565	69	8	A	DEI5528	253	8	A
DEI5567	77	8	I	DEI5529	261	8	I
DEI5568	85	8	A	DEI5530	269	8	A
DEI5569	93	8	A	DEI5578	277	8	I
DEI5570	101	8	A	DEI5580	285	8	I
DEI5511	109	8	I	DEI5531	293	8	A
DEI5512	117	8	I	DEI5532	301	8	I
DEI5566	125	8	I	DEI5533	309	8	A
DEI5557	133	8	I	DEI5581	317	8	I
DEI5558	141	8	F	DEI5583	325	8	I
DEI5559	149	8	F				

NOTE: "Type" refers to whether the variable values are alphanumeric (A), integer (I), or fixed-decimal in 8.2 format (F). Missing values are represented differently for each type: A = bbbbbbbb, I = bbbbbbb., and F = bbbbbb.bb ("b" meaning blank). To obtain the appropriate positive and missing values, read all values as alphanumeric, then convert "I" data to integers and "F" data to 8.2 format.

Table C.19
FFS FILE 12
BASIC IDENTIFYING DATA

Data file name	PE12AA01.PUF.DATA
Creation date	November 27, 1985
Variable format	Character
Total number of data elements	33
Header length (bytes)	20
Primary data length (bytes)	216
Record length (bytes)	236

Table C.20
FFS FILE 12
LISTING BY LOCATION

Name	Location	Length	Type	Name	Location	Length	Type
FILENAME	1	6	A	DEI5602	101	8	I
PERSON	7	8	A	DEI5558	109	8	F
SITE	15	1	A	DEI5559	117	8	F
INSTAT	16	1	A	DEI5560	125	8	I
CONTYR	17	2	A	DEI5561	133	8	F
FILLER	19	2	A	DEI5631	141	8	I
DEI5553	21	8	A	DEI5630	149	8	I
DEI5502	29	8	A	DEI5620	157	8	A
DEI5555	37	8	I	DEI5621	165	8	A
DEI5584	45	8	I	DEI5622	173	8	A
DEI5503	53	8	A	DEI5623	181	8	A
DEI5505	61	8	A	DEI5624	189	8	A
DEI5511	69	8	I	DEI5626	197	8	I
DEI5512	77	8	I	DEI5627	205	8	I
DEI5566	85	8	I	DEI5628	213	8	I
DEI5625	93	8	A	DEI5632	221	8	I
				DEI5629	229	8	I

NOTE: "Type" refers to whether the variable values are alphanumeric (A), integer (I), or fixed-decimal in 8.2 format (F). Missing values are represented differently for each type: A = bbbbbbbb, I = bbbbbbb., and F = bbbbbb.bb ("b" meaning blank). To obtain the appropriate positive and missing values, read all values as alphanumeric, then convert "I" data to integers and "F" data to 8.2 format.

Table C.21
FFS FILE 13
BASIC IDENTIFYING DATA

Data file name	PE13AA01.PUF.DATA
Creation date	November 27, 1985
Variable format	Character
Total number of data elements	24
Header length (bytes)	20
Primary data length (bytes)	144
Record length (bytes)	164

Table C.22

FFS FILE 13
LISTING BY LOCATION

Name	Location	Length	Type	Name	Location	Length	Type
FILENAME	1	6	A	DEI5512	69	8	I
PERSON	7	8	A	DEI5566	77	8	I
SITE	15	1	A	DEI5630	85	8	I
INSTAT	16	1	A	DEI5631	93	8	I
CONTYR	17	2	A	DEI5666	101	8	I
FILLER	19	2	A	DEI5589	109	8	A
DEI5553	21	8	A	DEI5590	117	8	I
DEI5502	29	8	A	DEI5591	125	8	I
DEI5584	37	8	I	DEI5592	133	8	I
DEI5503	45	8	A	DEI5593	141	8	I
DEI5505	53	8	A	DEI5594	149	8	I
DEI5511	61	8	I	DEI5595	157	8	I

NOTE: "Type" refers to whether the variable values are alphanumeric (A), integer (I), or fixed-decimal in 8.2 format (F). Missing values are represented differently for each type: A = bbbbbbbb, I = bbbbbbb., and F = bbbbbb.bb ("b" meaning blank). To obtain the appropriate positive and missing values, read all values as alphanumeric, then convert "I" data to integers and "F" data to 8.2 format.

Table C.23

FFS FILE 15
BASIC IDENTIFYING DATA

Data file name	PE15AA01.PUF.DATA
Creation date	November 27, 1985
Variable format	Character
Total number of data elements	37
Header length (bytes)	20
Primary data length (bytes)	248
Record length (bytes)	268

Table C.24

FFS FILE 15
LISTING BY LOCATION

Name	Location	Length	Type	Name	Location	Length	Type
FILENAME	1	6	A	DEI5649	117	8	I
PERSON	7	8	A	DEI5590	125	8	I
SITE	15	1	A	DEI5591	133	8	I
INSTAT	16	1	A	DEI5592	141	8	I
CONTYR	17	2	A	DEI5593	149	8	I
FILLER	19	2	A	DEI5594	157	8	I
DEI5553	21	8	A	DEI5595	165	8	I
DEI5502	29	8	A	DEI5658	173	8	I
DEI5603	37	8	I	DEI5659	181	8	I
DEI5604	45	8	A	DEI5660	189	8	I
DEI5650	53	8	I	DEI5661	197	8	I
DEI5653	61	8	I	DEI5588	205	8	I
DEI5558	69	8	F	DEI5667	213	8	I
DEI5559	77	8	F	DEI5668	221	8	I
DEI5560	85	8	I	DEI5669	229	8	I
DEI5561	93	8	F	DEI5670	237	8	I
DEI5666	101	8	I	DEI5586	245	8	I
DEI5589	109	8	A	DEI5587	253	8	I
				DEI5652	261	8	A

NOTE: "Type" refers to whether the variable values are alphanumeric (A), integer (I), or fixed-decimal in 8.2 format (F). Missing values are represented differently for each type: A = bbbbbb., I = bbbbbb., and F = bbbbbb.bb ("b" meaning blank). To obtain the appropriate positive and missing values, read all values as alphanumeric, then convert "I" data to integers and "F" data to 8.2 format.

Table C.25

FFS FILE 16
BASIC IDENTIFYING DATA

Data file name	PE16AA01.PUF.DATA
Creation date	November 27, 1985
Variable format	Character
Total number of data elements	17
Header length (bytes)	20
Primary data length (bytes)	88
Record length (bytes)	108

Table C.26

FFS FILE 16
LISTING BY LOCATION

Name	Location	Length	Type	Name	Location	Length	Type
FILENAME	1	6	A	DEI5604	45	8	A
PERSON	7	8	A	DEI5558	53	8	F
SITE	15	1	A	DEI5559	61	8	F
INSTAT	16	1	A	DEI5560	69	8	I
CONTYR	17	2	A	DEI5561	77	8	F
FILLER	19	2	A	DEI5605	85	8	A
DEI5553	21	8	A	DEI5601	93	8	I
DEI5502	29	8	A	DEI5602	101	8	I
DEI5603	37	8	I				

NOTE: "Type" refers to whether the variable values are alphanumeric (A), integer (I), or fixed-decimal in 8.2 format (F). Missing values are represented differently for each type: A = bbbbbbbb, I = bbbbbbb., and F = bbbbbb.bb ("b" meaning blank). To obtain the appropriate positive and missing values, read all values as alphanumeric, then convert "I" data to integers and "F" data to 8.2 format.

Table C.27

FFS FILE 18
BASIC IDENTIFYING DATA

Data file name	PE18AA01.PUF.DATA
Creation date	November 27, 1985
Variable format	Character
Total number of data elements	19
Header length (bytes)	20
Primary data length (bytes)	104
Record length (bytes)	124

Table C.28

FFS FILE 18
LISTING BY LOCATION

Name	Location	Length	Type	Name	Location	Length	Type
FILENAME	1	6	A	DEI5558	53	8	F
PERSON	7	8	A	DEI5559	61	8	F
SITE	15	1	A	DEI5560	69	8	I
INSTAT	16	1	A	DEI5562	77	8	F
CONTYR	17	2	A	DEI5563	85	8	I
FILLER	19	2	A	DEI5561	93	8	F
DEI5553	21	8	A	DEI5605	101	8	A
DEI5502	29	8	A	DEI5601	109	8	I
DEI5603	37	8	I	DEI5602	117	8	I
DEI5604	45	8	A				

NOTE: "Type" refers to whether the variable values are alphanumeric (A), integer (I), or fixed-decimal in 8.2 format (F). Missing values are represented differently for each type: A = bbbbbbbb, I = bbbbbbb., and F = bbbbb.bb ("b" meaning blank). To obtain the appropriate positive and missing values, read all values as alphanumeric, then convert "I" data to integers and "F" data to 8.2 format.

Appendix D
NONPRESCRIPTION DRUGS COVERED BY THE HIE
FOR CERTAIN CONDITIONS

Condition	Nonprescription drugs covered
Chronic Allergic (Respiratory) Conditions	Decongestants Antihistamines
Arthritis/Rheumatism (spondylolithesis)	Aspirin and similar aspirin-containing preparations
Diabetes	Insulin and associated supplies
Family Planning	Contraceptive substances
Chronic Lower Gastrointestinal Disease (enteritis, colitis, diverticulitis, hemorrhoidal disease, chronic constipation)	Stool softeners Bulk formers Laxatives Suppositories Hemorrhoidal preparations
Chronic Upper Gastrointestinal Disease (peptic ulcer, duodenal ulcer, gastric or stomach ulcer, esophagitis, gastrectomy, etc.)	Antacids Digestive enzymes
Pregnancy	Iron preparations Prenatal vitamins Stool softeners Bulk formers Laxatives
Nursing Mother	Vitamins
Chronic Respiratory Disease	Bronchial dilators Expectorants Cough suppressants
Chronic Skin Conditions:	
Acne	Anti-acne agents
Psoriasis, atopic dermatitis	Anti-psoriatic agents
Eczema, xerosis	Anti-eczema agents
Chronic thrombophlebitis, cardiac valvular disease, thrombosis	Aspirin


Appendix E

FAMILY HEALTH PROTECTION PLAN

PHARMACY MEDICAL EXPENSE REPORT

MAIL TO: FAMILY HEALTH PROTECTION PLAN, P.O. BOX 2076, OAKLAND, CA. 94604

PART 1 — PARTICIPANT TO FILL IN ITEMS 1 THROUGH 7 PLEASE PRINT OR TYPE

1 Last Name of Patient	First	M.I.	2 Sex	3 Age	4 Patient's Family No
5 Patient's Address	City, State, Zip Code				6 Patient's Individual No
7 I authorize any holder of medical or other information about the patient to release to the Family Health Protection Plan or its intermediaries any information needed for this or related medical reports. I permit a copy of this authorization to be used in place of the original. In conformance with the Family Health Protection Plan Enrollment Agreement, all health care benefits covering the Patient are hereby assigned to the Family Health Protection Plan.					
SIGN HERE 		Signature of Adult Participant or Guardian of Minor Participant		Print Adult's name	Date Signed

PART 2 — PHARMACIST TO COMPLETE PART 2-FILL IN ITEMS 8 THROUGH 15. PLEASE PRINT OR TYPE


8 PHARMACIST TO COMPLETE PART TWO - PLEASE PRINT OR TYPE. - For drugs purchased with a prescription. Fill in items 8 through 15. For drugs purchased without a prescription, complete the following boxes: Name of drug, Strength (if applicable), Dosage form, Metric quantity, and Charge. Also, sign and date this form.
NOTE: Over-the-counter (non-legend) drugs (with or without a prescription) should be paid for by the participant at the time of purchase, as FHPP cannot guarantee their reimbursement to the provider.

A	Date Item Dispensed	Prescription No.	Name of Drug Dispensed & Manufacturer (See Item 9 below)	Strength	Dosage form	Physician's Dosage Instructions		
	Date Prescription Written	How many refills were authorized on this Prescription No.?	Physician Prescribed Brand <input type="checkbox"/> Generic <input type="checkbox"/>	Name and Address of Prescribing Physician		Metric Quantity	Prescription Was: <input type="checkbox"/> Written by Physician <input type="checkbox"/> Phoned by Physician	Charge
B	Date Item Dispensed	Prescription No.	Name of Drug Dispensed & Manufacturer (See Item 9 below)	Strength	Dosage form	Physician's Dosage Instructions		
	Date Prescription Written	How many refills were authorized on this Prescription No.?	Physician Prescribed Brand <input type="checkbox"/> Generic <input type="checkbox"/>	Name and Address of Prescribing Physician		Metric Quantity	Prescription Was: <input type="checkbox"/> Written by Physician <input type="checkbox"/> Phoned by Physician	Charge
C	Date Item Dispensed	Prescription No.	Name of Drug Dispensed & Manufacturer (See Item 9 below)	Strength	Dosage form	Physician's Dosage Instructions		
	Date Prescription Written	How many refills were authorized on this Prescription No.?	Physician Prescribed Brand <input type="checkbox"/> Generic <input type="checkbox"/>	Name and Address of Prescribing Physician		Metric Quantity	Prescription Was: <input type="checkbox"/> Written by Physician <input type="checkbox"/> Phoned by Physician	Charge
D	Date Item Dispensed	Prescription No.	Name of Drug Dispensed & Manufacturer (See Item 9 below)	Strength	Dosage form	Physician's Dosage Instructions		
	Date Prescription Written	How many refills were authorized on this Prescription No.?	Physician Prescribed Brand <input type="checkbox"/> Generic <input type="checkbox"/>	Name and Address of Prescribing Physician		Metric Quantity	Prescription Was: <input type="checkbox"/> Written by Physician <input type="checkbox"/> Phoned by Physician	Charge

9 For Compounded Prescriptions, List the Ingredients and Total Charge for Each Compounded Prescription

13 Name and Address of Provider

15 I hereby certify that the services and/or supplies listed above have been provided on the date(s) shown

PROVIDER'S SIGNATURE 

16 I hereby authorize payment directly to the above-named provider of the benefits otherwise payable to me, but not to exceed the charges shown. I understand that I am financially responsible for any charges not covered by the Family Health Protection Plan.

ADULT PARTICIPANT'S SIGNATURE 

10. TOTAL CHARGE

11. AMOUNT PAID, IF ANY

12. BALANCE DUE

14 Employer I.D. Number

Telephone No

Date Signed

Date Signed

Appendix F

FAMILY HEALTH PROTECTION PLAN INPATIENT HOSPITAL AND SKILLED NURSING CARE MEDICAL EXPENSE REPORT MAIL TO: FAMILY HEALTH PROTECTION PLAN, P.O. BOX 2076, OAKLAND, CALIFORNIA 94604

PART 1 — PARTICIPANT TO FILL IN ITEMS 1 THROUGH 9						
Copy From Identification Card	1. Last Name of Patient	First Name	MI	2. Sex M <input type="checkbox"/> F <input type="checkbox"/>	3. Age	4. Patient's Family No.
	5. Patient's Address	City, State, Zip Code			6. Patient's Individual No.	
7. Was illness or injury accident related? Yes <input type="checkbox"/> No <input type="checkbox"/>		8. Was your illness or injury connected with your employment? Yes <input type="checkbox"/> No <input type="checkbox"/>				
9. I authorize any holder of medical or other information about the patient to release to the Family Health Protection Plan or its intermediaries any information needed for this or related medical reports. I permit a copy of this authorization to be used in place of the original, and request payment of medical benefits to the party who accepts assignment below or the plan-holder, if not assigned. In conformance with the Family Health Protection Plan Enrollment Agreement, all health care benefits covering the patient are hereby assigned to Family Health Protection Plan.						
SIGN HERE		Signature of Adult Participant or Guardian of Minor Participant			Print Adult's Name	Date Signed
PART 2 — HOSPITAL OR SKILLED NURSING FACILITY MUST COMPLETE ITEMS 10 THROUGH 26 AND ATTACH ITEMIZED BILL						
10. Provider Name and Address		11. Date of This Admission		12. Date of Discharge		13. Full Name of Admitting Physician
		14. Period covered by Billing From (Mo/Day/Yr)		Thru (Mo/Day/Yr)		
				15. Attending Physician(s) (if different from above)		
16. Provider Tax I.D. Number		17. Medical Record No.		18. Billing Date (Mo/Day/Yr)		
19. A. Primary (Discharge) Diagnosis		19. C. Other Diagnosis Contributing To Stay		20. If the patient was in a private room, please state whether this type of accommodation was: <input type="checkbox"/> The patient's choice <input type="checkbox"/> The only type of room available <input type="checkbox"/> Medically necessary		
19. B. Secondary Diagnosis		19. D. Other Diagnosis Not Contributing To Stay		21. Patient Status		
				Discharged <input type="checkbox"/> Deceased <input type="checkbox"/> Remains Inpatient <input type="checkbox"/>		
23. Indicate surgical or medical procedures (if any) billed by the hospital.				22. If patient is discharged to other than home, give name and address of discharge destination.		
Procedure Name		Mo.	Day	Yr.	ATTACH ITEMIZED BILL TO THIS FORM	
24. TOTAL CHARGE				27. Assignment of Patient's Payment <input type="checkbox"/> Accept Assignment <input type="checkbox"/> Do Not Accept Assignment		
25. AMOUNT PREVIOUSLY PAID, IF ANY						
26. BALANCE DUE						
				28. It is hereby certified that the services and/or supplies listed above have been provided on the date(s) shown. Signature of Provider's Representative: _____ Date Signed: _____		

MAIL TO: FAMILY HEALTH PROTECTION PLAN, P.O. BOX 2076, OAKLAND, CA 94604

HIEI 979 REV 1-77

MAIL TO FHPP

Appendix H

DENTAL SERVICES COVERED BY THE HIE

According to the terms described in the participant's Benefits statement, coverage is provided for the following dental services provided by a dentist¹ and his staff:

1. Diagnostic--necessary procedures to assist the dentist in evaluating existing conditions to determine the required dental treatment, including examination, X-rays, and other diagnostic services.
2. Preventive--necessary procedures to prevent the occurrence of oral disease, including prophylaxis (cleaning), topical application of fluoride, instruction in oral hygiene techniques, space maintainers, and other preventive services.
3. Restorative--necessary amalgam and synthetic/composite restorations. Necessary crowns and jackets made of stainless steel, porcelain, gold, ceramco (porcelain with metal) and acrylic are covered when teeth cannot be restored with the above materials. Gold foil and platinum materials are *excluded* from coverage.
4. Oral surgery--necessary procedures for surgical extractions, trauma, and other dental surgery, including pre- and post-operative care.
5. Endodontics--necessary procedures for treatment of disease of the pulp chamber and pulp canal, including root canal filling, related surgical procedures, and other endodontic services.
6. Periodontics--necessary procedures for treatment of the tissues supporting the teeth, including surgical treatment, deep scaling and curettage, and other periodontic services.
7. Orthodontics--all orthodontic procedures are *excluded* from coverage except necessary space maintainers, extractions, and the initial diagnostic examination and X-rays when such charges are itemized. Study models, films, slides, and subsequent visits and consultations are *not* covered. If there is any question regarding coverage of other orthodontic services, a prior authorization form should be completed by the dentist and submitted to the Plan.

¹The term "dentist" means a doctor of dental surgery (D.D.S.) or a doctor of dental medicine (D.M.D.) who is operating within the scope of his practice and is licensed in the state in which the service is being rendered.

Appendix H (cont.)

8. Prosthodontics--necessary procedures for the construction of fixed bridges, partial and full dentures, and the repair of prosthetic appliances, with the following restriction: the Plan *excludes* from coverage any fixed bridge involving seven or more units. However, the Plan will pay toward the fee for an excluded fixed bridge the amount it would have paid had dentures been elected instead. The Plan covers replacement of dentures or fixed bridges, *but* the Plan *does not* cover replacement of any satisfactory satisfactory denture or fixed bridge. Additionally, the Plan does not cover repair or replacement of appliances damaged through negligence.

Prior authorization is required for the following:

- a. For any treatment plan exceeding \$500.00 (except in the case of an emergency, *or*
- b. For any replacement of crowns, bridges, or dentures.

GLOSSARY

Attrition	Departure from the experiment by voluntary withdrawal before completion of assigned enrollment term.
Baseline participant	Person considered for enrollment at the beginning of the experiment in the site. May or may not have enrolled.
Baseline-only participant	Person considered for enrollment at the beginning of the experiment in the site who did not enroll.
<i>Codes Used</i>	Shorthand term for the reference volume containing the codes and code definitions used in the claims files. See the explanation in Sec. II.
Contract year	Administrative unit of time for enrollees; year period(s) reckoned from date family signed enrollment contract. First contract year began on enrollment date, second contract year began on first anniversary of enrollment, and so on.
CRVS	<i>California Relative Value Studies</i> code, a five-digit code created by the California Medical Association to define procedures and services performed by physicians and health professionals.
DEI	A variable prefix for primary variables that stands for "data element indicator."
Exit	Departure from the experiment after completion of assigned enrollment term, three or five years.
FFS	Fee-for-service, the private economic sector in which fees are charged.
GHC	Group Health Cooperative of Puget Sound, the Seattle HMO that participated in the experiment.
HICDA codes	Codes that define the diagnoses of physicians and health professionals. HICDA codes were taken from the <i>Hospital Adaptation of the ICDA (International Classification of Disease Adapted for Use in the United States)</i> .
HIE	Health Insurance Experiment.

HIE-insured	Enrollee assigned to an experimental health insurance plan paid by the HIE (plans A-0, described on p. 3). Includes members of HMO experimental group. Compare "HMO-insured."
HMO	Health maintenance organization; Group Health Cooperative of Puget Sound, the HMO that participated in the HIE.
HMO control group	Seattle enrollees drawn at random from existing HMO members who met HIE eligibility criteria. The HIE did not pay their insurance premiums.
HMO experimental group	Seattle enrollees experimentally transferred to HMO from fee-for-service system. The HIE paid their insurance premiums.
HMO-insured	Member of HMO control group.
Line item	An itemized claim for service, i.e., an item on a MER recording one instance of a provided service, drug, or supply.
Line-item charge	The charge for a specific service, drug, or supply. Commonly called "line charge."
MDE	Maximum dollar expenditure. The maximum out-of-pocket expense to be paid by an HIE-insured family before health care was free. The amount was a function of the family's assigned insurance plan and family income.
MER	Medical Expense Report, the insurance claim forms used by the HIE. Different types of MERs were used for different types of providers.
NAMCS codes	Codes that define a participant's reasons or symptoms for a health care visit. NAMCS codes were taken from the <i>National Ambulatory Medical Care Survey: Symptom Classification</i> .
NDC	National Drug Code.
Participant	Anyone with a record in the HIE database; includes baseline-only participants and enrollees.
Provider	Any person, institution, or organization who provided health services, drugs, or supplies to an HIE participant.
SAS	Statistical Analysis System. HIE files contain data in both SAS and character formats.

RAND/N-2347/1-HHS