N-2264/2-HHS

MASTER SAMPLE SERIES

Volume 2: CODEBOOK FOR FULL SAMPLE DEMOGRAPHIC FILE

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HEALTH INSURANCE EXPERIMENT

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PREFACE

This codebook describes the contents of a data file 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. The HIE is issuing a number of data files, grouped in topical series, with associated documentation.

The codebook is the second of a projected three volumes documenting files in the master sample series. It provides demographic data for the entire participant sample of 26,148 persons--all enrollees and anyone ever considered for enrollment in the HIE.[1]

The full sample demographic file consists of variables derived from administrative data maintained at Rand to keep track of participants over the course of the experiment. For each variable in the file, this codebook lists the data sources, defines all response codes, and tabulates the response frequencies. The codebook is thus a basic reference for file users. The full sample demographic file and its codebook supersede all previously issued demographic information about the HIE participant sample.

Arleen Leibowitz, Susan Marquis, and William Rogers defined most of the variables. Chih-Ming Fan, Christe McMenomy, and Lawrence Painter provided programming support; Betty Amo provided administrative support. Martha A. Bedell, Jacqueline M. McGee, and Elizabeth M. Sloss reviewed the draft codebook and made useful suggestions. Joice Polin prepared numerous typescripts. Final production of this Note was supervised by Patricia Bedrosian. Finally, we thank Joseph Newhouse for his guidance and support.

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[1]Volume 1 in the series provides data on eligibility status and family composition for 9142 enrollees throughout their period of participation. It has been published as S. M. Polich and C. d'Arc Taylor, *Master Sample Series, Vol. 1: Codebook for Eligibility-Family Changes File*, The Rand Corporation, N-2264/1-HHS, May 1986. Volume 3, in preparation, will provide data for certain subsets of the full participant sample.

CONTENTS

FIGURES

TABLES

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 distinctive features of the master sample series of files and the full sample demographic file addressed here. The full sample demographic file is so called because it provides demographic data for all 26,148 participants in the experiment. Section III presents the codebook for the variables in the file.

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

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[1]The 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.

[2]For 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.

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

7,700 were ultimately enrolled.[4] An additional 554 persons were enrolled later, all but a few of them newborns or adopted children under one year of age. Those 8,254 *insured enrollees* were assigned to an *experimental 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. The sample of persons in the full-sample demographic file is described in detail in Sec. II.

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 (baseline interview).

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.

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[4]Of the remaining 16,640 people, the 15,411 persons who did not enroll are called *baseline-only participants*; the other 1,229 are part of the adjunct enrollee group described below.

[5]Note 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.

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

- 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]

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-O. 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 O involved participation in a prepaid group practice, a traditional type of HMO:

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[7]Details 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.

[8]The logic and techniques used to determine optimal sample sizes and 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.

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).

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 plan (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:

Plan	*Percentage of Family Income*	*Dollar Limit*
B-D	5, 10, or 15	1000/750[11]
E-G	5, 10, or 15	1000

[9]During 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.

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

[11]In 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.

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 plan 0. 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-0 provided the same comprehensive benefits, including hospital, physician, dental, mental health, vision, 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 5 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 socieoeconomic 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.

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[12]Calculation 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.

[1]Numbers 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.

[2]Some 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.

[3]Some 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		
		How	When	From
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	Interview	4-6 months before enrollment	Baseline participants
	Health status Health care experience and insurance coverage Satisfaction with medical care	Self-administered	4-6 months before enrollment	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
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.

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 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.

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[13]The 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.

The machine-readable tape for each file includes data in both SAS[14] (Statistical Analysis System) and character formats, and an index of character-format variables.[15]

A codebook is also provided for each file. This volume contains the codebook for a derived variable file in the *master sample series.* Section II describes the file and its place in the series; Sec. III presents the codebook.

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[14]A registered trademark of the SAS Institute Inc.

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

II. FULL SAMPLE DEMOGRAPHIC FILE

The full sample demographic file is the second of three files in the master sample series, which contains the only demographic, eligibility, and family data for all participants in the experiment. Each file in the series treats a different part of the participant universe.

SERIES SAMPLE

Figure 1 depicts the two main samples and their components. The baseline sample (dashed border) contains all persons who were considered for HIE enrollment on the basis of information they gave in screening and baseline interviews. The enrolled sample (solid border) contains insured enrollees assigned to an experimental treatment and adjunct enrollees not so assigned.

The baseline-only part of the sample consists of persons who never enrolled. They were (1) determined ineligible, (2) found eligible but not offered enrollment, or (3) found eligible but refused enrollment.

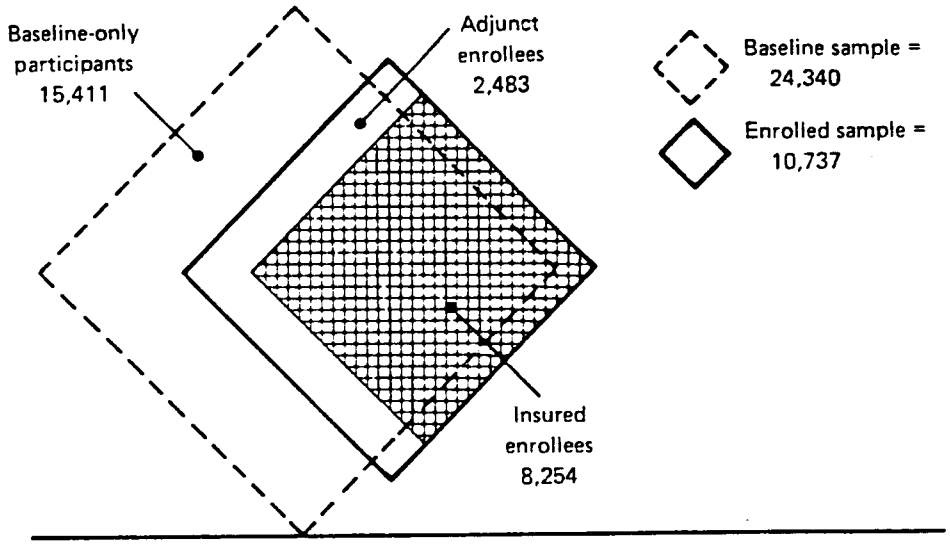

Fig. 1 -- Sample groups covered by the master sample series

The crosshatched area represents those who signed an enrollment contract and were *insured*, or assigned to an experimental treatment. As such, they provided longitudinal data on the use of health services. Adjunct enrollees were not assigned to an experimental treatment and provided no longitudinal data. About 25 percent of the adjunct enrollees (669) were members of a control group in Dayton that was discontinued after 15 months, as explained later in this section. The rest (1,814) resided with insured enrollees.[1] The portion of the crosshatched area extending beyond the dotted line represents insured and adjunct enrollees who joined the experiment after the baseline period.

In the master sample series of codebooks, Volume 1 focuses on the enrolled sample.[2] It shows eligibility status and family composition of insured enrollees from the time they enrolled until their participation ended. Since the period of enrollment could be as long as five years, an enrollee's family structure and ability to participate in the experiment could change during that time. Volume 1 presents data collected at various intervals to document those changes. It also provides limited data for 888 adjunct enrollees, excluding the Dayton control group and self-supporting adjunct enrollees. Volume 2, the present volume, provides demographic and socioeconomic data for both baseline and enrolled samples. Volume 3, in preparation, will provide supplemental data for certain subsets of the entire participant sample.

HIE files in the master sample series are the only sources of demographic and socioeconomic data on the participant sample. Those files and their associated codebooks supersede all previously issued sample data.

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[1]If financially dependent on the head of the insured family (or if a member of such a dependent person's family), the adjunct enrollee was called a *person of interest*. If self-supporting (or a member of such a person's family), he/she was called a *family of interest*.

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

FILE SAMPLE

Table 3 enumerates the sample covered in this codebook by site and sample group. For this purpose the two sites each in Massachusetts and South Carolina are considered one. The table alludes to special participant groups in Dayton, Seattle, and South Carolina.

The Dayton control group was chosen to indicate how the community's use of health services compared with use by our insured enrollees. Control families retained their own health insurance but completed the same questionnaires as insured families. The Dayton control group participated from November 1974 to February 1976; it was discontinued because complete claims data appeared unobtainable from its members. Unlike insured enrollees, Dayton control families had to file claims with both the HIE and their own insurance companies. HIE analysts used data from the Dayton control group only to scale measures of health status.

Table 3

SAMPLE COVERED IN FULL SAMPLE DEMOGRAPHIC FILE

Site	Baseline-Only Participants	Enrollees		Total
		Insured	Adjunct	
Dayton	2,845	1,208	968[1]	5,021
Seattle	3,492	3,351[2]	761	7,604
Massachusetts	4,279	1,710	316	6,305
South Carolina	4,795[3]	1,985	438	7,218
Total	15,411	8,254	2,483	26,148

[1]Includes 669 members of the Dayton control group.
[2]Includes 2,535 HIE-insured and 816 HMO-insured enrollees.
[3]Includes 552 members of the 3-year enrollee sample who participated only in the preenrollment phase.

In Sec. I we distinguished between the two insured enrollee groups in Seattle: HMO experimental and HMO control groups. Because members of the experimental group went through the HIE baseline selection process and were transferred to the HMO by the experiment, they are termed *HIE-insured* (as are insured enrollees assigned to the fee-for-service insurance treatments). The control group, chosen randomly from existing HMO members, is called *HMO-insured*. Because HMO-insured enrollees were not chosen by the unbiased selection model used to assign HIE-insured enrollees to an insurance plan, HMO-insured enrollees do not necessarily resemble HIE-insured enrollees in demographic characteristics. The HMO control group participated for the full 5-year enrollment term.

In every site except South Carolina the 3- and 5-year participants enrolled at the same time and exited two years apart. In South Carolina, the 3- and 5-year participants enrolled two years apart and exited at the same time. Although the 3-year and 5-year participants were chosen simultaneously, the 3-year group was not formally enrolled until the beginning of the third year of the experiment in South Carolina. During years 1 and 2, its members served as a preenrollment group (PEG); they were not assigned to an insurance plan but data were collected for them. The two preenrollment years are known as the PEG period. If a PEG family dropped out of the experiment during the PEG period, we consider it part of the baseline-only sample because the family did not formally enroll. Not all 3-year enrollees have PEG period data; some who refused preenrollment accepted formal enrollment two years later.

DATA SOURCES

Information in the full sample demographic file is drawn from two types of sources: data collection instruments completed by participants themselves and administrative files maintained by Rand or its subcontractors to keep track of participants over the course of the experiment.

The primary data collection instruments were the screening questionnaire, baseline questionnaire, and enrollment verification form (EVF), plus their associated supplements. They are described in Table 2 above, items 1 through 3. Income data are also taken from the annual income report, item 8 on Table 2.

During the baseline period and enrollment process, data collection instruments were administered in sequence. The screening questionnaire and baseline questionnaire were administered to everyone considered for enrollment. The EVF was administered to the subset of persons offered enrollment. The "new person" supplement to the EVF collected demographic and health-related data for persons who joined families offered enrollment after the baseline period.

Additionally, detailed information was collected about dental services and providers from the baseline dental supplement; medical visits, providers, and expenses from the baseline physician supplement; and wages from the EVF employment supplement. Filling out those supplements was triggered by a certain response in the main instrument. For example, "Yes, I have health insurance" in the baseline instrument led to the administration of an insurance supplement.

The same instrument differed in minor details from site to site. Each version bears a separate Health Insurance Experiment Instrument number. The instruments were also administered at different times in the different sites. For example, enrollment in Dayton began two years before enrollment in South Carolina (see Table 1). We attempt to compensate for the effects of such intersite differences in constructing the variables, as described in the codebook.

To provide complete information for all participants, whether present at baseline or added afterward, the screening, baseline, and enrollment verification instruments collected some of the same demographic data. Many variables use baseline data for participants present then and enrollment data for those added later. Other variables rely primarily on enrollment data and use baseline or screening data

only if enrollment data are lacking.[3] For several of those variables the logical consistency between enrollment and baseline or screening values was checked and discrepancies resolved. Variables constructed exclusively from either baseline or enrollment data are so labeled.

The HIE administrative files used for demographic data include the document accountability file, sample file, sex/birth file, participant master file, master demographic file, and enrollment screening exam file. The administrative files will not be released to the public.

Data sources for each variable are identified in the codebook and are further described in Appendix C.

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[3]In South Carolina, PEG members who formally enrolled completed two enrollment verification forms: one before signing a preenrollment agreement and another before formally enrolling two years later. Where there is a choice, the variable constructions use data from the "enrollment" rather than the "preenrollment" EVF.

III. THE CODEBOOK

VARIABLE DESCRIPTIONS

This codebook describes each variable in the full sample demographic file.[1] The format is illustrated in Fig. 2 for the variable WORRYBAS and is described below.

The box provides a basic description of the variable, including

- Variable name, the substantive abbreviation used by analysts.
- File name, in this case FSD, the acronym for "full sample demographic."
- Variable label, a capsule description.
- Response codes and their definitions or range of values.
- Prose definition.

Below the box appear essential explanatory notes if any.

The sources or input variables from which the derived variable is constructed are identified by site, administrative file name or HIEI number, and variable definition. Input variables may be other derived variables or primary variables (the latter denoted by the prefix DEI). Every DEI variable represents a question on a data collection instrument. The variable definition cites the question, including relevant instructions to the interviewer in capital letters (see the text of DEI2836 in Fig. 2).

The section called "Construction" describes how HIE programmers built the derived variable. The code conforms to SAS rules, including the convention that all values are initialized to "missing" and converted to valid responses only when specifically instructed. Explanatory comments are enclosed in parentheses to distinguish them from the executable part of the code.

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[1] A technical description of the file, including the location and length of each variable, is provided in Appendix D.

VARIABLE WORRYBAS FSD

Worry about health

CODES

. - Missing
1 - Great deal
2 - Some
3 - Hardly any
4 - None

WORRYBAS reports how much the participant worried about his or her health in the past year.

INPUT VARIABLES

Site	HIEI		Variable
Dayton	15/43,36	DEI357	(Dayton, Seattle) Over the past year has your health caused a great deal of worry, some worry, hardly any worry, or no worry at all? 1. Great deal 2. Some 3. Hardly any 4. None at all
Seattle	63		
Massachusetts	92	DEI2836	(Massachusetts and South Carolina) Over the past year has your health caused you a great deal of worry, some worry, a little worry, or no worry at all? 1. Great deal 2. Some 3. A little 4. None at all
South Carolina	147		

CONSTRUCTION

(Dayton)

(From baseline data or EVF new person supplement (for persons not present at baseline).)

```
IF 1 <= DEI357 <= 4
   THEN WORRYBAS = DEI357;
```

WORRYBAS

VALUE	FREQ	CUM FREQ	%	CUM %
.	3196	.	.	.
1	1252	1252	5.46	5.46
2	3952	5204	17.22	22.67
3	4732	9936	20.62	43.29
4	13016	22952	56.71	100.00

Fig. 2 -- Example of codebook format

At the right of the box for most variables is a table of response frequencies. The first column lists all response codes appearing for the variable. The second and third columns show, respectively, the absolute and cumulative response frequencies for each code. The fourth and fifth columns show the corresponding absolute and cumulative percentages. For continuous variables--for example, those pertaining to income--statistics such as the mean, median, and standard deviation are given instead of frequencies. The total number of observations (responses + nonresponses) is 26,148.

VARIABLE TYPES

Six *identifiers* precede the other variables on each record in the file. FILENAME denotes the present file. PERSON identifies each participant, permitting data to be merged for an individual across years and files. SITE and INSTAT (HIE insurance status) can be used to select analytic subsamples. The other identifiers indicate the participant's baseline family (BFAMILY) and household (BHH).

INSTAT distinguishes participants who were ever insured under the HIE (INSTAT = 1) from those never insured under the HIE (INSTAT = 3). It also identifies members of the HMO control group (INSTAT = 2), who retained their HMO insurance, in contrast to the HMO experimental group, which was insured under the HIE. "Never insured" participants include the baseline-only sample and adjunct enrollees.

Enrollment-related variables identify baseline families and households, family head at enrollment, and conditions of enrollment such as the assigned insurance plan and enrollment date and term. *Demographic* variables describe participants by age, sex, race, marital status, education, occupation, wage, and income. *Health-related* variables indicate attitudes, health insurance status, receipt of welfare or other public assistance, presence of a regular medical or dental health care provider, and the previous year's medical and dental expenses.

The amount of data for participants on this file depends on their category and how long they were associated with the experiment. Insured enrollees, members of the Dayton control group, and persons of interest

who were in the family at the time of the baseline interview but were never insured have full data. Baseline-only participants have demographic and health-related data but lack most of the enrollment-related variables. Persons of interest who joined the family just before enrollment have only enough data needed to judge their eligibility. Persons of interest cannot be identified from data in this file; for that purpose it is necessary to use the eligibility-family changes file. For families of interest, only basic identification data were collected. Being self-supporting, families of interest are unimportant in economic analyses because they did not contribute to or use the income pool from which insured families paid for health care.

MISSING VALUES

Missing data are represented by the SAS dot ".". Understanding which participant groups have missing values often requires studying the construction. There are basically two kinds of missing values:

- "True" missing values occur when a person should have data but does not. The discrepancy can occur for several reasons: The question was left off the survey by mistake; the person was asked the question but did not answer; or the person answered two or more related questions and gave conflicting answers. Also, some data come from the baseline questionnaire, which was administered to everyone considered for enrollment, and other data come from the EVF, which was administered to a subset of the baseline sample. Note that the same variable can come from the baseline questionnaire in one site and the EVF in other sites.
- "Not applicable" values occur when a person was not asked a question intentionally. For example, income and employment questions were not asked of persons under 16 years of age.

Conversely, some people who should have "not applicable" values were asked the questions and do have data. For example, a few children under 16 were asked the income and employment questions. Their values have been left on the file so the user can decide how to handle them.

For each variable, we have indicated next to the "." which groups of people have missing values. For reasons explained above, some of the persons in these groups do have data. The user must decide what to do with them.

CODEBOOK USE

Because it contains complete variable descriptions, this codebook is a basic reference for users of the full sample demographic file. As the only HIE file containing demographic data, this file is also necessary to use in selecting subsamples for analyses of substantive data in other HIE files.

VARIABLE FILENAME FSD; HEADER

Name of file

FILENAME is a unique 6-character code that identifies this file as DSF0AA.

VARIABLE PERSON FSD; HEADER

Person identifier

PERSON is an 8-character alphanumeric code that uniquely identifies each person for whom the HIE collected data. The 2nd character designates the site in which the person resided at baseline/enrollment: A=Dayton, B=Seattle, E=Fitchburg, F=Franklin County, G=Charleston, H=Georgetown County.

FILENAME

VALUE	FREQ	CUM FREQ	%	CUM %
DSF0AA	26148	26148	100.00	100.00

VARIABLE SITE FSD; HEADER

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 the baseline instrument was administered.

SITE

VALUE	FREQ	CUM FREQ	%	CUM %
1	5021	5021	19.20	19.20
2	7604	12625	29.08	48.28
3	2885	15510	11.03	59.32
4	3420	18930	13.08	72.40
5	3587	22517	13.72	86.11
6	3631	26148	13.89	100.00

VARIABLE INSTAT FSD; HEADER

Insurance status

CODES

1 - Ever HIE-insured
2 - Ever HMO-insured
3 - Never insured

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

INSTAT

VALUE	FREQ	CUM FREQ	%	CUM %
1	7438	7438	28.45	28.45
2	816	8254	3.12	31.57
3	17894	26148	68.43	100.00

SOURCE: Document accountability file

VARIABLE BFAMILY FSD; HEADER

Baseline family identifier

CODES

blank - Missing

BFAMILY is an 8-character alphanumeric code that uniquely identifies a family in which one or more persons were screened for enrollment. All persons in the family at baseline received this identifier.

VARIABLE BHH FSD; HEADER

Baseline household identifier

CODES

blank - Missing

BHH is an 8-character alphanumeric code that uniquely identifies a household in which one or more families were screened for enrollment. All persons in the household at baseline received this identifier.

VARIABLE XPERSON FSD; HEADER

Head of enrollment family identifier

CODES

blank - Missing or not enrolled

XPERSON identifies the head of the family at enrollment--female head if present. If no head is present (rare), the oldest child of the family is designated XPERSON. The identifier is the same 8-character alphanumeric code as in variable PERSON.

VARIABLE BASELD FSD

Baseline date

RANGE

. - Missing or participant joined experiment after baseline period
19740610 to 19761215

BASELD identifies the date on which baseline instruments were administered to the participant (YYYYMMDD).

INPUT VARIABLES

Site	HIEI		Variables
Dayton	15	DE156	(Dayton) DATE OF BASELINE INTERVIEW--MONTH
Seattle	(#)		
Massachusetts	92	DE157	(Dayton) DATE OF BASELINE INTERVIEW--DAY
South Carolina	147		
		DE158	(Dayton) DATE OF BASELINE INTERVIEW--YEAR

(cont.)

VARIABLE BASELD (cont.)

INPUT VARIABLES (cont.)

DEI1429 (NonDayton) BASELINE COMPLETION DATE--MONTH
DEI1430 (NonDayton) BASELINE COMPLETION DATE--DAY
DEI1431 (NonDayton) BASELINE COMPLETION DATE--YEAR
FIRSTC (First contact date, from eligibility-family changes file)

#Through administrative oversight, this date was not recorded for Seattle participants. We estimate BASELD for them by using data from another file in the master sample series (see "CONSTRUCTION").

CONSTRUCTION

(Dayton)

(From baseline data. If the month (DEI56) was missing or out of range, the value was set to 07; if day (DEI57) was missing or out of range, the value was set to 15.)

```
BASELD = (10000*DEI58) + (100*DEI56) + DEI57;
```

(Seattle)

(From eligibility-family changes file.)

```
BASELD = FIRSTC;
```

(Massachusetts and South Carolina)

(From baseline data. If the month (DEI1429) was missing or out of range, the value was set to 07; if day (DEI1430) was missing or out of range, the value was set to 15.)

```
BASELD = (10000*DEI1431) + (100*DEI1429) + DEI1430;
```

VARIABLE ENRTERM FSD

Term of enrollment

CODES

0 - None--person never enrolled or was a persons of interest
2 - None--participant in PEG period only
3 - 3 years
5 - 5 years

ENRTERM distinguishes the participants who accepted 3-year and 5-year terms of enrollment (including ever-insured and Dayton control group).

SOURCE: Document accountability file

ENRTERM

VALUE	FREQ	CUM FREQ	%	CUM %
0	16673	16673	63.76	63.76
2	552	17225	2.11	65.88
3	4876	22101	18.65	84.52
5	4047	26148	15.48	100.00

VARIABLE ENRDATE FSD

Family enrollment date

RANGE

. - Missing, person of interest, or never enrolled
19741101 to 19790201

ENRDATE is the date of enrollment (YYYYMMDD) for families ever insured or members of the Dayton control group or the South Carolina preenrollment group.

SOURCE: Sample file

ENRDATE

VALUE	FREQ	CUM FREQ	%	CUM %
.	16673	.	.	.
19741101	125	125	1.32	1.32
19741201	521	646	5.50	6.82
19750101	581	1227	6.13	12.95
19750201	650	1877	6.86	19.81
19760101	47	1924	0.50	20.31
19760201	188	2112	1.98	22.29
19760301	150	2262	1.58	23.87
19760401	380	2642	4.01	27.88
19760501	726	3368	7.66	35.55
19760601	647	4015	6.83	42.38
19760701	603	4618	6.36	48.74
19760801	897	5515	9.47	58.21
19760901	966	6481	10.20	68.40
19761001	457	6938	4.82	73.22
19761101	102	7040	1.08	74.30
19761201	280	7320	2.96	77.26
19761231	362	7682	3.82	81.08
19770131	326	8008	3.44	84.52
19781101	216	8224	2.28	86.80

(cont.)

VARIABLE ENRDATE (cont.)

VALUE	FREQ	CUM FREQ	%	CUM %
19781201	604	8828	6.38	93.17
19790101	461	9289	4.87	98.04
19790201	186	9475	1.96	100.00

VARIABLE ANND FSD

Anniversary date

CODES

. - Missing, person of interest, or never enrolled
0101 - Dayton, Seattle, Charleston, Georgetown
0131 - Charleston, Georgetown
0201 - Dayton, Seattle, Charleston, Georgetown
0301 - Seattle
0401 - Seattle
0501 - Seattle
0601 - Seattle
0701 - Seattle, Fitchburg, Franklin
0801 - Seattle, Fitchburg, Franklin
0901 - Seattle, Fitchburg, Franklin
1001 - Fitchburg, Franklin
1101 - Dayton, Charleston, Georgetown
1201 - Dayton, Charleston, Georgetown
1231 - Charleston, Georgetown

ANND identifies the month and day (MMDD) on which a new contract year began for an enrolled family each year during its term of participation. For families ever insured, ANND derives from the effective date of coverage (same as ENRDATE). For members of the Dayton control group and South Carolina preenrollment group, ANND derives from the date their participation began.

SOURCE: Sample file

ANND

VALUE	FREQ	CUM FREQ	%	CUM %
.	16673	.	.	.
101	1089	1089	11.49	11.49
131	326	1415	3.44	14.93
201	1024	2439	10.81	25.74
301	150	2589	1.58	27.33
401	380	2969	4.01	31.34
501	726	3695	7.66	39.00
601	647	4342	6.83	45.83
701	603	4945	6.36	52.19
801	897	5842	9.47	61.66
901	966	6808	10.20	71.85
1001	457	7265	4.82	76.68
1101	443	7708	4.68	81.35
1201	1405	9113	14.83	96.18
1231	362	9475	3.82	100.00

VARIABLE PLAN FSD

Assigned insurance plan

CODES

0 - Person was never assigned to an insurance plan or experimental treatment.

1 - Participant pays 100% of covered services until deductible is met, then plan pays 100%. Deductible is $150 per person or $450 per family. In effect only 1st year in Dayton; thereafter participants were switched to plan 13.

2 - Participant pays 100% of covered services until deductible is met, then plan pays 100%. Deductible is 5% of family income or $1000, whichever is less. In effect only 1st year in Dayton; thereafter participants were switched to plan 14.

3 - Participant pays 100% of covered services until deductible is met, then plan pays 100%. Deductible is 10% of family income or $1000, whichever is less. In effect only 1st year in Dayton; thereafter participants were switched to plan 15.

4 - Participant pays 100% of covered services until deductible is met, then plan pays 100%. Deductible is 15% of family income or $1000, whichever is less. In effect only 1st year in Dayton; thereafter participants were switched to plan 16.

5 - Participant pays 25% of covered services until maximum is spent, then plan pays 100%. Maximum out-of-pocket expenditure is 5% of family income or $1000 ($750#), whichever is less.

6 - Participant pays 25% of covered services until maximum is spent, then plan pays 100%. Maximum out-of-pocket expenditure is 10% of family income or $1000 ($750#), whichever is less.

7 - Participant pays 25% of covered services until maximum is spent, then plan pays 100%. Maximum out-of-pocket expenditure is 15% of family income or $1000 ($750#), whichever is less.

(cont.)

PLAN

VALUE	FREQ	CUM FREQ	%	CUM %
0	16673	16673	63.76	63.76
1	106	16779	0.41	64.17
2	107	16886	0.41	64.58
3	80	16966	0.31	64.89
4	93	17059	0.36	65.24
5	239	17298	0.91	66.15
6	241	17539	0.92	67.08
7	198	17737	0.76	67.83
8	68	17805	0.26	68.09
9	66	17871	0.25	68.35
10	269	18140	1.03	69.37
11	2052	20192	7.85	77.22
13	1257	21449	4.81	82.03
14	300	21749	1.15	83.18
15	267	22016	1.02	84.20
16	359	22375	1.37	85.57
17	175	22550	0.67	86.24
18	200	22750	0.77	87.01
19	146	22896	0.56	87.56
30	1215	24111	4.65	92.21
97	552	24663	2.11	94.32
98	816	25479	3.12	97.44
99	669	26148	2.56	100.00

VARIABLE PLAN (cont.)

8 - Participant pays 50% of covered services until maximum is spent, then plan pays 100%. Maximum out-of-pocket expenditure is 5% of family income or $1000, whichever is less.

9 - Participant pays 50% of covered services until maximum is spent, then plan pays 100%. Maximum out-of-pocket expenditure is 10% of family income or $1000, whichever is less.

10 - Participant pays 50% of covered services until maximum is spent, then plan pays 100%. Maximum out-of-pocket expenditure is 15% of family income or $1000, whichever is less.

11 - Participant pays nothing out-of-pocket for covered services.

13 - Participant pays nothing out-of-pocket for covered inpatient services but pays 95% of covered outpatient services until deductible is met. Then plan pays 100%. Deductible is $150 per person or $450 per family.

14 - Participant pays 95% of covered services until maximum is spent, then plan pays 100%. Maximum out-of-pocket expenditure is 5% of family income or $1000, whichever is less.

15 - Participant pays 95% of covered services until maximum is spent, then plan pays 100%. Maximum out-of-pocket expenditure is 10% of family income or $1000, whichever is less.

16 - Participant pays 95% of covered services until maximum is spent, then plan pays 100%. Maximum out-of-pocket expenditure is 15% of family income or $1000, whichever is less.

17 - Participant pays 25% of covered medical services and 50% of dental and outpatient psychiatric services until maximum is spent, then plan pays 100%. Maximum out-of-pocket expenditure is 5% of family income or $1000 ($750#), whichever is less.

(cont.)

VARIABLE PLAN (cont.)

18 - Participant pays 25% of covered medical services and 50% of dental and outpatient psychiatric services until maximum is spent, then plan pays 100%. Maximum out-of-pocket expenditure is 10% of family income or $1000 ($750#), whichever is less.

19 - Participant pays 25% of covered medical services and 50% of dental and outpatient psychiatric services until maximum is spent, then plan pays 100%. Maximum out-of-pocket expenditure is 15% of family income or $1000 ($750#), whichever is less.

30 - Member of HMO experimental group (families randomly assigned to the HMO as part of the experiment).

97 - Never insured through the HIE--participant in PEG period only

98 - Member of HMO control group (families in the HMO before the experiment).

99 - Never insured through the HIE--member of Dayton control group.

$1000 in the early site-years (see footnote 11, p. 4).

PLAN identifies the insurance plan or experimental treatment to which participant was assigned at enrollment. For most participants, PLAN is that assigned when the family enrolled. However, if the family's plan changed and the participant was enrolled afterward (e.g., as a newborn), PLAN is the new plan.

SOURCE: Document accountability file

VARIABLE MDEOFF FSD

Maximum dollar expenditure assigned at enrollment

CODES

. - MDE missing or not assigned (includes plan 30)
0 - assigned to plan 11, or no income
Dollar amount

MDEOFF indicates the maximum annual amount the enrollee's family would have to pay out-of-pocket before health care was free under the HIE. That "maximum dollar expenditure" (MDE) was a function of the family's assigned HIE insurance plan. For most plans (see variable PLAN), MDE was a specified portion of family income (5, 10, or 15%) up to $1,000 or $750, depending on the site-year. For plans 1 and 13, the maximum was $150 per person or $450 per family. For plan 11, the maximum was $0.

SOURCE: Participant master file

MDEOFF

NUMBER OF OBSERVATIONS	6854
NUMBER OF MISSING	19294
MEAN	409.93
MEDIAN	450.00
MINIMUM VALUE	0.00
MAXIMUM VALUE	1000.00
STANDARD DEVIATION	378.91
COEFFICIENT OF VARIATION	92.43
SKEWNESS	0.34
KURTOSIS	-1.33

VARIABLE PIOFF FSD

Participation incentive offered at enrollment

CODES

. - PI missing or not HIE-insured
0 - not offered
Dollar amount

PIOFF indicates the amount offered the enrollee's family as a participation incentive during the first year of enrollment. Appendix A defines participation incentive payments.

(cont.)

PIOFF

NUMBER OF OBSERVATIONS	8261
NUMBER OF MISSING	17887
MEAN	381.45
MEDIAN	315.15
MINIMUM VALUE	0.00
MAXIMUM VALUE	1291.68
STANDARD DEVIATION	363.85
COEFFICIENT OF VARIATION	95.39
SKEWNESS	0.52
KURTOSIS	-1.08

VARIABLE PIOFF (cont.)

INPUT VARIABLES

Site	File	Variables
Dayton Seattle Massachusetts South Carolina	Participant master file	DEI1676 (Payment guarantee) DEI1677 (Premium reimbursement)

CONSTRUCTION

```
PIOFF = SUM(DEI1676,DEI1677);
```

VARIABLE SUPERPI FSD

Super PI offered

CODES

. - Missing or not applicable
1 - Yes
2 - No

SUPERPI indicates whether the enrollee's family was offered a bonus participation incentive payment in the next-to-last year of the family's assigned enrollment term. The bonus was offered to a sample of families assigned to plans requiring 95 percent coinsurance. For details, see Appendix A.

SOURCE: Participant master file

SUPERPI

VALUE	FREQ	CUM FREQ	%	CUM %
.	24364	.	.	.
1	799	799	44.79	44.79
2	985	1784	55.21	100.00

VARIABLE SEX FSD

Sex

CODES

. - Missing
0 - Female
1 - Male

SEX defines the participant's sex.

SOURCE: Sex/birth file

SEX

VALUE	FREQ	CUM FREQ	%	CUM %
.	63	.	.	.
0	13398	13398	51.36	51.36
1	12687	26085	48.64	100.00

VARIABLE AGE FSD

Age at enrollment

CODES

. - Missing
A - Born after family's enrollment date
0 - Less than 1 year old

AGE identifies the participant's age at his/her last birthday.

INPUT VARIABLES

Site	File	Variable
Dayton	Sex/birth file	BIRTHDAT
Seattle		ENRDATE
Massachusetts		
South Carolina		

(cont.)

AGE

VALUE	FREQ	CUM FREQ	%	CUM %
.	352	.	.	.
A	593	.	.	.
0	269	269	1.07	1.07
1	476	745	1.89	2.96
2	412	1157	1.64	4.59
3	457	1614	1.81	6.40
4	481	2095	1.91	8.31
5	525	2620	2.08	10.40
6	534	3154	2.12	12.51
7	527	3681	2.09	14.61
8	492	4173	1.95	16.56
9	483	4656	1.92	18.47
10	469	5125	1.86	20.34
11	505	5630	2.00	22.34
12	553	6183	2.19	24.53
13	554	6737	2.20	26.73
14	539	7276	2.14	28.87
15	573	7849	2.27	31.14
16	569	8418	2.26	33.40
17	597	9015	2.37	35.77
18	566	9581	2.25	38.02
19	527	10108	2.09	40.11

(cont.)

VARIABLE AGE (cont.)

CONSTRUCTION

(For participants who were not insured, ENRDATE = the last enrollment date in the site: Dayton, 02/01/75; Seattle, 09/01/76; Massachusetts, 10/01/76; South Carolina, 01/31/77.)

AGE = ENRDATE - BIRTHDAT;

VALUE	FREQ	CUM FREQ	%	CUM %
20	531	10639	2.11	42.21
21	512	11151	2.03	44.25
22	520	11671	2.06	46.31
23	509	12180	2.02	48.33
24	537	12717	2.13	50.46
25	535	13252	2.12	52.58
26	556	13808	2.21	54.79
27	526	14334	2.09	56.87
28	524	14858	2.08	58.95
29	473	15331	1.88	60.83
30	443	15774	1.76	62.59
31	442	16216	1.75	64.34
32	400	16616	1.59	65.93
33	384	17000	1.52	67.45
34	354	17354	1.41	68.86
35	289	17643	1.15	70.00
36	288	17931	1.14	71.15
37	307	18238	1.22	72.36
38	247	18485	0.98	73.34
39	257	18742	1.02	74.36
40	257	18999	1.02	75.38
41	245	19244	0.97	76.36
42	252	19496	1.00	77.36
43	262	19758	1.04	78.40
44	244	20002	0.97	79.36
45	250	20252	0.99	80.36
46	239	20491	0.95	81.30
47	247	20738	0.98	82.28
48	271	21009	1.08	83.36
49	282	21291	1.12	84.48
50	254	21545	1.01	85.49
51	274	21819	1.09	86.57
52	276	22095	1.10	87.67
53	287	22382	1.14	88.81
54	274	22656	1.09	89.89
55	257	22913	1.02	90.91
56	291	23204	1.16	92.07
57	242	23446	0.96	93.03
58	223	23669	0.89	93.91
59	231	23900	0.92	94.83
60	238	24138	0.94	95.77
61	202	24340	0.80	96.58
62	137	24477	0.54	97.12
63	92	24569	0.37	97.48
64	86	24655	0.34	97.83
65	55	24710	0.22	98.04
66	51	24761	0.20	98.25
67	51	24812	0.20	98.45
68	48	24860	0.19	98.64

(cont.)

VARIABLE AGE (cont.)

VALUE	FREQ	CUM FREQ	%	CUM %
69	38	24898	0.15	98.79
70	23	24921	0.09	98.88
71	31	24952	0.12	99.00
72	19	24971	0.08	99.08
73	23	24994	0.09	99.17
74	20	25014	0.08	99.25
75	23	25037	0.09	99.34
76	19	25056	0.08	99.42
77	17	25073	0.07	99.48
78	18	25091	0.07	99.56
79	15	25106	0.06	99.62
80	11	25117	0.04	99.66
81	16	25133	0.06	99.72
82	11	25144	0.04	99.77
83	8	25152	0.03	99.80
84	12	25164	0.05	99.85
85	6	25170	0.02	99.87
86	6	25176	0.02	99.89
87	3	25179	0.01	99.91
88	2	25181	0.01	99.91
89	6	25187	0.02	99.94
90	7	25194	0.03	99.96
91	1	25195	0.00	99.97
92	2	25197	0.01	99.98
93	1	25198	0.00	99.98
94	1	25199	0.00	99.98
96	1	25200	0.00	99.99
97	1	25201	0.00	99.99
98	2	25203	0.01	100.00

VARIABLE RACE FSD

Race

CODES

. - Missing or not family head
1 - White
2 - Black
3 - Other

RACE identifies the race of the family head.

(cont.)

RACE

VALUE	FREQ	CUM FREQ	%	CUM %
.	12612	.	.	.
1	11534	11534	85.21	85.21
2	1789	13323	13.22	98.43
3	213	13536	1.57	100.00

VARIABLE RACE (cont.)

INPUT VARIABLES

Site	HIEI	Variable	
Dayton	15/43,50	DEI284	(Dayton) FOR HEAD(S) ONLY.
Seattle	63,126		INTERVIEWER OBSERVATION:
Massachusetts	92,182		1. White/Non-Spanish
South Carolina	147,193		2. Black/Non-Spanish
			3. Oriental
			4. Puerto Rican
			5. Mexican-American
			6. American Indian
			10. Other, specify
		DEI2800	(NonDayton) CODE A BY OBSERVATION ONLY. DO NOT ASK.
			A. RACE:
			1. White
			2. Black
			3. Other

CONSTRUCTION

(Dayton)

(From baseline data.)

```
      IF 1 <= DEI284 <= 6 | DEI284 = 10
         THEN DO;

              IF DEI284 = 1
                 THEN RACE = 1;
                 ELSE IF DEI284 = 2
                         THEN RACE = 2;
                 ELSE RACE = 3;

              END;
```

(cont.)

VARIABLE RACE (cont.)

CONSTRUCTION (cont.)

(For persons not present at baseline, RACE was constructed from EVF "new head" supplement.)

```
IF 1 <= DEI284 <= 6 | DEI284 = 10
   THEN DO;
        IF DEI284 = 1
           THEN RACE = 1;
           ELSE IF DEI284 = 2
                   THEN RACE = 2;
           ELSE RACE = 3;

        END;
```

(Seattle, Massachusetts, and South Carolina)

(From baseline data or EVF "new head" supplement (for persons not present at baseline).)

```
IF 1 <= DEI2800 <= 3 THEN RACE = DEI2800;
```

VARIABLE ETHNOS FSD

Ethnicity

CODES

. - Missing or not family head
1 - Spanish
2 - American Indian
3 - Oriental
4 - None of the above

ETHNOS defines the ethnic group of the family head.

(cont.)

ETHNOS

VALUE	FREQ	CUM FREQ	%	CUM %
.	13147	.	.	.
1	76	76	0.59	0.59
2	32	108	0.25	0.83
3	116	224	0.89	1.72
4	12777	13001	98.28	100.00

VARIABLE ETHNOS (cont.)

INPUT VARIABLES

Site	HIEI		Variable
Dayton	15/43,50	DEI284	(Dayton) FOR HEAD(S) ONLY. INTERVIEWER OBSERVATION: 1. White/Non-Spanish 2. Black/Non-Spanish 3. Oriental 4. Puerto Rican 5. Mexican-American 6. American Indian 10. Other, specify
Seattle	63,126		
Massachusetts	92,182		
South Carolina	147,193		
		DEI2801	(NonDayton) CODE B BY OBSERVATION ONLY. DO NOT ASK. B. ORIGIN OR DESCENT: 1. Puerto Rican, Mexican-American, or other Spanish 2. American Indian 3. Oriental 4. None of these 5. Not observable (code absent in Seattle EVF)

CONSTRUCTION

(Dayton)

(From baseline data or EVF "new head" supplement (for persons not present at baseline).)

```
IF 1 <= DEI284 <= 6 | DEI284 = 10
   THEN DO;

        IF DEI284 = 4 | DEI284 = 5
           THEN ETHNOS = 1;
           ELSE IF DEI284 = 6
                   THEN ETHNOS = 2;
           ELSE IF DEI284 = 3
                   THEN ETHNOS = 3;
           ELSE ETHNOS = 4;

        END;
```

(cont.)

VARIABLE ETHNOS (cont.)

CONSTRUCTION (cont.)

(Seattle, Massachusetts and South Carolina)

(From baseline data or EVF "new head" supplement (for persons not present at baseline).)

```
IF 1 <= DEI2801 <= 4 THEN ETHNOS = DEI2801;
```

VARIABLE MARSTAT FSD

Marital status

CODES

. - Missing or Dayton respondent younger than 14
1 - Never married
2 - Divorced
3 - Separated
4 - Widowed
5 - Married, spouse present
6 - Married, spouse absent
7 - Married, spouse's whereabouts unknown
8 - Not applicable

MARSTAT describes the participant's marital status.

INPUT VARIABLES

Site	HIEI		Variable
Dayton	9,15/43,39	DEI114	(Dayton) What is your marital status? (At enrollment/baseline) 1. Never married 2. Married to _____ 3. Divorced 4. Separated 5. Widowed
Seattle	62,123		
Massachusetts	91,176		
South Carolina	146,187		

(cont.)

MARSTAT

VALUE	FREQ	CUM FREQ	%	CUM %
.	3587	.	.	.
1	5254	5254	23.29	23.29
2	998	6252	4.42	27.71
3	444	6696	1.97	29.68
4	650	7346	2.88	32.56
5	10051	17397	44.55	77.11
6	61	17458	0.27	77.38
7	3	17461	0.01	77.40
8	5100	22561	22.61	100.00

VARIABLE MARSTAT (cont.)

INPUT VARIABLES (cont.)

DE1318 (Dayton) Are you married, never married, divorced, separated, or widowed?
1. Married
2. Never married
3. Divorced
4. Separated
5. Widowed
9. Not applicable

DE1319 (Dayton) Spouse listed?
1. Yes
2. No
(NonDayton) CIRCLE ONE:
1. Spouse in household
6. Spouse absent

DE1321 (Dayton) You say that you are married to (SPOUSE), but I don't seem to have (HIM/HER) listed as living here.
1. Here
2. Not here/not listed
8. No response

DE1362 (NonDayton) Are you now married, widowed, divorced, separated, or have you never been married?
1. Married
2. Widowed
3. Divorced
4. Separated
5. Never married
8. Under 14 years old

DE12914 (Dayton) Are you married never married, divorced, separated, or widowed?
1. Married
2. Never married
3. Divorced
4. Separated
5. Widowed
9. Not applicable

(cont.)

VARIABLE MARSTAT (cont.)

INPUT VARIABLES (cont.)

```
                                DE17657  (NonDayton)
                                         Marriage Codes
                                         1. Married
                                         2. Widowed
                                         3. Divorced
                                         4. Separated
                                         5. Never married
                                         6. Married, spouse absent
                                    AGE  Participant's age
```

CONSTRUCTION

(Dayton)

(From EVF data.)

```
   IF DE12914 = 2
      THEN MARSTAT = 1;
      ELSE IF DE12914 = 3 THEN MARSTAT = 2;
      ELSE IF DE12914 = 4 THEN MARSTAT = 3;
      ELSE IF DE12914 = 5 THEN MARSTAT = 4;
      ELSE IF DE12914 = 9 THEN MARSTAT = 8;
      ELSE IF DE12914 = 1 AND (DE1321 = 1 OR DE1319 = 1)
              THEN MARSTAT = 5;
      ELSE IF DE12914 = 1 AND (DE1321 = 2 AND DE1319 = 2)
              THEN MARSTAT = 6;
      ELSE IF DE12914 = 1 AND (DE1321 \= 1 AND DE1321 \= 2
                           AND DE1319 \= 1 AND DE1319 \= 2)
              THEN MARSTAT = 7;
```

(MARSTAT was constructed from baseline data if marital status was missing from EVF data.)

```
   IF DE1318 = 2 THEN MARSTAT = 1;
      ELSE IF DE1318 = 3 THEN MARSTAT = 2;
      ELSE IF DE1318 = 4 THEN MARSTAT = 3;
      ELSE IF DE1318 = 5 THEN MARSTAT = 4;
      ELSE IF DE1318 = 9 THEN MARSTAT = 8;
      ELSE IF DE1318 = 1 AND (DE1321 = 1 OR DE1319 = 1)
              THEN MARSTAT = 5;
      ELSE IF DE1318 = 1 AND (DE1321 = 2 AND DE1319 = 2)
              THEN MARSTAT = 6;
      ELSE IF DE1318 = 1 AND (DE1321 \= 2) AND DE1321 \= 1)
                           AND (DE1319 \= 2 AND DE1319 \= 1)
              THEN MARSTAT = 7;
   IF MARSTAT = 1 AND AGE <= 14
      THEN MARSTAT = 8;
```

(cont.)

VARIABLE MARSTAT (cont.)

CONSTRUCTION (cont.)

```
(MARSTAT was constructed from screening data if marital status was
 missing from EVF and baseline data.)

     IF DEI114 = .
        THEN IF AGE <= 14 THEN MARSTAT = 8;
        ELSE IF DEI114 = 1 THEN MARSTAT = 1;
        ELSE IF DEI114 = 2 THEN MARSTAT = 5;
        ELSE IF DEI114 = 3 THEN MARSTAT = 2;
        ELSE IF DEI114 = 4 THEN MARSTAT = 3;
        ELSE IF DEI114 = 5 THEN MARSTAT = 4;


 (Seattle and South Carolina)

 (From EVF data.  DSI7657 = 32 when the response to DEI7657 is
  inapplicable.)

      IF (DEI7657 = .) AND (DEI362 \= .)
         THEN DO;

              DEI7657 = DEI362;
              IF DEI319 = 6 THEN DEI7657 = 6;

              END;


      IF DEI7657 = 5 THEN MARSTAT = 1;
         ELSE IF DEI7657 = 3 THEN MARSTAT = 2;
         ELSE IF DEI7657 = 4 THEN MARSTAT = 3;
         ELSE IF DEI7657 = 2 THEN MARSTAT = 4;
         ELSE IF DEI7657 = 6 THEN MARSTAT = 6;
         ELSE IF DEI7657 = 1
                 THEN IF DSI7657 = 32
                         THEN MARSTAT = 8;
                         ELSE MARSTAT = 5;
```

(cont.)

VARIABLE MARSTAT (cont.)

CONSTRUCTION (cont.)

(MARSTAT was constructed from screening data if marital status was missing from EVF data. DSI362 = 32 when the response to DEI362 is inapplicable.)

```
IF DEI362 = . AND DSI362 = 32 THEN MARSTAT = 8;
   ELSE IF DEI362 = 8 THEN MARSTAT = 8;
   ELSE IF DEI362 = 5 THEN MARSTAT = 1;
   ELSE IF DEI362 = 3 THEN MARSTAT = 2;
   ELSE IF DEI362 = 4 THEN MARSTAT = 3;
   ELSE IF DEI362 = 2 THEN MARSTAT = 4;
   ELSE IF DEI362 = 1
           THEN IF DEI319 = 1
                   THEN MARSTAT = 5;
                   ELSE IF DEI319 = 2
                           THEN MARSTAT = 6;
                           ELSE MARSTAT = 7;

IF MARSTAT = 1 AND AGE <= 14
   THEN MARSTAT = 8;
```

(Massachusetts)

(From EVF data. DSI7657 = 32 when the response to DEI7657 is inapplicable.)

```
IF DEI7657 = 5 THEN MARSTAT = 1;
   ELSE IF DEI7657 = 3 THEN MARSTAT = 2;
   ELSE IF DEI7657 = 4 THEN MARSTAT = 3;
   ELSE IF DEI7657 = 2 THEN MARSTAT = 4;
   ELSE IF DEI7657 = 6 THEN MARSTAT = 6;
   ELSE IF DEI7657 = 1
           THEN IF DSI7657 = 32
                   THEN MARSTAT = 8;
                   ELSE MARSTAT = 5;
```

(MARSTAT was constructed from screening data if marital status was missing from EVF data. DSI362 = 32 when the response to DEI362 is inapplicable.)

```
IF DEI362 = . AND DSI362 = 32 THEN MARSTAT = 8;
   ELSE IF DEI362 = 8 THEN MARSTAT = 8;
   ELSE IF DEI362 = 5 THEN MARSTAT = 1;
   ELSE IF DEI362 = 3 THEN MARSTAT = 2;
   ELSE IF DEI362 = 4 THEN MARSTAT = 3;
   ELSE IF DEI362 = 2 THEN MARSTAT = 4;
   ELSE IF DEI362 = 1
           THEN IF DEI319 = 1
                   THEN MARSTAT = 5;
                   ELSE IF DEI319 = 2
                           THEN MARSTAT = 6;
                           ELSE MARSTAT = 7;
```

(cont.)

VARIABLE MARSTAT (cont.)

CONSTRUCTION (cont.)

```
IF MARSTAT = 1 AND AGE <= 14
   THEN MARSTAT = 8;
```

VARIABLE EDUCPER FSD

Education

CODES

. - Missing, Dayton respondent younger than 18, or nonDayton respondent younger than 16
0 - 28#

EDUCPER shows the years of school completed by adult participants.

#Allowable maximum varied by site: Dayton, no maximum; Seattle, 22 years; Massachusetts and South Carolina, 24 years.

INPUT VARIABLES

Site	HIEI		Variable
Dayton	15/43,36	DEI1633	What is the highest grade in school you have attended?
Seattle	62,63,125		
Massachusetts	91,92,181		
South Carolina	146,147,192	DEI1634	Did you complete that grade? 1. Yes 2. No

(cont.)

EDUCPER

VALUE	FREQ	CUM FREQ	%	CUM %
.	10665	.	.	.
0	52	52	0.34	0.34
0.5	1	53	0.01	0.34
1	21	74	0.14	0.48
1.5	1	75	0.01	0.48
2	45	120	0.29	0.78
2.5	2	122	0.01	0.79
3	96	218	0.62	1.41
3.5	3	221	0.02	1.43
4	100	321	0.65	2.07
4.5	2	323	0.01	2.09
5	134	457	0.87	2.95
5.5	1	458	0.01	2.96
6	248	706	1.60	4.56
6.5	1	707	0.01	4.57
7	399	1106	2.58	7.14
7.5	2	1108	0.01	7.16
8	823	1931	5.32	12.47
8.5	3	1934	0.02	12.49
9	1055	2989	6.81	19.31
9.5	3	2992	0.02	19.32
10	1208	4200	7.80	27.13
10.5	9	4209	0.06	27.19
11	1129	5338	7.29	34.48
11.5	2	5340	0.01	34.49
12	5563	10903	35.93	70.42
12.5	1	10904	0.01	70.43
13	1019	11923	6.58	77.01

(cont.)

VARIABLE EDUCPER (cont.)

INPUT VARIABLES (cont.)

DE16044	(NonDayton) What is the highest grade or year of regular school that you ever attended?
DE16045	(NonDayton) Did you complete that grade (year)? 1. Yes 2. No

CONSTRUCTION

(Dayton)

(EDUCPER was constructed from EVF new person supplement for those not present at baseline.)

```
   IF DE11633 >= 0
      THEN DO;

           IF DE11634 = 1
              THEN EDUCPER = DE11633;
              ELSE IF DE11634 = 2
                      THEN EDUCPER = DE11633 - 1;
                      ELSE EDUCPER = DE11633 - .5;
                   IF EDUCPER < 0 THEN EDUCPER = 0;
           END;
```

(From baseline data for all others.)

```
   IF DE11633 >= 0;
      THEN DO;

           IF DE11634 = 1
              THEN EDUCPER = DE11633;
              ELSE IF DE11634 = 2
                      THEN EDUCPER = DE11633 - 1;
                      ELSE EDUCPER = DE11633 - .5;
                   IF EDUCPER < 0 THEN EDUCPER = 0;
           END;
```

(cont.)

VALUE	FREQ	CUM FREQ	%	CUM %
13.5	1	11924	0.01	77.01
14	1024	12948	6.61	83.63
15	476	13424	3.07	86.70
16	1251	14675	8.08	94.78
17	305	14980	1.97	96.75
18	275	15255	1.78	98.53
19	99	15354	0.64	99.17
20	81	15435	0.52	99.69
21	23	15458	0.15	99.84
22	15	15473	0.10	99.94
23	4	15477	0.03	99.96
24	2	15479	0.01	99.97
25	3	15482	0.02	99.99
28	1	15483	0.01	100.00

VARIABLE EDUCPER (cont.)

CONSTRUCTION (cont.)

(Seattle, Massachusetts, and South Carolina)

(EDUCPER was constructed from EVF new person supplement for those not present at baseline. MAX is a temporary variable denoting the maximum allowable number of years.)

```
IF 0 <= DE11633 <= MAX
   THEN DO;

        IF DE11634 = 1
           THEN EDUCPER = DE11633;
           ELSE IF DE11634 = 2
                   THEN EDUCPER = DE11633 - 1;
                   ELSE EDUCPER = DE11633 - .5;
                IF EDUCPER < 0 THEN EDUCPER = 0;
        END;
```

(From baseline data for those present at baseline. MAX is a temporary variable denoting the maximum allowable number of years.)

```
IF 0 <= DE16044 <= MAX
   THEN DO;

        IF DE16045 = 1
           THEN EDUCPER = DE16044;
           ELSE IF DE16045 = 2
                   THEN EDUCPER = DE16044 - 1;
                   ELSE EDUCPER = DE16044 - .5;
                IF EDUCPER < 0 THEN EDUCPER = 0;
        END;
```

(EDUCPER was constructed from screening data if the information was missing from baseline and EVF new person supplement data. MAX is a temporary variable denoting the maximum allowable number of years.)

```
IF 0 <= DE11633 <= MAX
   THEN DO;
```

(cont.)

VARIABLE EDUCPER (cont.)

CONSTRUCTION (cont.)

```
IF DEI1634 = 1
   THEN EDUCPER = DEI1633;
   ELSE IF DEI1634 = 2
           THEN EDUCPER = DEI1633 - 1;
           ELSE EDUCPER = DEI1633 - .5;
        IF EDUCPER < 0 THEN EDUCPER = 0;
END;
```

VARIABLE ECOLLEGE FSD

College attendance at baseline

CODES

. - Missing
0 - No
1 - Yes

ECOLLEGE indicates whether participant was attending college at baseline.

INPUT VARIABLES

Site	HIEI	Variable
Dayton	9	DEI2020 (Dayton) Are you a student, not counting elementary or high school? (Seattle) Are you currently enrolled in a college or university? (Massachusetts and South Carolina) Are you currently enrolled in a college or university? 1. Yes 2. No
Seattle	63	
Massachusetts	92	
South Carolina	147	

(cont.)

ECOLLEGE

VALUE	FREQ	CUM FREQ	%	CUM %
.	3925	.	.	.
0	21361	21361	96.12	96.12
1	862	22223	3.88	100.00

VARIABLE ECOLLEGE (cont.)

INPUT VARIABLES (cont.)

DEI2021 (Dayton) Are you a student?
CIRCLE 1 OR 2
1. Student
2. Non-student
(NonDayton) Are you a student? CODE "8" FOR ALL OTHERS.
1. Student
8. Other

CONSTRUCTION

(Dayton)

(From screening data.)

```
IF DEI2021 = 1
   THEN ECOLLEGE = 1;
   ELSE IF DEI2021 = 2 OR DEI2020 = 2
           THEN ECOLLEGE = 0;
```

(Seattle, Massachusetts and South Carolina)

(From baseline data.)

```
IF DEI2021 = 1
   THEN ECOLLEGE = 1;
   ELSE IF DEI2021 = 8 OR DEI2020 = 2
           THEN ECOLLEGE = 0;
```

VARIABLE BACKGRND FSD

City background

CODES

. - Missing, Dayton respondent younger than 18, or nonDayton respondent younger than 16
1 - Large or medium city
2 - Suburb
3 - Small town
4 - Rural area

BACKGRND describes the degree of urbanization in the place the adult participant was raised.

INPUT VARIABLES

Site	HIEI		Variable
Dayton	15/43,36	DEI1632	(Dayton) During most of the time you were growing up, did you live on a farm, in a small town, in a city, or in a suburb of a city? 1. On a farm 2. In a small town 3. In a city 4. In a suburb of a city
Seattle	63,125		
Massachusetts	92,181		
South Carolina	147,192		
		DEI4978	(Dayton) During most of the time you were growing up, did you live on a farm, in the country but not on a farm, in a small town, in a city, or in a suburb of a city? 1. On a farm 2. In country, nonfarm 3. In a small town 4. In a city 5. In a suburb of a city
		DEI6043	(NonDayton) Up to the time you were 16 years old, where did you live (cont.)

BACKGRND

VALUE	FREQ	CUM FREQ	%	CUM %
.	10574	.	.	.
1	4710	4710	30.24	30.24
2	1719	6429	11.04	41.28
3	5608	12037	36.01	77.29
4	3537	15574	22.71	100.00

VARIABLE BACKGRND (cont.)

INPUT VARIABLES (cont.)

most of the time--in a suburb near a large city, in a large city of over 250,000, in a medium city of 50,000 to 250,000, a small city or town up to 50,000, in open country not on a farm, or on a farm?
1. Suburb near a large city
2. A large city of over 250,000
3. A medium city of 50,000 - 250,000
4. A small city or town of up to 50,000
5. Open country, not a farm
6. On a farm

CONSTRUCTION

(Dayton)

(From baseline data.)

```
IF DE11632 = 1 THEN BACKGRND = 4;
   ELSE IF DE11632 = 2 THEN BACKGRND = 3;
   ELSE IF DE11632 = 3 THEN BACKGRND = 1;
   ELSE IF DE11632 = 4 THEN BACKGRND = 2;
```

(For persons not present at baseline, BACKGRND was constructed from EVF new person supplement data.)

```
IF DE14978 = 4 THEN BACKGRND = 1;
   ELSE IF DE14978 = 5 THEN BACKGRND = 2;
   ELSE IF DE14978 = 3 THEN BACKGRND = 3;
   ELSE IF DE14978 = 1 OR DE14978 = 2
           THEN BACKGRND = 4;
```

(cont.)

VARIABLE BACKGRND (cont.)

CONSTRUCTION (cont.)

(Seattle, Massachusetts, and South Carolina)

(From baseline or EVF new person supplement data (for persons not present at baseline).)

```
IF DEI6043 = 2 OR DEI6043 = 3 THEN BACKGRND = 1;
   ELSE IF DEI6043 = 1 THEN BACKGRND = 2;
   ELSE IF DEI6043 = 4 THEN BACKGRND = 3;
   ELSE IF DEI6043 = 5 OR DEI6043 = 6
           THEN BACKGRND = 4;
```

VARIABLE INCOME1 FSD

Family income for year preceding enrollment

CODES

. - Missing
Dollar amount#

INCOME1 states the family's income (in 1973 dollars) for the year preceding enrollment.##

#Values are those provided by respondents.

##In South Carolina, the EVF new person supplement asked about income in 1975, but the responses were mistakenly adjusted as if 1974 dollars. This error did not affect many participants.

INPUT VARIABLES

Site	HIEI		Variable
Dayton	15/43,36	DEI1051	(Dayton) Next, in 1973, what was the total income of the people who are currently in your family unit from all sources? (cont.)
Seattle	63,125		
Massachusetts	92,181		
South Carolina	147,192		

INCOME1

NUMBER OF OBSERVATIONS	23081
NUMBER OF MISSING	3067
MEAN	11192.04
MEDIAN	10814.40
MINIMUM VALUE	0.00
MAXIMUM VALUE	73343.26
STANDARD DEVIATION	6655.66
COEFFICIENT OF VARIATION	59.47
SKEWNESS	0.85
KURTOSIS	2.71

VARIABLE INCOME1 (cont.)

INPUT VARIABLES (cont.)

DE11486	(Dayton) Were you employed at any time during 1973?
DE11487	(Dayton) How much of the income you personally earned in 1973 was from wages and salaries before anything was deducted for taxes and other things?
DE11489	(Dayton) During 1973, did you receive any additional income from overtime, bonuses, commissions or tips?
DE11490	(Dayton) How much was that altogether before deductions?
DE11596	(Dayton) During 1973 did you have any income from dividends or interest from savings accounts, stocks or bonds?
DE11597	(Dayton) Amount from dividends/interest?
DE11598	(Dayton) During 1973 did you have any net rental income from buildings you own?
DE11599	(Dayton) Amount of net rental income?
DE11610	(Dayton) During 1973 did you have any net income from business?
DE11611	(Dayton) Amount of net income from business?
DE11612	(Dayton) During 1973 did you have any income from alimony or child support from someone outside the household?
DE11613	(Dayton) Amount from alimony/child support?
DE11622	(Dayton) During 1973, did you have any income from veteran benefits?

(cont.)

VARIABLE INCOME1 (cont.)

INPUT VARIABLES (cont.)

DEI1623	(Dayton) Amount from veteran benefits?
DEI1628	(Dayton) During 1973 did you have any income from foster child payments?
DEI1629	(Dayton) Amount from foster child payments?
DEI1630	(Dayton) During 1973 did you have any income from any other sources?
DEI1631	(Dayton) Amount from other sources?
DEI4964	(Dayton) During 1973 did you have any income from social security payments?
DEI4965	(Dayton) Amount from social security payments?
DEI4966	(Dayton) During 1973 did you have any income from welfare payments; for example, Aid to Families with Dependent Children or Supplemental Security Income?
DEI4967	(Dayton) Amount from welfare payments?
DEI6004	(NonDayton) In 1974 what was your total net income from the business(es)? By net income I mean the gross receipts less expenses. (Asked for 1975 in South Carolina.)
DEI6008	(NonDayton) Other than (PERSON)'s self employment that we have just spoken about, did (he/she) have any other regular work for pay in 1974? (Asked for 1975 in South Carolina.)
DEI6009	(NonDayton) How much did you earn from your

(cont.)

VARIABLE INCOME1 (cont.)

INPUT VARIABLES (cont.)

	employment in 1974 before any deductions for taxes or other things? Please include wages, salary, overtime, bonuses, commissions, or tips from all you jobs. (Again, any records you have would be helpful.) (Asked for 1975 in South Carolina.)
DEI6014	(Seattle) Did you get meals, housing, goods, or services free or at a reduced rate as part of the pay from your job or jobs in 1974?
DEI6015	(Seattle) What was the dollar value of those goods or services in 1974? Please give me your best estimate.
DEI6022	(NonDayton) Besides (all) the job(s) we have talked about did you earn any income from occasional work such as babysitting, doing chores for someone, fixing or repairing something, or any other job which was done from time to time? (Asked for 1974 in Seattle and Massachusettts. Asked of 1975 in South Carolina.)
DEI6023	(NonDayton) How much did you earn altogether for that occasional work during 1974? (Asked for 1975 in South Carolina.)
DEI6037	(NonDayton) Now, in 1974, what was the total income of the people who are currently in your family unit, from all (cont.)

VARIABLE INCOME1 (cont.)

INPUT VARIABLES (cont.)

	sources, before any deductions for taxes or other things? Please include all the income we have already recorded. Give me your best guess.
DEI6319	(Dayton) 1973 source of income (unemployment insurance or strike benefits).
DEI6320	(Dayton) Amount of 1973 income (unemployment insurance or strike benefits).
DEI6321	(Dayton) 1973 source of income (workman's compensation or disability insurance).
DEI6322	(Dayton) Amount of 1973 income (workman's compensation or disability insurance).

CONSTRUCTION

(Dayton)

(INCOME1 is constructed only from baseline family-level data unless new members joined between baseline and enrollment. Then, the income of each new family member is added from the EVF new person supplement.)

(From baseline data.)

```
IF DEI1051 >= 0
   THEN INCOME1 = DEI1051;
```

(From EVF new person supplement. TMPINC1 is a temporary variable denoting the income of each new member.)

```
TMPINC1 = 0;
```

(cont.)

VARIABLE INCOME1 (cont.)

CONSTRUCTION (cont.)

```
IF DEI1486 = 2 | DEI1487 = . THEN DEI1487 = 0;
IF DEI1489 = 2 | DEI1490 = . THEN DEI1490 = 0;
IF DEI1596 = 2 | DEI1597 = . THEN DEI1597 = 0;
IF DEI1598 = 2 | DEI1599 = . THEN DEI1599 = 0;
IF DEI1610 = 2 | DEI1611 = . THEN DEI1611 = 0;
IF DEI1612 = 2 | DEI1613 = . THEN DEI1613 = 0;
IF DEI6319 = 2 | DEI6320 = . THEN DEI6320 = 0;
IF DEI6321 = 2 | DEI6322 = . THEN DEI6322 = 0;
IF DEI1622 = 2 | DEI1623 = . THEN DEI1623 = 0;
IF DEI4964 = 2 | DEI4965 = . THEN DEI4965 = 0;
IF DEI4966 = 2 | DEI4967 = . THEN DEI4967 = 0;
IF DEI1628 = 2 | DEI1629 = . THEN DEI1629 = 0;
IF DEI1630 = 2 | DEI1631 = . THEN DEI1631 = 0;


TMPINC1 = DEI1487 + DEI1490 + DEI1597 + DEI1599 + DEI1611 +
          DEI1613 + DEI6320 + DEI6322 + DEI1623 + DEI4965 +
          DEI4967 + DEI1629 + DEI1631;

INCOME1 = INCOME1 + (sum of all TMPINC1s for the family)
```

(Seattle)

(INCOME1 is constructed only from baseline family-level data unless new members joined between baseline and enrollment. Then, the income of each new family member is added from the EVF new person supplement.)

(From baseline data.)

```
IF DEI6037 >= 0
   THEN INCOME1 = DEI6037;
```

(From new person EVF supplement. TMPINC1 is a temporary variable denoting the income of each new member.)

```
TMPINC1 = 0;
IF DEI6004 = . THEN DEI6004 = 0;
IF DEI6008 = 2 | DEI6009 = . THEN DEI6009 = 0;
IF DEI6014 = 2 | DEI6015 = . THEN DEI6015 = 0;
IF DEI6022 = 2 | DEI6023 = . THEN DEI6023 = 0;

TMPINC1 = DEI6004 + DEI6009 + DEI6015 + DEI6023;
```

(cont.)

VARIABLE INCOME1 (cont.)

CONSTRUCTION (cont.)

INCOME1 = INCOME1 + (sum of all TMPINC1s for the family)

(The results were adjusted to 1973 dollars.)

```
INCOME1 = INCOME1 * .9012;
```

(Massachusetts and South Carolina)

(INCOME1 is constructed only from baseline family-level data unless new members joined between baseline and enrollment. Then, the income of each new family member is added from the EVF new person supplement.)

(From baseline data.)

```
IF DEI6037 >= 0
   THEN INCOME1 = DEI6037;
```

(From EVF new person supplement. TMPINC1 is a temporary variable denoting the income of each new member.)

```
TMPINC1 = 0;
IF DEI6004 = . THEN DEI6004 = 0;
IF DEI6008 = 2 OR DEI6009 = . THEN DEI6009 = 0;
IF DEI6022 = 2 OR DEI6023 = . THEN DEI6023 = 0;

TMPINC1 = DEI6004 + DEI6009 + DEI6023;
```

INCOME1 = INCOME1 + (sum of all TMPINC1s for the family)

(The results were adjusted to 1973 dollars.)

```
INCOME1 = INCOME1 * .9012;
```

VARIABLE INCOME2 FSD

Family income for second year preceding enrollment

CODES

. - Missing or South Carolina respondent
Dollar amount#

INCOME2 describes the income (in 1973 dollars) for the second year preceding enrollment.

#Values are those provided by respondents.

INPUT VARIABLES

Site	HIEI		Variable
Dayton	15/43	DEI179	(Dayton) First, in 1972, what was the total income of the people who are currently in your family unit from all sources before anything was deducted for taxes or other things?
Seattle	63		
Massachusetts	92		
		DEI6038	(Seattle and Massachusetts) Next, in 1973, what was the total income of the people who are currently in your family unit from all sources, before any deductions for taxes or other things? Give best guess.

CONSTRUCTION

(Constructed only from baseline data.)

(Dayton)

```
IF DEI179 >= 0
   THEN INCOME2 = 1.0623 * DEI179;
```

(cont.)

INCOME2

NUMBER OF OBSERVATIONS	15791
NUMBER OF MISSING	10357
MEAN	11864.78
MEDIAN	11685.30
MINIMUM VALUE	0.00
MAXIMUM VALUE	85000.00
STANDARD DEVIATION	7038.60
COEFFICIENT OF VARIATION	59.32
SKEWNESS	1.20
KURTOSIS	7.05

VARIABLE INCOME2 (cont.)

CONSTRUCTION (cont.)

(Seattle and Massachusetts)

```
IF DEI6038 >= 0
   THEN INCOME2 = DEI6038;
```

VARIABLE TINC FSD

Log of family income

CODES

. - Missing or never HIE-insured
Log of dollar amount

TINC is a transformation of average annual family income (in 1973 dollars) for the two years preceding enrollment. Raw values are adjusted for family size and for cost-of-living differences across sites, and $1000 is added before the log is taken. Predicted values are substituted for missing values. TINC is calculated for HIE-insured families only.

INPUT VARIABLES (all sites)

Source	Variable	
Full sample demographic file	INCOME1	Income for year preceding enrollment
	INCOME2	Income for second year preceding enrollment
	AGE	Participant's age
	TINCCAT	Source of TINC value
Master demographic file	EDUCDEC	Education of person most likely to make decisions
Annual income report (AIR)	TAXINC	Taxable income
	NONTAX	Nontaxable income
	IRS	Federal income tax paid
Temporary variables	ADULT	Number of adults (18 and older) in family
	CHILD	Number of children (under 18) in family

(cont.)

TINC

NUMBER OF OBSERVATIONS	9139
NUMBER OF MISSING	17009
MEAN	9.29
MEDIAN	9.40
MINIMUM VALUE	6.79
MAXIMUM VALUE	11.18
STANDARD DEVIATION	0.62
COEFFICIENT OF VARIATION	6.72
SKEWNESS	-1.00
KURTOSIS	1.40

VARIABLE TINC (cont.)

INPUT VARIABLES (cont.)

FAMCHG	Change in number of family heads between baseline and enrollment -1 - Family lost a head 0 - No change 1 - Family added a head
INC	Family income calculated from AIR data
TIRS	Log of federal income tax paid
MEANTINC	Mean of all calculated TINC values
NOINC	AIR income indicator 0 - No income 1 - Some income
NOIRS	Federal income tax indicator 0 - No federal income tax paid 1 - Federal income tax paid
TINCA	Log of family income calculated from AIR data
TINCP	Predicted value of TINC from regression on income data
TIRSP	Predicted value of TINC from regression on federal income tax
TEDCP	Predicted value of TINC from regression on age and education of family decision maker

CONSTRUCTION (all sites)

Step 1 - calculate TINC from INCOME1 and/or INCOME2 for HIE-insured families.

(Calculate family size income factor (FSIF#).)

```
IF ADULT = 0 THEN FSIF = .;

IF CHILD = 0 THEN FSIF = .37 + .18*ADULT;
IF CHILD = 1 THEN FSIF = .37 + .18*ADULT + .15;
IF CHILD = 2 THEN FSIF = .37 + .18*ADULT + .15 + .12;
IF CHILD > 2
   THEN FSIF = .37 + .18*ADULT + .15 + .12 + .10*(CHILD-2);
```

(cont.)

VARIABLE TINC (cont.)

CONSTRUCTION (cont.)

(Calculate TINC; adjust for site (USSTDINC##) and family size.)

```
IF INCOME1 = . AND INCOME2 = . THEN INCOME = .;
IF INCOME1 = . AND INCOME2 \= . THEN INCOME = INCOME2;
IF INCOME1 \= . AND INCOME2 = . THEN INCOME = INCOME1;
IF INCOME1 \= . AND INCOME2 \= .
   THEN INCOME = (INCOME1 + INCOME2)/2;
IF INCOME \= .
   THEN DO;

        IF SITE = 1 THEN USSTDINC = INCOME*9761/9139;
        IF SITE = 2 THEN USSTDINC = INCOME*9761/10072;
        IF SITE = 3 | SITE = 4
           THEN USSTDINC = INCOME*9761/10904;
        IF SITE = 5 | SITE = 6
           THEN USSTDINC = INCOME*9761/((9151+9258)/2);
        TINC = LOG (( MAX (USSTDINC,0) + 1000) / FSIF);

        END;
```

#FSIF factors to adjust income for family size were developed by Rand analysts on the theory that operating a larger household entails an economy of scale. The factor for operating any household is .37, to which the following are added, as applicable: .18 for each adult (over 18 years old); .15 for the first child (under 18); .12 for the second child; and .10 for the third and any subsequent child. TINC normalizes income to that of a family of four, two adults and two children. Use of FSIF therefore inflates the income of families smaller than four and deflates the income of families larger than four.

##USSTDINC factors to adjust for site differences represent the annual budget of a 4-person family at an intermediate standard of living in autumn 1973. The dividend, 9761, is the average for all urban U.S. families. The divisors reflect amounts in or optimally near the HIE sites: 9139 (Dayton, Ohio), 10,072 (Seattle-Everett, Washington), 10,904 (Hartford, Connecticut), 9151 (Atlanta, Georgia), and 9258 (Durham, North Carolina). All figures are from U.S. Department of Labor, Bureau of Labor Statistics, "Handbook of Labor Statistics 1975--Reference Edition, " Washington, D.C., 1975, Table 142.

(cont.)

VARIABLE TINC (cont.)

CONSTRUCTION (cont.)

Step 2 - Calculate income from the annual income report; adjust for site and family size.

```
(Dayton, 1974 AIR)

INC = (TAXINC + NONTAX) * (9761/9139);

(Seattle, 1975 AIR)
INC = (TAXINC + NONTAX) * (9761/10072);

(Massachusetts, 1976 AIR)
INC = (TAXINC + NONTAX) * (9761/10904);

(South Carolina 3-year enrollees, 1978 AIR)
INC = (170.5/195.4) * (TAXINC + NONTAX) * (9761 /
                                          ((9151 + 9254)/2));

(South Carolina 5-year enrollees, 1976 AIR)
INC = (TAXINC + NONTAX) * (9761 / ((9151 + 9254)/2));

(All sites)
TINCA = LOG((MAX(INC,0) + 1000) / FSIF);
```

Step 3 - Calculate derived variables needed for regressions.

```
TIRS = LOG(IRS + 100);

IF INC = 0 THEN NOINC = 1;
   ELSE IF INC > 0 THEN NOINC = 0;

IF IRS = 0 THEN NOIRS = 1;
   ELSE IF IRS > 0 THEN NOIRS = 0;

TINCASQ = TINCA * TINCA;
TIRSSQ = TIRS * TIRS;
```

Step 4 - Run regressions shown below to predict TINC for every person

```
(Dayton)
TINCP = C1 + C2 * TINCA + C3 * NOINC;
TIRSP = C1 + C2 * TIRS + C3 * FAMCHG + C4 * NOIRS;
TEDCP = C1 + C2 * EDUCDEC + C3 * AGE;
```

(cont.)

VARIABLE TINC (cont.)

CONSTRUCTION (cont.)

(Seattle and Massachusetts)

```
TINCP = C1 + C2 * TINCA + C3 * TINCASQ + C4 * NOINC;
TIRSP = C1 + C2 * TIRS + C3 * TIRSSQ + C4 * FAMCHG + C5 * NOIRS;
TEDCP = C1 + C2 * EDUCDEC + C3 * AGE;
```

(South Carolina 3-year enrollees)

```
TINCP = C1 + C2 * TINCA + C3 * NOINC;
TIRSP = C1 + C2 * TIRS + C3 * FAMCHG + C4 * NOIRS;
TEDCP = C1 + C2 * EDUCDEC + C3 * AGE;
```

(South Carolina 5-year enrollees)

```
TINCP = C1 + C2 * TINCA + C3 * TINCASQ + C4 * NOINC;
TIRSP = C1 + C2 * TIRS + C3 * TIRSSQ + C4 * FAMCHG + C5 * NOIRS;
TEDCP = C1 + C2 * EDUCDEC + C3 * AGE;
```

Step 5 - For members of HIE-insured families, if TINC is missing from INCOME1 and INCOME2 (step 1), substitute the predicted values from TINCP, TIRSP, TEDCP, or MEANTINC (step 4) in that order.

```
TINCCAT = 1;

IF TINC = .
   THEN DO;

        IF TINCP \= .
           THEN DO;
                TINC = TINCP;
                TINCCAT = 2;
                END;
           ELSE IF TIRSP \= .
                   THEN DO;
                        TINC = TIRSP;
                        TINCCAT = 3;
                        END;
           ELSE IF TEDCP \= .
                   THEN DO;
                        TINC = TEDCP;
                        TINCCAT = 4;
                        END;
           ELSE DO;
                TINC = MEANTINC;
                TINCCAT = 5;
                END;
        END;
```

(cont.)

VARIABLE TINCCAT FSD

Source of TINC value

CODES

. - Missing or never HIE-insured
1 - Calculated from baseline data
2 - Predicted from regression on income data (AIR)
3 - Predicted from regression on federal income tax (AIR)
4 - Predicted from regression on age and education of family decision maker
5 - Predicted from mean of all calculated TINC values

TINCCAT indicates the basis of the family's value for the variable TINC.

INPUT VARIABLES (all sites)

Source		Variable
Full sample demographic file	TINC	Log of family income
Temporary variables	TINCP	Predicted value of TINC from regression on income data
	TIRSP	Predicted value of TINC from regression on federal income tax
	TEDCP	Predicted value of TINC from regression on age and education of family decision maker

(cont.)

TINCCAT

VALUE	FREQ	CUM FREQ	%	CUM %
.	17009	.	.	.
1	8676	8676	94.93	94.93
2	383	9059	4.19	99.13
3	32	9091	0.35	99.48
4	44	9135	0.48	99.96
5	4	9139	0.04	100.00

VARIABLE TINCCAT (cont.)

CONSTRUCTION

(TINCCAT is created in the construction of TINC, step 5.)

Step 5 - For memebers of HIE-insured families, if TINC is missing from INCOME1 and INCOME2 (step 1), substitute the predicted values from TINCP, TIRSP, TEDCP, or MEANTINC (step 4) in that order.

```
TINCCAT = 1;

IF TINC = .
   THEN DO;

        IF TINCP \= .
           THEN DO;
                TINC = TINCP;
                TINCCAT = 2;
                END;
           ELSE IF TIRSP \= .
                   THEN DO;
                        TINC = TIRSP;
                        TINCCAT = 3;
                        END;
           ELSE IF TEDCP \= .
                   THEN DO;
                        TINC = TEDCP;
                        TINCCAT = 4;
                        END;
           ELSE DO;
                TINC = MEANTINC;
                TINCCAT = 5;
                END;

        END;
```

VARIABLE TINCSE FSD

Standard error of predicted TINC value

RANGE

. - Missing or never HIE-insured
0 - TINC calculated from baseline data (95% of cases)

TINCSE is the standard error for predicted values of TINC.

INPUT VARIABLES (all sites)

Source	Variable	
Full sample demographic file	TINC	Log of family income
	TINCCAT	Source of TINC value
Temporary variables	YHAT	Predicted TINC value
	VARE	Mean square error
	VARYHAT	Variance of predicted TINC values

CONSTRUCTION

(TINCSE is calculated separately for each site. In South Carolina only, TINCSE is calculated separately for 3-year and 5-year participants.)

```
IF 2 <= TINCCAT <= 5 THEN YHAT = TINC;

TINCSE = SQRT (VARYHAT + VARE);

IF TINCCAT = 1 THEN TINCSE = 0;
```

TINCSE

NUMBER OF OBSERVATIONS	9139
NUMBER OF MISSING	17009
MEAN	0.02
MEDIAN	0.00
MINIMUM VALUE	0.00
MAXIMUM VALUE	0.67
STANDARD DEVIATION	0.11
COEFFICIENT OF VARIATION	440.94
SKEWNESS	4.31
KURTOSIS	17.13

VARIABLE ESTATUS FSD

Current employment status

CODES

. - Missing, Dayton respondent younger than 18, or nonDayton respondent younger than 16
1 - Working
2 - On strike
3 - Laid off
4 - Retired
5 - Homemaker
6 - Other (including leave of absence)

ESTATUS describes the adult participant's employment status at the time of the interview.

INPUT VARIABLES

Site	HIEI		Variable
Dayton	15/43,39	DEI1637	(Dayton) Are you currently working, on strike, temporarily laid off, retired, keeping house, or something else? 1. Currently working 2. On strike 3. Temporarily laid off 4. Retired 5. Keeping house 6. Something else, specify
Seattle	63		
Massachusetts	92		
South Carolina	147		
		DEI6048	(NonDayton) Are you currently working, on strike, on leave, temporarily laid off, retired, going to school, keeping house, or something else? 01. On strike 02. On leave 03. Temporarily laid off 04. Working 05. Retired 06. Student 07. Keeping house 08. Something else

(cont.)

ESTATUS

VALUE	FREQ	CUM FREQ	%	CUM %
.	10691	.	.	.
1	9287	9287	60.08	60.08
2	9	9296	0.06	60.14
3	429	9725	2.78	62.92
4	529	10254	3.42	66.34
5	3046	13300	19.71	86.05
6	2157	15457	13.96	100.00

VARIABLE ESTATUS (cont.)

CONSTRUCTION

(Dayton)

(From EVF or baseline data (if the information was missing from EVF data).)

```
      IF 1 <= DEI1637 <= 6
         THEN ESTATUS = DEI1637;
```

(Seattle, Massachusetts, and South Carolina)

(Constructed only from baseline data.)

```
   IF 1 <= DEI6048 <= 8
      THEN DO;

           IF DEI6048 = 4 THEN ESTATUS = 1;
              ELSE IF DEI6048 = 1 THEN ESTATUS = 2;
              ELSE IF DEI6048 = 3 THEN ESTATUS = 3;
              ELSE IF DEI6048 = 5 THEN ESTATUS = 4;
              ELSE IF DEI6048 = 7 THEN ESTATUS = 5;
              ELSE IF DEI6048 = 2 OR DEI6048 = 6 OR DEI6048 = 8
                      THEN ESTATUS = 6;
           END;
```

VARIABLE EFULL FSD

Full or part time employment at baseline

CODES

. - Missing or Seattle respondent
0 - Neither part nor full time, Dayton respondent younger than 18, or nonDayton respondent younger than 16
1 - Part time
2 - Full time

EFULL indicates whether the adult participant was working full or part time at baseline.

INPUT VARIABLES

Site	HIEI		Variable
Dayton	15/43	DEI1492	(Dayton) When working in 1973, what was the average number of hours you worked per week? Include paid and unpaid overtime, second jobs and so forth.
Massachusetts	92		
South Carolina	147		
		DEI2990	(Massachusetts and South Carolina) Do you usually usually work full time, regular part time, or something else? 1. Usually full time 2. Usually part time 3. Other

CONSTRUCTION

(Constructed only from baseline data.)

(Dayton)

```
IF 0 <DEI1492 < 35
   THEN EFULL = 1;
   ELSE IF DEI1492 >= 35
           THEN EFULL = 2;
   ELSE EFULL = 0;
```

(cont.)

EFULL

VALUE	FREQ	CUM FREQ	%	CUM %
.	9434	.	.	.
0	9968	9968	59.64	59.64
1	1087	11055	6.50	66.14
2	5659	16714	33.86	100.00

VARIABLE EFULL (cont.)

CONSTRUCTION (cont.)

(Massachusetts and South Carolina)

```
IF DEI2990 = 1
   THEN EFULL = 2;
   ELSE IF DEI2990 = 2
           THEN EFULL = 1;
   ELSE EFULL = 0;
```

VARIABLE ESELF FSD

Self-employment

CODES

. - Missing or not applicable#
0 - No
1 - Yes

ESELF indicates whether participants were self-employed.

#Not asked of homemakers, retired persons, respondents under 18 in Dayton, or respondents under 16 in nonDayton.

INPUT VARIABLES

Site	HIEI		Variable
Dayton	15/43	DEI1637	(Dayton) Are you currently working, on strike, temporarily laid off, retired, keeping house, or something else? 1. Currently working 2. On strike
Seattle	63,125		
Massachusetts	92,181		
South Carolina	147,192		

(cont.)

ESELF

VALUE	FREQ	CUM FREQ	%	CUM %
.	16880	.	.	.
0	8634	8634	93.16	93.16
1	634	9268	6.84	100.00

VARIABLE ESELF (cont.)

INPUT VARIABLES (cont.)

3. Temporarily laid off
4. Retired
5. Keeping house
6. Something else, specify

DE11639 (Dayton) (Do/Did) you work for someone else or (is/was) this your own business? (Asked for the last twelve months.)
1. Someone else
2. Self

DE16000 (NonDayton) Did you do any work for pay on regular full or part time basis at anytime during 1974? (Asked for 1975 in South Carolina.)

DE16001 (NonDayton) Were you self-employed at any time in 1974? Did you work in your own business? (Asked for 1975 in South Carolina.)
1. Yes
2. No

DE16048 (NonDayton) Are you currently working, on strike, on leave, temporarily laid off, retired, going to school, keeping house, or something else?
01. On strike
02. On leave
03. Temporarily laid off
04. Working
05. Retired
06. Student
07. Keeping house
08. Something else

DE16056 (NonDayton) Are you self-employed or do you work for someone else?
1. Self-employed
2. Work for someone else

(cont.)

VARIABLE ESELF (cont.)

```
CONSTRUCTION

(Dayton)

(Constructed only from baseline data.)

   IF 1 <= DEI1637 <= 3
      THEN IF 1 <= DEI1639 <= 2
              THEN DO;

                   IF DEI1639 = 1
                      THEN ESELF = 0;
                      ELSE ESELF = 1;

                   END;


(Seattle, Massachusetts, and South Carolina)

(From baseline data.)

   IF 1 <= DEI6048 <= 4
      THEN DO;

           IF DEI6056 = 1
              THEN ESELF = 1;
              ELSE IF DEI6056 = 2
                      THEN ESELF = 0;
           END;


(For persons not present at baseline, ESELF was constructed
from EVF new person supplement.)

   IF DEI6000 = 1
      THEN DO;

           IF DEI6001 = 1
              THEN ESELF = 1;
              ELSE IF DEI6001 = 2
                      THEN ESELF = 0;
           END;
```

VARIABLE OCC FSD

Occupation

RANGE

. - Missing or not applicable#
1 to 994 (codes in 1970 U.S. Census Index of Industries and Occupations)

OCC defines the occupation of participants.

#Question asked on the baseline instrument in Dayton and the EVF in nonDayton. Not asked of homemakers, retired persons, respondents under 18 in Dayton, or respondents under 16 in nonDayton.

INPUT VARIABLES

Site	HIEI		Variables
Dayton	15/43	DEI3212	(Dayton) What is your job there, what do you make or do? (U.S. Census Index of Industries and Occupations, 1970 edition)
Seattle	124		
Massachusetts	177		
South Carolina	188,377		
		DEI6058	(NonDayton) What kind of work do you do? PROBE: WHAT ARE (HIS/HER) MOST IMPORTANT ACTIVITIES OR DUTIES?

(cont.)

VARIABLE OCC (cont.)

CONSTRUCTION

(Dayton)

(Constructed only from baseline data.)

OCC = DEI3212;

(Seattle, Massachusetts and South Carolina)

(Constructed only from EVF data.)

OCC = DEI6058;

VARIABLE INDUSTRY FSD

Industry

RANGE

. - Missing or not applicable#
17 to 990 (codes in 1970 U.S. Census Index of Industries and Occupations)

INDUSTRY defines the industry of participants.

#Not asked of homemakers, retired persons, respondents under 18 in Dayton, or respondents under 16 in nonDayton.

INPUT VARIABLES

Site	HIEI		Variables
Dayton	15/43	DEI3211	(Dayton) What is the main thing (company, division/plant) that you work for makes or does? (U.S. Census Index of Industries and Occupations, 1970 edition)
Seattle	63,124		
Massachusetts	92,177		
South Carolina	147,188		

(cont.)

VARIABLE INDUSTRY (cont.)

INPUT VARIABLES (cont.)

DEI6056	(NonDayton) Are you self-employed or do you work for someone else? 1. Self-employed 2. Work for someone else
DEI6057	(NonDayton) What kind of business or industry is that? PROBE: What does it make or do? (U.S. Census Index of Industries and Occupations, 1970 edition)
DEI6061	(NonDayton) What kind of business or industry is that? PROBE: What do they make or do? (U.S. Census Index of Industries and Occupations, 1970 edition)

CONSTRUCTION

(Dayton)

(Constructed only from baseline data.)

INDUSTRY = DEI3211;

(Seattle and South Carolina)

(From EVF data.)

INDUSTRY = DEI6061;

(cont.)

VARIABLE INDUSTRY (cont.)

CONSTRUCTION (cont.)

(INDUSTRY was constructed from baseline data if the information was missing from the EVF data.)

```
IF DE16056 = 1 AND (DE16057 \= .) AND (DE16061 = .)
   THEN INDUSTRY = DE16057;
   ELSE IF DE16056 = 2 AND (DE16061 \= .) AND (DE16057 = .)
           THEN INDUSTRY = DE16061;
```

(Massachusetts)

(From EVF data.)

```
IF DE16056 = 2 THEN INDUSTRY = DE16061;
```

(INDUSTRY was constructed from baseline data if the information was missing from EVF data.)

```
IF DE16056 = 1 AND (DE16057 \= .) AND (DE16061 = .)
   THEN INDUSTRY = DE16057;
   ELSE IF DE16056 = 2 AND (DE16061 \= .) AND (DE16057 = .)
           THEN INDUSTRY = DE16061;
```

VARIABLE LFEXPER FSD

Work experience

CODES

. - Missing, Dayton respondent younger than 18, or nonDayton respondent younger than 16
Number of months

LFEXPER indicates how long the adult participant has been employed since school.

(cont.)

LFEXPER

NUMBER OF OBSERVATIONS	14257
NUMBER OF MISSING	11891
MEAN	176.07
MEDIAN	120.00
MINIMUM VALUE	0.00
MAXIMUM VALUE	804.00
STANDARD DEVIATION	153.09
COEFFICIENT OF VARIATION	86.95
SKEWNESS	0.96
KURTOSIS	0.05

VARIABLE LFEXPER (cont.)

INPUT VARIABLES

Site	HIEI		Variable
Dayton	15/43,36		(Dayton) Since you left
Seattle	63,125		school, how many years
Massachusetts	92,181		altogether have you spent
South Carolina	147,192		working?
		DEI1666	____ YEARS
			and/or
		DEI1667	____ MONTHS
			NA STILL IN SCHOOL
			(NonDayton) How many
			years have you
			regularly been employed
			for pay either full- or
			part-time?
		DEI6070	____ YEARS
			and/or
		DEI6071	____ MONTHS

CONSTRUCTION

(Dayton)

(LFEXPER is constructed from baseline data or EVF new person supplement data (for persons not present at baseline).)

```
IF DEI1666 \= . OR DEI6667 \= .
   THEN LFEXPER = SUM(12 * DEI1666),DEI1667));
```

(Seattle, Massachusetts, and South Carolina)

(LFEXPER is constructed from baseline data or EVF new person supplement data (for persons not present at baseline).)

```
IF DEI6070 \= . OR DEI6071 \= .
   THEN LFEXPER = SUM(12 * DEI6070),DEI6071));
```

VARIABLE DEIWG1B FSD

Hourly wage, primary job at baseline

CODES

. - Missing or not applicable#
Dollar amount##

DEIWG1B defines the hourly wage earned at the adult participant's primary job at baseline, excluding work at an unincorporated self-owned business. DEIWG1B is not standardized by year. The instruments asked about wages in 1974, with the following exceptions: Seattle HIEI 63 and South Carolina HIEIs 147 and 192, wages in 1975; and South Carolina HIEI 380, wages in 1977.

#Not asked of homemakers, retired persons, respondents under 18 in Dayton, or respondents under 16 in nonDayton.

##Values are those provided by respondents.

INPUT VARIABLES

Site	HIEI
Dayton	15/43
Seattle	63,125
Massachusetts	92,181
South Carolina	147,192,380

	Variables
DEI1639	(Dayton) (Do/Did) you work for someone else, or (is/was) this your own business? 1. Someone else 2. Self
DEI1643	(Dayton) On your (current/most recent) main job (do/did) you earn a wage, a salary, or some other rate of pay? 1. Yes 2. No
DEI1645	(Dayton) What (is/was) your (salary/ wage)? (DO NOT INCLUDE OVERTIME PAY) (cont.)

DEIWG1B

NUMBER OF OBSERVATIONS	9356
NUMBER OF MISSING	16792
MEAN	4.83
MEDIAN	4.00
MINIMUM VALUE	0.00
MAXIMUM VALUE	806.15
STANDARD DEVIATION	12.22
COEFFICIENT OF VARIATION	253.03
SKEWNESS	44.42
KURTOSIS	2503.53

VARIABLE DEIWG1B (cont.)

INPUT VARIABLES (cont.)

DEI1646 (Dayton) TIME UNIT FOR WAGE RATE ON THAT JOB:
1. Hour
2. Week
3. Month
4. Year
5. Other

DEI1650 (Dayton) What is your hourly wage? (estimate)
$_____

DEI1657 (Dayton) How many weeks did you work at this job in the last 12 months including paid vacation and sick leave?

DEI1658 (Dayton) Did you take any paid vacation from this job during the last 12 months?
1. Yes
2. No

DEI1659 (Dayton) How many weeks paid vacation did you take?

DEI1660 (Dayton) How many hours per week (do/did) you usually work at this job, including usual overtime hours?

DEI1661 (Dayton) (Are/ Were) any of these hours paid overtime?
1. Yes
2. No

DEI1662 (Dayton) How many hours of paid overtime (do/did) you usually work per week?

DEI2117 (South Carolina) Were you self-employed at any time in 1975? (Did you work in your own business)?
1. Yes
2. No

(cont.)

VARIABLE DEIWG1B (cont.)

INPUT VARIABLES (cont.)

DEI2119 (South Carolina) (Was/ were) your business(es) (a corporation/ corporations)?
1. Yes
2. No

DEI2131 (South Carolina) Other than your self-employment that we have just spoken about did you have any other regular work for pay in 1975?
1. Yes
2. No

DEI2132 (South Carolina) How much pay did you earn in 1975 before any deductions for taxes or other things? Please include wages, salary, overtime, bonuses, commissions, or tips, from all your jobs. (Again, any records you have would be helpful.)

DEI2134 (South Carolina) During 1975, how many days of paid vacation and holidays did you take? IF ANSWER IS GIVEN IN WEEKS, ASK: How many working days was that?

DEI2140 (South Carolina) During 1975, how many weeks did you, work including weeks of paid vacation and paid sick leave? Do not include weeks on strike or lay-off.

(cont.)

VARIABLE DEIWG1B (cont.)

INPUT VARIABLES (cont.)

DE12141 (South Carolina) When working in 1975, what was the average number of hours you worked per week? INCLUDE PAID AND UNPAID OVERTIME AND SECOND JOBS.

DE16001 (NonDayton) Were you self-employed at any time in 1974? (Did you work in your own business?) (Asked for 1975 in South Carolina.)
1. Yes
2. No

DE16003 (NonDayton) (Was/ Were all of) your business(es) (a corporation/corporations)?
1. Yes
2. No

DE16008 (NonDayton) Other than your self-employment that we have just spoken about, did you have any other regular work for pay in 1974? (Asked for 1975 in South Carolina.)
1. Yes
2. No

DE16009 (NonDayton) How much pay did you earn in 1974 before any deductions for taxes or other things? Please include wages, salary, overtime, bonuses, commissions, or tips, from all your jobs. (Again, any records you have would be helpful.) (Asked for 1975 in South Carolina.)
(cont.)

VARIABLE DEIWG1B (cont.)

INPUT VARIABLES (cont.)

A. RECORD AMOUNT.
B. CODE RECORD USED. IF BOTH 1040 AND W-2, CODE 1040.
1. Federal 1040
2. W-2
3. Other
4. No record used

DEI6011 (NonDayton) During 1974, how many days of paid vacation and paid holidays did you take? IF ANSWER IS GIVEN IN WEEKS, ASK: How many working days was that? (Asked for 1975 in South Carolina.)

DEI6012 (NonDayton) During 1974, how many weeks did you work, including weeks of paid vacation and paid sick leave? DO NOT INCLUDE WEEKS ON STRIKE OR LAY-OFF. (Asked for 1975 in South Carolina.)

DEI6013 (NonDayton) When working in 1974, what was the average number of hours you worked per week? INCLUDE PAID AND UNPAID OVERTIME AND SECOND JOBS. (Asked for 1975 in South Carolina.)

DEI6056 (Seattle) Are you self-employed at that job, or do you work for someone else?
1. Self-employed
2. Someone else

DEI6059 (Seattle) Is your business a corporation or is it an unincorporated business?
1. Corporation
2. Unincorporated

(cont.)

VARIABLE DEIWG1B (cont.)

INPUT VARIABLES (cont.)

DE16063 (Seattle) (What is your wage or salary/What are your earnings at this job?)

DE16064 (Seattle) (What is your wage or salary/What is your earning rate at this job?)
1. Rate per hour
2. Rate per day
3. Rate per week
4. Rate per month
5. Rate per year
6. By work completed or commission only

DE16940 (South Carolina PEG) Were you self-employed at any time in 1977? Did you work in your own business?
1. Yes
2. No

DE16944 (South Carolina PEG) Other than your self-employment that we have just spoken about, did you have any other regular work for pay in 1977?
1. Yes
2. No

DE16945 (South Carolina PEG) How much did you earn from your employment in 1977 before any deductions for taxes or other things? Please include wages, salary, overtime, bonuses, commissions, or tips, from all your jobs. (Again, any records you have would be helpful.) (cont.)

VARIABLE DEIWG1B (cont.)

INPUT VARIABLES (cont.)

A. RECORD AMOUNT.
B. CODE RECORD USED. IF BOTH 1040 (OR 1040A) AND W-2,CODE 1040 OR 1040A.

DEI6947 (South Carolina PEG) During 1977, how many days of paid vacation and paid holidays did (PERSON) take? IF ANSWER IS GIVEN IN WEEKS, ASK: How many working days was that?

DEI6948 (South Carolina PEG) During 1977, how many weeks did you work, including weeks of paid vacation and paid sick leave? Do not include weeks on strike or laid off.

DEI6949 (South Carolina PEG) When working in 1977, what was the average number of hours you worked per week? INCLUDE PAID AND UNPAID OVERTIME AND SECOND JOBS.

CONSTRUCTION

(Dayton)

(From baseline data.)

```
IF DEI1639 = 1 AND DEI1643 = 1
   THEN DO;

        IF DEI1646 = 1
           THEN DEIWG1B = DEI1645;
           ELSE IF DEI1646 = 2
                   THEN DO;
                        IF DEI1661 = 1
                           THEN DEIWG1B = DEI1645 /
                                          (DEI1660 - DEI1662);
                           ELSE DEIWG1B = DEI1645 / DEI1660;
                        END;
```

(cont.)

VARIABLE DEIWG1B (cont.)

CONSTRUCTION (cont.)

```
            ELSE IF DEI1646 = 3
                    THEN DO;
                         IF DEI1661 = 1
                            THEN DEIWG1B = DEI1645 /
                                           (DEI1660-DEI1662)*4.3;
                            ELSE DEIWG1B = DEI1645 /
                                           (DEI1660 * 4.3);
                         END;

            ELSE IF DEI1646 = 4 AND DEI1658 = 1
                    THEN DO;
                         IF DEI1661 = 1
                            THEN DEIWG1B = DEI1645 /
                                (DEI1657-DEI1659)*(DEI1660-DEI1662);
                            ELSE DEIWG1B = DEI1645 /
                                (DEI1657 - DEI1659)*DEI1660;
                         END;

            ELSE DO;
                 IF DEI1661 = 1
                    THEN DEIWG1B = DEI1645 /
                                   (DEI1657 * (DEI1660 - DEI1662));
                    ELSE DEIWG1B = DEI1645 / (DEI1657 * DEI1660);
                 END;
         END;

         ELSE DEIWG1B = DEI1650;
```

(Seattle)

(From baseline data.)

```
IF DEI6056 = 2 | DEI6059 = 1
   THEN DO;

         IF DEI6064 = 1
            THEN DEIWG1B = DEI6063;
            ELSE IF DEI6064 = 2
                    THEN DEIWG1B = DEI6063 / 8;
            ELSE IF DEI6064 = 3
                    THEN DEIWG1B = DEI6063 / DEI6013;
            ELSE IF DEI6064 = 4
                    THEN DEIWG1B = DEI6063 / (DEI6013 * 4.3);
            ELSE IF DEI6064 = 5
                    THEN DEIWG1B = DEI6063 /
                       ((DEI6012 - (DEI6011 / 5)) * DEI6013);
         END;
```

(cont.)

VARIABLE DEIWG1B (cont.)

CONSTRUCTION (cont.)

```
(DEIWG1B was constructed from EVF new person supplement data for
persons not present at baseline.)

IF DEI6001 = 2 OR DEI6003 = 1 OR DEI6008 = 1
   THEN DEIWG1B = (DEI6009 * 100) /
                  ((DEI6012 - (DEI6011 / 5)) * DEI6013);

                  DEIWG1B = DEIWG1B * .01;


(Massachusetts)

(From baseline or EVF new person supplement data.)

IF DEI6001 = 2 OR DEI6003 = 1 OR DEI6008 = 1
   THEN DEIWG1B = (DEI6009 * 100) /
                  ((DEI6012 - (DEI6011 / 5)) * DEI6013);

                  DEIWG1B = DEIWG1B * .01;


(South Carolina)

(From baseline data.)

IF DEI2117 = 2 OR DEI2119 = 1 OR DEI2131 = 1
   THEN DEIWG1B = (DEI2132 * 100) /
                  ((DEI2140 - (DEI2134 / 5)) * DEI2141);

                  DEIWG1B = DEIWG1B * .01;


(DEIWG1B was constructed from EVF new person supplement data for
persons not present at baseline.)

IF DEI6001 = 2 OR DEI6003 = 1 OR DEI6008 = 1
   THEN DEIWG1B = (DEI6009 * 100) /
                  ((DEI6012 - (DEI6011 / 5)) * DEI6013);

                  DEIWG1B = DEIWG1B * .01;
```

(cont.)

VARIABLE DEIWG1B (cont.)

CONSTRUCTION (cont.)

(For 3-year enrollees, DEIWG1B was constructed from preenrollment EVF new person supplement data if the information was missing from baseline data or the EVF new person supplement.)

```
IF DE16940 = 2 OR DE16003 = 1 OR DE16944 = 1
   THEN DEIWG1B = (DE16945 * 100) /
                  ((DE16948 - (DE16947 / 5)) * DE16949);

                DEIWG1B = DEIWG1B * .01;
```

VARIABLE DEIWG1E FSD

Hourly wage, primary job at enrollment

CODES

. - Missing or not applicable#
Dollar amount##

DEIWG1E defines the hourly wage earned at the adult participant's primary job at enrollment, excluding work at an unincorporated self-owned business. The year is not standardized (see instrument administration dates in in Appendix C).

#Not asked of homemakers, retired persons, respondents under 18 in Dayton, or respondents under 16 in nonDayton.

##Values are those provided by respondents.

(cont.)

DEIWG1E

Number of observations	3478
Number of missing	22670
Mean	5.63
Median	4.60
Minimum value	0.00
Maximum value	600.00
Standard deviation	12.64
Coefficient of variation	224.55
Skewness	35.17
Kurtosis	1508.69

VARIABLE DEIWG1E (cont.)

INPUT VARIABLES

Site	HIEI		Variables
Dayton	42	DE11650	(Dayton) What is your hourly wage (estimate)?
Seattle	124,127		
Massachusetts	177,178	DE12897	(Dayton) Do you receive a regular wage or salary from this job? 1. Yes 2. No
South Carolina	188,189,377, 381	DE12903	(Dayton) What is your rate of pay per hour before taxes and other deductions? PLEASE DO NOT INCLUDE ANY OVERTIME EARNINGS.
		DE12904	(Dayton) What is your rate of pay per day before taxes and other deductions? PLEASE DO NOT INCLUDE ANY OVERTIME EARNINGS.
		DE12905	(Dayton) What is your rate of pay per week before taxes and other deductions? PLEASE DO NOT INCLUDE ANY OVERTIME EARNINGS.
		DE12906	(Dayton) What is your rate of pay per month before taxes and other deductions? PLEASE DO NOT INCLUDE ANY OVERTIME EARNINGS.
		DE12907	(Dayton) What is your rate of pay per year before taxes and other deductions? PLEASE DO NOT INCLUDE ANY OVERTIME EARNINGS.
		DE12910	How many weeks per (month/year) do you have to work to receive this pay? PLEASE INCLUDE WEEKS OF PAID VACATION.

(cont.)

VARIABLE DEIWG1E (cont.)

INPUT VARIABLES (cont.)

DEI2911 How many days per week do you work at this job?

DEI2912 (Dayton) How many hours per day do you work, not including paid overtime?

DEI4696 (NonDayton) How many days of paid vacation and paid holidays do you get per year?

DEI4697 (NonDayton) How many hours per week, not including paid overtime hours, do you usually work at this job?

DEI5067 (Dayton) TIME UNIT FOR WAGE RATE ON THAT JOB:
1. Per Hour
2. Per Day
3. Per Week
4. Per Month
5. Per Year
6. Per Other

DEI6056 (NonDayton) Are you self-employed at that job, or do you work for someone else?
1. Self-employed
2. Someone else

DEI6059 (NonDayton) Is your business a corporation or is it an unincorporated business?
1. Corporation
2. Unincorporated

DEI6063 (NonDayton) (What is your wage or salary/What are your earnings at this job?) (cont.)

VARIABLE DEIWG1E (cont.)

INPUT VARIABLES (cont.)

DEI6064 (NonDayton) (What is your wage or salary/What are your) earnings at this job?)
CODE ONE:
1. Rate per hour
2. Rate per day
3. Rate per week
4. Rate per month
5. Rate per year
6. By work completed or commission only

CONSTRUCTION

(Dayton)

(Constructed only from EVF employment supplement data.)

```
IF DEI2897 = 1
   THEN DO;

        IF DEI5067 = 1
           THEN DEIWG1E = DEI2903;
           ELSE IF DEI5067 = 2
                   THEN DEIWG1E = DEI2904 / DEI2912;
           ELSE IF DEI5067 = 3
                   THEN DEIWG1E = DEI2905 / (DEI2911 * DEI2912);
           ELSE IF DEI5067 = 4
                   THEN DEIWG1E = DEI2906 /
                                  (DEI2910 * DEI2911 * DEI2912);
           ELSE IF DEI5067 = 5
                   THEN DEIWG1E = DEI2907 /
                                  (DEI2910 * DEI2911 * DEI2912);
           ELSE DEIWG1E = DEI1650;

        END;
```

(cont.)

VARIABLE DEIWG1E (cont.)

CONSTRUCTION (cont.)

(NonDayton)

(From EVF or EVF employment supplement if the information was missing from the EVF.)

```
IF DE16056 = 2 OR DE16059 = 1
   THEN DO;
        IF DE16064 = 1
           THEN DEIWG1E = DE16063;
           ELSE IF DE16064 = 2
                   THEN DEIWG1E = (DE16063 * DE12911) / DE14697;
           ELSE IF DE16064 = 3
                   THEN DEIWG1E = DE16063 / DE14697;
           ELSE IF DE16064 = 4
                   THEN DEIWG1E = DE16063 / (DE14697 * 4.3);
           ELSE IF DE16064 = 5
                   THEN DEIWG1E = DE16063 /
                      ((DE12910 - (DE14696 / 5)) * DE14697);
        END;
```

VARIABLE INSURED FSD

Family health insurance

CODES

. - Missing or conflicting data
0 - No
1 - Yes

INSURED indicates whether a family member had health insurance of any kind.

NOTE: Due to a programming error, Dayton baseline-only participants who had no health insurance were coded as having health insurance.

(cont.)

INSURED

VALUE	FREQ	CUM FREQ	%	CUM %
.	3148	.	.	.
0	3142	3142	13.66	13.66
1	19858	23000	86.34	100.00

VARIABLE INSURED (cont.)

INPUT VARIABLES

Site	HIEI
Dayton	9,15/43,39
Seattle	63
Massachusetts	92
South Carolina	147

	Variables
DEI245	(Dayton) Does anyone have health insurance through a school or other organization? (NonDayton) Do you (or anyone in your family unit) have health insurance through a school, professional organization, or any other group? 1. Yes 2. No
DEI1049	(Dayton) Does he have health insurance through his employer? 1. Yes 2. No
DEI1050	(Dayton) Does he have any (other) health insurance, through a private agent or other source? 1. Yes 2. No
DEI1220	(NonDayton) RECORD TOTAL NUMBER OF SUPPLEMENTS TO BE COMPLETED. THE NUMBER OF SUPPLEMENTS YOU HAVE PREPARED SHOULD EQUAL THIS TOTAL.
DEI2305	(Dayton) (In addition to any policies already mentioned) Does anyone have any policies or plans that are purchased from a private source, such as an insurance company, agent, salesman or by mail? Here is a list of some private insurance companies which offer medical insurance in (Ohio). (NonDayton) (In addition to that policy/those policies) Do you have any policies or (cont.)

VARIABLE INSURED (cont.)

INPUT VARIABLES (cont.)

plans that are purchased from a private source, such as an insurance company, agent, salesman or by mail?
1. Yes
2. No

DEI2307 (Dayton) CIRCLE ONE: 1) Family unit has no insurance; 2) Family unit has some insurance.

DEI2309 (Dayton) (In addition) are there any (other) health insurance policies covering any of the members of your family unit? For instance, policies which are held by someone outside the family unit?
(NonDayton) (Other than the policy(ies) you've told me about) Are there any members of this family unit covered by a health insurance policy held by someone outside the family unit or outside the household, for example, a child's insurance being paid by a relative who does not live here?
1. Yes
2. No

DEI2339 (NonDayton) Sometimes people have special insurance policies which pay cash directly to the beneficiary for days spent in the hospital. This kind of policy is called a hospital indemnity or extra cash policy. (Outside of the policy(ies) you've already told me about) Do you (or anyone in your family

(cont.)

VARIABLE INSURED (cont.)

INPUT VARIABLES (cont.)

unit) have a hospital indemnity or extra cash policy?
1. Yes
2. No

DE12341 (NonDayton) (Other than what you have already told me about) Are you (or is anyone in your family unit) covered by any of the special plans which are listed on this card?
1. Yes
2. No

DE12343 (NonDayton) Some people participate in prepaid health maintenance or group practice plans, which provide health care in a clinic setting. By that, I mean a group of doctors to whom one can go for regular check ups as well as for treatment. These plans sometimes are provided by an employer, union, or some other group, or sometimes one can join as an individual. (Other than the policy(ies) you have mentioned) Are you (or anyone in your family unit) participating in such a plan?
1. Yes
2. No

DE12345 (Seattle) Do you (or anyone in your family unit) expect to get any (other) health insurance policies within the next 6 months?
1. Yes
2. No

(cont.)

VARIABLE INSURED (cont.)

INPUT VARIABLES (cont.)

DE12577 Do you (or anyone in your family unit) have health insurance through an employer or through a union?
1. Yes
2. No

DE12749 (Dayton) INTERVIEWER: CHECK INSURANCE PREP SHEET
1. Family did not have health insurance
2. Family did have health insurance

DE12757 (Dayton) Is (each/this) policy still in force, (that is, is the policy holder the same and the insurer the same (on each policy))?
1. Yes
2. No

DE12762 (Dayton) (Do you/does anyone in your family unit) currently have any (other) health insurance policies, through an employer, a union, a school, or a private agency?
1. Yes
2. No

DE12787 (Dayton) Among the persons who have left this unit, that is, (NAMES OF LIVING DEPARTED PERSONS) (is anyone a policy holder of a health insurance policy/is (NAME) the policy holder of a health insurance policy)?
1. Yes
2. No
8. Don't know

DE12789 (Dayton) Is anyone currently in this family unit covered by the health
(cont.)

VARIABLE INSURED (cont.)

INPUT VARIABLES (cont.)

insurance policy(ies) of (DEPARTED POLICY HOLDER(S))?
1. Yes
2. No

DE12794 (Dayton) Among the new members of this family unit, that is (NAMES OF NEW MEMBERS BESIDES NEWBORNS), does anyone have any (other) health insurance?
1. Yes
2. No

DE12834 (Massachusetts and South Carolina) Will you (or anyone in your family unit) be eligible for any (other) health insurance policies within the next 6 months?
1. Yes
2. No

DE15064 (Dayton) Are there any (other) health insurance policies which are held by someone outside the family unit covering any of the members of your family unit?
1. Yes
2. No

CONSTRUCTION

(Dayton)

(From EVF data.)

```
IF DE12749 = 2 OR DE12757 = 1 OR DE12762 = 1 OR
   DE12787 = 1 OR DE12789 = 1 OR DE15064 = 1 OR
   DE12794 = 1
   THEN INSURED = 1;
IF (DE12749 = 1 ) AND
   (DE12757 = 2 OR DE12757 = .) AND
   (DE12762 = 2 OR DE12762 = .) AND
   (DE12787 = 2 OR DE12787 = . OR DE12787 = 8) AND
   (DE12789 = 2 OR DE12789 = .) AND
   (DE15064 = 2 OR DE15064 = .) AND
   (DE12794  = 2 OR DE12794 = .)
   THEN INSURED = 0;
```

(cont.)

VARIABLE INSURED (cont.)

CONSTRUCTION (cont.)

```
(INSURED was constructed from baseline data if health insurance
 information was missing from EVF data.)

     IF DEI2577 = 1 OR DEI245 = 1 OR DEI2305 = 1
        OR DEI2309 = 1 OR DEI2307 = 1
        THEN INSURED = 1;
     IF DEI2577 \= 1 AND DEI245 \= 1 AND DEI2305 \= 1 AND
        DEI2309 \= 1 AND DEI2307 \= 1
        THEN INSURED = 0;


(INSURED was constructed from screening data if health insurance
 information was missing from EVF and baseline data.)

     IF DEI1049 = 1 OR DEI1050 = 1
        THEN INSURED = 1;
        ELSE IF DEI1049 = 2 AND DEI1050 = 2
                THEN INSURED = 0;
                ELSE INSURED = .;


(Seattle)

(From baseline data.)

        IF DEI2577 = 2 AND
           DEI2305 = 2 AND
           DEI2339 = 2 AND
           (DEI2341 = 2 OR DEI2341 = .) AND
           DEI245  = 2 AND
           DEI2343 = 2 AND
           DEI2309 = 2 AND
           DEI2345 = 2 AND DEI1220 = 0
           THEN INSURED = 0;
        IF DEI2577 = 1 OR
           DEI2305 = 1 OR
           DEI2339 = 1 OR
           DEI2341 = 1 OR
           DEI245  = 1 OR
           DEI2343 = 1 OR
           DEI2309 = 1 OR
           DEI2345 = 1 OR DEI1220 > 0
           THEN INSURED = 1;
```

(cont.)

VARIABLE INSURED (cont.)

CONSTRUCTION (cont.)

(Massachusetts and South Carolina)

(From baseline data.)

```
IF DEI2577 = 2 AND
   DEI2305 = 2 AND

   DEI2339 = 2 AND
   (DEI2341 = 2 OR DEI2341 = .) AND
   DEI245  = 2 AND
   DEI2343 = 2 AND
   DEI2309 = 2 AND
   DEI2834 = 2 AND DEI1220 = 0
   THEN INSURED = 0;

IF DEI2577 = 1 OR
   DEI2305 = 1 OR
   DEI2339 = 1 OR
   DEI2341 = 1 OR
   DEI245  = 1 OR
   DEI2343 = 1 OR
   DEI2309 = 1 OR
   DEI2834 = 1 OR DEI1220 > 0
   THEN INSURED = 1;
```

VARIABLE PRIVINS FSD

"Private" medical insurance at baseline

CODES

. - Missing or conflicting data
0 - Has no insurance or insurance only through work
1 - Has "private" insurance

PRIVINS indicates whether the participant has a "private" medical insurance policy, defined as a policy not supplied through work.

INPUT VARIABLES

Site	HIEI
Seattle	67
Massachusetts	96
South Carolina	151

	Variable
DEI1220	(NonDayton) RECORD TOTAL NUMBER OF SUPPLEMENTS TO BE COMPLETED. THE NUMBER OF SUPPLEMENTS YOU HAVE PREPARED SHOULD EQUAL THIS TOTAL.
DEI2482	(NonDayton) Is this a group plan or is it a private policy? 1. Group plan 2. Private plan
DEI2485	(NonDayton) Is this plan provided through an employer, a union, a school, or some other organization? 1. Employer 2. Union 3. School 4. Other organization 5. None (not group)
INSURED	Family health insurance . - Missing or conflicting information 0 - No 1 - Yes

(cont.)

PRIVINS

VALUE	FREQ	CUM FREQ	%	CUM %
.	8390	.	.	.
0	14397	14397	81.07	81.07
1	3361	17758	18.93	100.00

VARIABLE PRIVINS (cont.)

INPUT VARIABLES (cont.)

Temporary variables	TFAM	Whether someone in family has a policy described in a medical insurance supplement 0 - No 1 - Yes
	COUNT	Number of medical insurance supplements found
	IFP	Whether policy described in medical insurance supplement is "private" or work-related . - Missing or conflicting information 0 - Work-related policy 1 - "Private" policy
	FP	Whether any policy described in a medical insurance supplement is "private" . - Information on all policies missing or some policies missing and all others work-related 0 - All policies work-related 1 - Any policy "private"
	ERRFP	Whether any supplement describing a policy is missing or shows conflicting information . - No 1 - Yes

CONSTRUCTION

(PRIVINS is constructed by checking responses to the baseline questionnaire and/or its supplements to see if participant had "private" medical insurance. If not all supplements were found (and no supplement indicated "private" insurance), PRIVINS was coded missing because of conflicting data.)

(cont.)

```
VARIABLE PRIVINS (cont.)

  CONSTRUCTION (cont.)

  (All nonDayton sites)

  (Construct IFP for each medical insurance supplement.)

  IFP = 0;

  IF DEI2482 = 2 OR (3 <= DEI2485 <= 5)
     THEN IFP = 1;

  IF (DEI2482 = 2 AND DEI2485 \= .) OR (DEI2482 = 1 AND DEI2485 = .)
     OR (DEI2482 = . AND DEI2485 = .)
     THEN IFP = .;


  (Construct FP)

  DO OVER MEDICAL SUPPLEMENTS;

     IF FIRST.PERSON THEN FP = 0;

     IF IFP = 1 THEN FP = 1;
     IF IFP = . THEN ERRFP = 1;

     IF LAST.PERSON THEN IF FP = 0 AND ERRFP = 1 THEN FP = .;

  END;


  (Seattle)

       PRIVINS = 0;

  (For persons with medical and/or dental insurance supplement(s).)

       IF FP = . THEN PRIVINS = .;
       IF FP = 1 THEN PRIVINS = 1;

       IF FP = 0
          THEN DO;

               IF INSURED = 0 THEN PRIVINS = 0;
               IF INSURED = . THEN PRIVINS = .;
               IF INSURED = 1
                  THEN IF COUNT >= DEI1220
                          THEN PRIVINS = 0;
                          ELSE PRIVINS = .;
               END;
```

(cont.)

VARIABLE PRIVINS (cont.)

CONSTRUCTION (cont.)

```
(For persons with dental but no medical insurance supplements.)

     IF INSURED = .
        THEN PRIVINS = .;
     IF INSURED = 1 AND TFAM = 1 AND COUNT < DEI1220
        THEN PRIVINS = .;
     IF INSURED = 1 AND TFAM = 0
        THEN PRIVINS = .;

(Massachusetts, South Carolina)

     PRIVINS = 0;

(For persons with medical and/or dental insurance supplement(s).)

     IF FP = . THEN PRIVINS = .;
     IF FP = 1 THEN PRIVINS = 1;

     IF FP = 0
        THEN DO;

             IF INSURED = 0 THEN PRIVINS = 0;
             IF INSURED = . THEN PRIVINS = .;
             IF INSURED = 1
                THEN IF COUNT >= DEI1220
                        THEN PRIVINS = 0;
                        ELSE PRIVINS = .;
             END;


(For persons with dental but no medical insurance supplements.)

     IF INSURED = .
        THEN PRIVINS = .;
     IF INSURED = 1 AND TFAM = 1 AND COUNT < DEI1220
        THEN PRIVINS = .;
     IF INSURED = 1 AND TFAM = 0
        THEN PRIVINS = .;
```

VARIABLE WORKINS FSD

Work-related medical insurance at baseline

CODES

. - Missing or conflicting data
0 - Has no insurance or only "private" insurance
1 - Has work insurance

WORKINS indicates whether the participant has a medical insurance policy through work, defined as a group policy through one's employer or union.

INPUT VARIABLES

Site	HIEI	Variable	
Seattle	67	DEI1220	(NonDayton) RECORD TOTAL NUMBER OF SUPPLEMENTS TO BE COMPLETED. THE NUMBER OF SUPPLEMENTS YOU HAVE PREPARED SHOULD EQUAL THIS TOTAL.
Massachusetts	96		
South Carolina	151		
		DEI2482	(NonDayton) Is this a group plan or is it a private policy? 1. Group plan 2. Private plan
		DEI2485	(NonDayton) Is this plan provided through an employer, a union, a school, or some other organization? 1. Employer 2. Union 3. School 4. Other organization 5. None (not group)
		INSURED	Family health insurance . - Missing or conflicting information 0 - No 1 - Yes

(cont.)

WORKINS

VALUE	FREQ	CUM FREQ	%	CUM %
.	8322	.	.	.
0	5290	5290	29.68	29.68
1	12536	17826	70.32	100.00

VARIABLE WORKINS (cont.)

INPUT VARIABLES (cont.)

Temporary variables	TFAM	Whether someone in family has a policy described in a medical insurance supplement 0 - No 1 - Yes
	COUNT	Number of medical insurance supplements found
	IFW	Whether policy described in medical insurance supplement is "private" or work-related . - Missing or conflicting information 0 - "Private" policy 1 - Work-related policy
	FW	Whether any policy described in a medical insurance supplement is work-related . - Information on all policies missing or some policies missing and all others "private" 0 - All policies "private" 1 - Any policy work-related
	ERRFW	Whether any supplement describing a policy is missing or shows conflicting information . - No 1 - Yes

CONSTRUCTION

(WORKINS is constructed by checking responses to the baseline questionnaire and/or its supplements to see if participant had work-related medical insurance. If not all supplements were found (and no supplement indicated work-related insurance), WORKINS was coded missing because of conflicting data.)

(cont.)

```
VARIABLE WORKINS (cont.)

  CONSTRUCTION (cont.)

  (All nonDayton sites)

  (Construct IFW for each medical insurance supplement)

   IFW = 0;

   IF (DEI2482 = 1 OR DEI2482 = .) AND
      (DEI2485 = 1 OR DEI2485 = 2)
      THEN IFW = 1;
   IF (DEI2482 = 2 AND DEI2485 \= .) OR
      (DEI2482 = 1 AND DEI2485 = .) OR
      (DEI2482 = . AND DEI2485 = .)
      THEN IFW = .;


  (Construct FW)

   DO OVER MEDICAL SUPPLEMENTS;

        IF FIRST.PERSON
           THEN FW = 0;
        IF IFW = 1 THEN FW = 1;
        IF IFW = . THEN ERRFW = 1;

        IF LAST.PERSON
           THEN IF FW = 0 AND ERRFW = 1 THEN FW = .;
   END;


  (Seattle)

   WORKINS = 0;

  (For persons with medical and/or dental insurance supplement(s).)

        IF FW = . THEN WORKINS = .;
        IF FW = 1 THEN WORKINS = 1;

        IF FW = 0
           THEN DO;

                IF INSURED = 0 THEN WORKINS = 0;
                IF INSURED = . THEN WORKINS = .;
                IF INSURED = 1
                   THEN IF COUNT >= DEI1220
                            THEN WORKINS = 0;
                ELSE WORKINS = .;
                END;
```

(cont.)

```
VARIABLE WORKINS (cont.)

  CONSTRUCTION (cont.)

  (For persons with dental but no medical insurance supplements.)

       IF INSURED = .
          THEN WORKINS = .;
       IF INSURED = 1 AND TFAM = 1 AND COUNT < DEI1220
          THEN WORKINS = .;
       IF INSURED = 1 AND TFAM = 0
          THEN WORKINS = .;


  (Massachusetts, South Carolina)

       WORKINS = 0;

  (For persons with medical and/or dental insurance supplement(s).)

       IF FW = . THEN WORKINS = .;
       IF FW = 1 THEN WORKINS = 1;

       IF FW = 0
          THEN DO;

               IF INSURED = 0 THEN WORKINS = 0;
               IF INSURED = . THEN WORKINS = .;
               IF INSURED = 1
                  THEN IF COUNT >= DEI1220
                          THEN WORKINS = 0;
               ELSE WORKINS = .;
               END;

  (For persons with dental but no medical insurance supplements.)

       IF INSURED = .
          THEN WORKINS = .;
       IF INSURED = 1 AND TFAM = 1 AND COUNT < DEI1220
          THEN WORKINS = .;
       IF INSURED = 1 AND TFAM = 0
          THEN WORKINS = .;
```

VARIABLE PUBLINS FSD

Public insurance recipient

CODES

. - Missing
0 - No, or nonDayton respondents who did not answer DEI2348 and DEI2351
1 - Yes

PUBLINS indicates whether the participant's health care costs were paid by a government agency.

INPUT VARIABLES

Site	HIEI
Dayton	15/43,39
Seattle	63
Massachusetts	92
South Carolina	147

DEI249 (Dayton) Does anyone (else) in in this family unit have their doctor or hospital costs paid for by Medicare, Medicaid, the military, or a government welfare agency?
1. Yes
2. No

DEI2348 (NonDayton) Does anyone in this family unit have his or her doctor or hospital costs paid by Medicare? Who is that? (Who else)?
1. Medicare
8. Other

DEI2351 (NonDayton) Does anyone in this family unit have his or her medical care paid by Medicaid or a welfare agency? Who is that? (Anyone else?)
1. Medicaid or welfare
2. Other

(cont.)

PUBLINS

VALUE	FREQ	CUM FREQ	%	CUM %
.	3108	.	.	.
0	20382	20382	88.46	88.46
1	2658	23040	11.54	100.00

VARIABLE PUBLINS (cont.)

CONSTRUCTION

(Dayton)

(From baseline data.)

```
IF DEI249 = 1 THEN PUBLINS = 1;
IF DEI249 = 2 THEN PUBLINS = 0;
```

(From EVF data for persons not present at baseline.)

```
IF DEI249 = 1 THEN PUBLINS = 1;
IF DEI249 = 2 THEN PUBLINS = 0;
```

(NonDayton)

(From baseline data.)

```
IF DEI2348 \= 1 AND DEI2351 \= 1
   THEN PUBLINS = 0;
   ELSE IF DEI2348 = 1 OR DEI2351 = 1
           THEN PUBLINS = 1;
```

VARIABLE AFDC FSD

AFDC recipient at baseline

CODES

. - Missing
0 - No
1 - Yes

AFDC indicates whether the participant received public aid through the Aid to Families with Dependent Children program.

(cont.)

AFDC

VALUE	FREQ	CUM FREQ	%	CUM %
.	15154	.	.	.
0	10346	10346	94.11	94.11
1	648	10994	5.89	100.00

VARIABLE AFDC (cont.)

INPUT VARIABLES

Site	HIEI		Variable
Dayton Seattle	15/43 63	DEI1497	(Dayton) Did (you/anyone in your family unit, including children) receive any welfare payments during 1973 or 1974? For example, Aid to Families with Dependent Children or Supplemental Security Income (that is Old Age Assistance, Aid to the Blind or Disabled)? 1. Yes 2. No
		DEI1498	(Dayton) Under which programs did you receive payments? AFDC? 1. Yes 2. No
		DEI6025	(Seattle) During 1974, did you (or anyone in your family unit, including children) receive any public aid benefits from the AFDC (Aid to Families with Dependent Children)? 1. Yes 2. No

CONSTRUCTION

(Dayton)

(From baseline data.)

```
    IF DEI1497 = 1
       THEN DO;

            IF DEI1498 = 1
               THEN AFDC = 1;
               ELSE IF DEI1498 = 2
                       THEN AFDC = 0;
            END;

       ELSE IF DEI1497 = 2 AND DEI1498 =.
               THEN AFDC = 0;
```

(cont.)

VARIABLE AFDC (cont.)

CONSTRUCTION (cont.)

(Seattle)

(From baseline data.)

```
IF DE16025 = 2 THEN AFDC = 0;
IF DE16025 = 1 THEN AFDC = 1;
```

VARIABLE SSI FSD

SSI recipient

CODES

. - Missing
0 - No
1 - Yes

SSI indicates whether the participant received federal Supplemental Security Income for the disabled.

INPUT VARIABLES

Site	HIEI		Variable
Dayton	15/43	DE11497	(Dayton) Did you receive any welfare payments during 1973 or 1974? For example, Aid to Families with Dependent Children or Supplemental Security Income (that is, Old Age Assistance, Aid to the Blind or Disabled)? 1. Yes 2. No
Seattle	63,124		
Massachusetts	177		
South Carolina	188		
		DE11499	(Dayton) Under which programs did you receive payments? SSI? 1. Yes 2. No

(cont.)

SSI

VALUE	FREQ	CUM FREQ	%	CUM %
.	9939	.	.	.
0	16054	16054	99.04	99.04
1	155	16209	0.96	100.00

VARIABLE SSI (cont.)

INPUT VARIABLES (cont.)

DEI6030 (NonDayton EVF) Are you currently receiving income from the S.S.I. program? That is, Supplemental Security Income--Old Age Assistance/Aid to the Blind or Disabled?
1. Yes
2. No
(Seattle baseline) During 1974, did you receive any income from the S.S.I. program (Supplemental Security Income--that is Old Age Assistance/Aid to the Blind or Disabled)?
1. Yes
2. No

DEI6031 (NonDayton EVF) IF RECEIVES SSI, CODE '1' IF NOT, CODE '8'.
1. SSI
8. Not applicable
(Seattle baseline) Are you covered by check from SSI?
1. Covered
2. Not covered

CONSTRUCTION

(Dayton)

(From baseline data.)

```
    IF DEI1497 = 1
       THEN DO;

            IF DEI1499 = 1
               THEN SSI = 1;
               ELSE IF DEI1499 = 2
                       THEN SSI = 0;
            END;

       ELSE IF DEI1497 = 2 AND DEI1499 = .
               THEN SSI = 0;
```

(cont.)

VARIABLE SSI (cont.)

CONSTRUCTION (cont.)

(Seattle)

(From EVF data.)

```
IF DEI6031 = 8
   THEN SSI = 0;
   ELSE IF DEI6031 = 1
           THEN SSI = 1;
   ELSE IF DEI6030 = 2
           THEN SSI = 0;
```

(From baseline data for persons not present at enrollment.)

```
IF DEI6031 = 1
   THEN SSI = 1;
   ELSE IF DEI6030 = 2
           THEN SSI = 0;
```

(Massachusetts and South Carolina)

(From EVF data.)

```
IF DEI6031 = 8
   THEN SSI = 0;
   ELSE IF DEI6031 = 1
           THEN SSI = 1;
   ELSE IF DEI6030 = 2
           THEN SSI = 0;
```

VARIABLE FOODSTMP FSD

Food stamp recipient at baseline

CODES

. - Missing
0 - No
1 - Yes

FOODSTMP indicates whether the participant received food stamps.

INPUT VARIABLES

Site	HIEI		Variable
Dayton	15/43	DEI1591	(Dayton) Did (you/your family) purchase food stamps during 1973 or 1974? 1. Yes 2. No
Seattle	63	DEI6039	(Seattle) Now, back to last year, during 1974 did anyone in this household purchase food stamps? 1. Yes 2. No

CONSTRUCTION

(Dayton)

(From baseline data.)

```
IF DEI1591 = 1 THEN FOODSTMP = 1;
IF DEI1591 = 2 THEN FOODSTMP = 0;
```

(cont.)

FOODSTMP

VALUE	FREQ	CUM FREQ	%	CUM %
.	15151	.	.	.
0	9778	9778	88.92	88.92
1	1219	10997	11.09	100.00

VARIABLE FOODSTMP (cont.)

CONSTRUCTION (cont.)

(Seattle)

(From baseline data.)

```
IF DEI6039 = 1 THEN FOODSTMP = 1;
IF DEI6039 = 2 THEN FOODSTMP = 0;
```

VARIABLE WELFARE FSD

Welfare recipient

CODES

. - Missing
0 - No
1 - Yes

WELFARE indicates whether the participant received welfare payments.

INPUT VARIABLES

Site	HIEI	Variable	
Dayton	15/43	DEI1497	(Dayton) Did you receive any welfare payments during 1973 or 1974? For example, Aid to Families with Dependent Children or Supplemental Security Income (that is, Old Age Assistance, Aid to the Blind or Disabled)? 1. Yes 2. No
		AFDC	AFDC recipient at baseline
		SSI	SSI recipient
		FOODSTMP	Food stamp recipient at baseline

(cont.)

WELFARE

VALUE	FREQ	CUM FREQ	%	CUM %
.	15170	.	.	.
0	9597	9597	87.42	87.42
1	1381	10978	12.58	100.00

VARIABLE WELFARE (cont.)

CONSTRUCTION

(Dayton)

(From baseline data.)

```
IF DEI1497 = 2 AND FOODSTMP = 0
   THEN WELFARE = 0;
IF DEI1497 = 1 OR FOODSTMP = 1
   THEN WELFARE = 1;
```

(Seattle)

```
IF AFDC = 1 OR SSI = 1 OR FOODSTMP = 1
   THEN WELFARE = 1;
   ELSE IF AFDC = 0 AND SSI = 0 AND FOODSTMP = 0
           THEN WELFARE = 0;
```

VARIABLE EGFPBAS FSD

Health status

CODES

. - Missing
1 - Excellent
2 - Good
3 - Fair
4 - Poor

EGFPBAS reports the participant's evaluation of his or her current health.

(cont.)

EGFPBAS

VALUE	FREQ	CUM FREQ	%	CUM %
.	3074	.	.	.
1	11224	11224	48.64	48.64
2	9017	20241	39.08	87.72
3	2180	22421	9.45	97.17
4	653	23074	2.83	100.00

VARIABLE EGFPBAS (cont.)

INPUT VARIABLES

Site	HIEI		Variable
Dayton	9,15/43,36	DEI177	(Dayton) Compared to other persons your age, would you say that your health is excellent, good, fair, poor? 1. Excellent 2. Good 3. Fair 4. Poor
Seattle	62,63		
Massachusetts	91,92		
South Carolina	146,147		
		DEI356	Would you say your health, in general, is excellent, good, fair, or poor? 1. Excellent 2. Good 3. Fair 4. Poor

CONSTRUCTION

(Dayton)

(From baseline data or EVF new person supplement (for persons not present at baseline).)

```
    IF 1 <= DEI356 <= 4 THEN EGFPBAS = DEI356;
```

(From screening data if the information was missing from baseline and EVF new person supplement data.)

```
            EGFPBAS = DEI177;
```

(Seattle, Massachusetts, and South Carolina)

(From baseline data.)

```
            EGFPBAS = DEI356;
```

(From screening data if the information was missing from baseline data.)

```
         IF 1 <= DEI356 <= 4
            THEN EGFPBAS = DEI356;
```

VARIABLE HSELFREP FSD

Self-reported health characteristics

CODES#

. - Missing
1 - Health status and physician use self-reported
2 - Health status and physician use reported by another
3 - Health status but not physician use self-reported
4 - Physician use but not health status self-reported

HSELFREP indicates whether the participant or another reported on his/her health status and physician use.

#Codes 1-4 were used in Dayton; only codes 1 and 2 were used in the other sites.

INPUT VARIABLES

Site	HIE1		Variable
Dayton	15/43	DE11560	(Dayton) Is health status section self or other person response? 1. Self-response 2. Other-response
Seattle	63		
Massachusetts	92		
South Carolina	147		
		DE12703	(Dayton) Is utilization section self/other response? 1. Self-response 2. Other-response
		DE12820	(Seattle) CODE FOR EACH PERSON COLUMN USED. Who answered most of the questions in this column--for modules C and D (health status and physician utilization)? CODE ONE. 1. Self-response 2. Female head only 3. Male head only 4. Both heads 5. Other in household 6. Other, out of household

(cont.)

HSELFREP

VALUE	FREQ	CUM FREQ	%	CUM %
.	3304	.	.	.
1	12098	12098	52.96	52.96
2	10731	22829	46.98	99.93
3	9	22838	0.04	99.97
4	6	22844	0.03	100.00

VARIABLE HSELFREP (cont.)

INPUT VARIABLES (cont.)

(Massachusetts and South Carolina) CODE FOR EACH PERSON COLUMN USED.
Who answered most of the questions in this column--for Modules C and D (health status and physician utilization)?
CODE ONE.
1. Self-response
2. Female head only
3. Male head only
4. Other in household

CONSTRUCTION

(Dayton)

(From baseline data.)

```
IF DEI1560 = 1 AND DEI2703 = 1 THEN HSELFREP = 1;
IF DEI1560 = 2 AND DEI2703 = 2 THEN HSELFREP = 2;
IF DEI1560 = 1 AND DEI2703 = 2 THEN HSELFREP = 3;
IF DEI1560 = 2 AND DEI2703 = 1 THEN HSELFREP = 4;
```

(Seattle, Massachusetts and South Carolina)

(From baseline data.)

```
IF DEI2820 = 1
   THEN HSELFREP = 1;
   ELSE IF DEI2820 > 1 AND DEI2820 <= 6
           THEN HSELFREP = 2;
```

VARIABLE PAINBAS FSD

Frequency of pain

CODES

. - Missing
1 - Very often
2 - Fairly often
3 - Occasionally
4 - Not at all

PAINBAS reports how often participant experienced pain in the past year.

INPUT VARIABLES

Site	HIEI		Variable
Dayton	15/43,36	DEI358	(Dayton) In the past year, would you say you have experienced pain very often, fairly often, occasionally, or not at all? 1. Very often 2. Fairly often 3. Occasionally 4. Not at all 8. Don't know
Seattle	63		
Massachusetts	92		
South Carolina	147		
		DEI2837	(NonDayton) In the past year, would you say you have experienced a great deal of pain, some pain, a little pain, or no pain at all? 1. A great deal 2. Some pain 3. A little pain 4. No pain at all 8. Don't know

(cont.)

PAINBAS

VALUE	FREQ	CUM FREQ	%	CUM %
.	3210	.	.	.
1	1238	1238	5.40	5.40
2	2686	3924	11.71	17.11
3	8692	12616	37.89	55.00
4	10322	22938	45.00	100.00

VARIABLE PAINBAS (cont.)

CONSTRUCTION

(Dayton)

(From baseline data or EVF new person supplement (for persons not present at baseline).)

```
IF 1 <= DEI358 <= 4
   THEN PAINBAS = DEI358;
```

(Seattle)

(From baseline data.)

```
IF 1 <= DEI358 <= 4
   THEN PAINBAS = DEI358;
```

(Massachusetts and South Carolina)

(From baseline data.)

```
IF 1 <= DEI2837 <= 4
   THEN PAINBAS = DEI2837;
```

VARIABLE WORRYBAS FSD

Worry about health

CODES

. - Missing
1 - Great deal
2 - Some
3 - Hardly any
4 - None

WORRYBAS reports how much the participant worried about his or her health in the past year.

(cont.)

WORRYBAS

VALUE	FREQ	CUM FREQ	%	CUM %
.	3196	.	.	.
1	1252	1252	5.46	5.46
2	3952	5204	17.22	22.67
3	4732	9936	20.62	43.29
4	13016	22952	56.71	100.00

VARIABLE WORRYBAS (cont.)

INPUT VARIABLES

Site	HIEI		Variable
Dayton	15/43,36	DEI357	(Dayton, Seattle) Over the past year has your health caused a great deal of worry, some worry, hardly any worry, or no worry at all? 1. Great deal 2. Some 3. Hardly any 4. None at all
Seattle	63		
Massachusetts	92	DEI2836	(Massachusetts and South Carolina) Over the past year has your health caused you a great deal of worry, some worry, a little worry, or no worry at all? 1. Great deal 2. Some 3. A little 4. None at all
South Carolina	147		

CONSTRUCTION

(Dayton)

(From baseline data or EVF new person supplement (for persons not present at baseline).)

```
IF 1 <= DEI357 <= 4
   THEN WORRYBAS = DEI357;
```

(Seattle)

(From baseline data.)

```
IF 1 <= DEI357 <= 4
   THEN WORRYBAS = DEI357;
```

(cont.)

VARIABLE WORRYBAS (cont.)

CONSTRUCTION (cont.)

(Massachusetts and South Carolina)

(From baseline data.)

```
IF 1 <= DEI2836 <= 4
   THEN WORRYBAS = DEI2836;
```

VARIABLE HOSP FSD

Hospitalization

CODES

. - Missing
0 - No
1 - Yes

HOSP reports whether participant was hospitalized in the past year.

INPUT VARIABLES

Site	HIEI		Variable
Dayton	15/43,36	DEI387	(Dayton) Was anyone in this family unit admitted to a hospital at any time in the last 12 months? Please do not include emergency room visits that did not result in (being admitted to a hospital). (Massachusetts and South Carolina) Since (DATE OF INTERVIEW) a year ago, have you (or has anyone in the family) been a patient in a hospital overnight or longer? 1. Yes 2. No
Seattle	63,125		
Massachusetts	92,181		
South Carolina	147,192,380		

(cont.)

HOSP

VALUE	FREQ	CUM FREQ	%	CUM %
.	2834	.	.	.
0	20778	20778	89.12	89.12
1	2536	23314	10.88	100.00

VARIABLE HOSP (cont.)

INPUT VARIABLES (cont.)

DE1479 Who was admitted to a hospital?
1. Admitted
8. Don't know
9. Not applicable

DE1407 (NonDayton) INTERVIEWER CODE: IS THERE MORE THAN ONE PERSON IN THIS FAMILY UNIT/RELATIONSHIP GROUP?
1. Yes
2. No

DE1408 (Seattle) During the last 12 months, how many people in this family unit/group were patients in a hospital? By that I mean anyone who might already have been in the hospital on (DATE OF INTERVIEW) a year ago, or anyone who was hospitalized at any time since then, and including also anyone in a hospital now?
# of persons hospitalized
0 No one hospitalized

DE1409 (NonDayton) During the last 12 months, have you been a patient in a hospital? I mean on or since (DATE OF INTERVIEW) a year ago.
1. Yes
2. No

CONSTRUCTION

(Dayton)

(From baseline data.)

```
IF (DE1387 = 2) OR (DE1387 = 1 AND DE1479 \= 1)
   THEN HOSP = 0;
IF DE1387 = 1 AND DE1479 = 1
   THEN HOSP = 1;
```

(cont.)

```
VARIABLE HOSP (cont.)

  CONSTRUCTION (cont.)


  (From EVF new person supplement for persons not present at
   baseline.)

          IF DEI387 = 2 THEN HOSP = 0;
          IF DEI387 = 1 THEN HOSP = 1;


  (Seattle)

  (From baseline data.)

          IF (DEI1407 = 2 AND DEI1409 = 2) OR
             (DEI1407 = 1 AND DEI1408 = 0) OR
             (DEI1407 = 1 AND DEI1408 >= 0 AND DEI479 = 8)
             THEN HOSP = 0;
          IF (DEI1407 = 2 AND DEI1409 = 1) OR
             (DEI1407 = 1 AND DEI1408 > 0 AND DEI479 = 1)
             THEN HOSP = 1;


  (From EVF new person supplement for persons not present at
   baseline.)

          IF DEI1409 = 2 THEN HOSP = 0;
          IF DEI1409 = 1 THEN HOSP = 1;


  (Massachusetts and South Carolina)

  (From baseline data.)

          IF DEI387 = 2 OR (DEI387 = 1 AND DEI479 \= 1)
             THEN HOSP = 0;
          IF DEI387 = 1 AND DEI479 = 1
             THEN HOSP = 1;

  (From EVF new person supplement for persons not present at
   baseline.)

          IF DEI1409 = 2 THEN HOSP = 0;
          IF DEI1409 = 1 THEN HOSP = 1;
```

VARIABLE HAVEMD FSD

Family doctor

CODES

. - Missing
0 - No family doctor
1 - Family doctor present

HAVEMD indicates whether any member of the family had a regular doctor or clinic for medical care.

INPUT VARIABLES

Site	HIEI
Dayton	15/43,36
Massachusetts	92,181
South Carolina	147,192

Variable	
DE1877	(Dayton, Massachusetts, South Carolina) Are there any particular doctors or clinics you (or other members of your family) usually go to when you (or they) are sick or need medical advice? 1. Yes 2. No
DE1879	(Dayton) Are there any (other) doctors or clinics you (or your family) go to regularly such as eye doctors, (women's doctors, children's doctors) and so forth? 1. Yes 2. No
DE11200	(Massachusetts and South Carolina) Are there any particular doctors or clinics (PERSON) usually goes to when (he/she) is sick or needs medical advice? 1. Yes 2. No

(cont.)

HAVEMD

VALUE	FREQ	CUM FREQ	%	CUM %
.	8627	.	.	.
0	935	935	5.34	5.34
1	16586	17521	94.66	100.00

VARIABLE HAVEMD (cont.)

CONSTRUCTION

(HAVEMD is constructed by checking the presence of a doctor for each member of the family, using baseline data for those present then, and EVF new person supplement for those not present at

baseline. If any member had a doctor, the entire family was considered to have a doctor.)

(Dayton)

(From baseline or EVF new person supplement data.)

```
IF 1 <= DEI877 <= 2 | 1 <= DEI879 <= 2
   THEN DO;

        IF DEI877 = 1 | DEI879 = 1
           THEN HAVEMD = 1;
           ELSE IF DEI877 = 2 & DEI879 = 2
                   THEN HAVEMD = 0;
        END;
```

(Massachusetts and South Carolina)

(From baseline data.)

```
IF 1 <= DEI1200 <= 2
   THEN DO;

        IF DEI1200 = 1
           THEN HAVEMD = 1;
           ELSE HAVEMD = 0;
        END;
```

(From EVF new person supplement data.)

```
IF 1 <= DEI877 <= 2
   THEN DO;

        IF DEI877 = 1
           THEN HAVEMD = 1;
           ELSE HAVEMD = 0;
        END;
```

VARIABLE MDEXAM FSD

Physical exam

CODES

. - Missing
0 - No
1 - Yes

MDEXAM indicates whether participant had a physical examination in the past year.

INPUT VARIABLES

Site	HIEI		Variable
Dayton	15/43,36		(Dayton) In addition to what you've told me about, during the last 12 months, did you do any of these things:
Seattle	63		
Massachusetts	92,181		
South Carolina	147,192		
		DE1454	A. Have a general medical or physical examination?
		DE1455	B. See a doctor in a hospital emergency room or outpatient clinic? 0. No 2. Yes, Dr already recorded 3. Yes, Dr is new
		DE1414	(Seattle) First, we want to ask you about visits to the doctor that were not for any special health problems you may have: During the last 12 months, did you have a general medical or a physical examination or a check-up? 1. Yes 2. No

(cont.)

MDEXAM

VALUE	FREQ	CUM FREQ	%	CUM %
.	3211	.	.	.
0	11574	11574	50.46	50.46
1	11363	22937	49.54	100.00

VARIABLE MDEXAM (cont.)

INPUT VARIABLES (cont.)

DE12844 (Massachusetts and South Carolina) Since (DATE OF INTERVIEW) a year ago, did you (or any other members of your family) have a general medical or physical examination?
1. Yes
2. No

DE12845 (Massachusetts and South Carolina) Who had an exam? (Who else?)
1. Had exam
2. No

DE11570 (Massachusetts and South Carolina) Since (DATE OF INTERVIEW) a year ago, has (PERSON) had a general medical or physical examination?
1. Yes
2. No

CONSTRUCTION

(Dayton)

(From baseline or EVF new person supplement data.)

```
IF DE11454 = 0 AND DE11455 = 0
   THEN MDEXAM = 0;
IF DE11454 > 0 OR DE11455 > 0
   THEN MDEXAM = 1;
```

(Seattle)

(From baseline data.)

```
IF DE11414 = 2 THEN MDEXAM = 0;
IF DE11414 = 1 THEN MDEXAM = 1;
```

(cont.)

VARIABLE MDEXAM (cont.)

CONSTRUCTION (cont.)

(Massachusetts and South Carolina)

(From baseline data.)

```
IF DEI2845 = 2 OR DEI2844 = 2
   THEN MDEXAM = 0;
IF DEI2845 = 1
   THEN MDEXAM = 1;
```

(From EVF new person supplement (for persons not present at baseline).)

```
IF DEI1570 = 1 THEN MDEXAM = 1;
IF DEI1570 = 2 THEN MDEXAM = 0;
```

VARIABLE MDVIS FSD

Medical visits

CODES

. - Missing or conflicting data

MDVIS indicates how many times the participant visited a health practitioner in the past year. These visits exclude hospitalizations.

INPUT VARIABLES

Site	HIEI		Variable
Dayton	15/43,25,36	DEI877	(Dayton, Massachusetts,
Seattle	63,125		South Carolina) Are
Massachusetts	92,93, 181		there any particular
South Carolina	147,148,192, 380		doctors or clinics you usually go to when you are

(cont.)

MDVIS

VALUE	FREQ	CUM FREQ	%	CUM %
.	6502	.	.	.
0	1633	1633	8.31	8.31
1	3974	5607	20.23	28.54
2	3228	8835	16.43	44.97
3	2347	11182	11.95	56.92
4	1738	12920	8.85	65.76
5	1246	14166	6.34	72.11
6	1054	15220	5.37	77.47
7	679	15899	3.46	80.93
8	574	16473	2.92	83.85
9	395	16868	2.01	85.86
10	484	17352	2.46	88.32
11	233	17585	1.19	89.51
12	423	18008	2.15	91.66
13	210	18218	1.07	92.73
14	137	18355	0.70	93.43
15	212	18567	1.08	94.51
16	108	18675	0.55	95.06
17	91	18766	0.46	95.52
18	80	18846	0.41	95.93
19	37	18883	0.19	96.12
20	138	19021	0.70	96.82

(cont.)

VARIABLE MDVIS (cont.)

INPUT VARIABLES (cont.)

sick or need medical advice?
1. Yes
2. No

DE1878 (Dayton) (Besides the doctors and/or clinics just mentioned) how many doctors altogether have you gone to during the last twelve months?

DE1879 (Dayton) Are there any (other) doctors or clinics you go to regularly such as eye doctors, (women's doctors, children's doctors) and so forth?

(Massachusetts and South Carolina) Have you been treated or examined by any (other) clinic or doctor since (DATE OF INTERVIEW) a year ago, that is, an eye doctor, dermatologist, psychiatrist, surgeon, (obstetrician), (gynecologist), (pediatrician), or any other kind of doctor?
1. Yes
2. No

DE11270 (Massachusetts and South Carolina) In the last 12 months, that is, since (DATE OF INTERVIEW) a year ago, have you been treated or examined by (this doctor/this clinic/ any of these doctors or clinics)?
1. Yes
2. No

(cont.)

VALUE	FREQ	CUM FREQ	%	CUM %
21	44	19065	0.22	97.04
22	35	19100	0.18	97.22
23	32	19132	0.16	97.38
24	63	19195	0.32	97.70
25	59	19254	0.30	98.01
26	41	19295	0.21	98.21
27	24	19319	0.12	98.34
28	16	19335	0.08	98.42
29	22	19357	0.11	98.53
30	34	19391	0.17	98.70
31	8	19399	0.04	98.74
32	14	19413	0.07	98.81
33	9	19422	0.05	98.86
34	9	19431	0.05	98.91
35	13	19444	0.07	98.97
36	16	19460	0.08	99.05
37	7	19467	0.04	99.09
38	6	19473	0.03	99.12
39	8	19481	0.04	99.16
40	18	19499	0.09	99.25
41	6	19505	0.03	99.28
42	9	19514	0.05	99.33
43	6	19520	0.03	99.36
44	3	19523	0.02	99.37
45	2	19525	0.01	99.38
46	5	19530	0.03	99.41
47	3	19533	0.02	99.43
48	5	19538	0.03	99.45
49	2	19540	0.01	99.46
50	19	19559	0.10	99.56
51	7	19566	0.04	99.59
52	13	19579	0.07	99.66
53	9	19588	0.05	99.71
54	3	19591	0.02	99.72
55	4	19595	0.02	99.74
56	1	19596	0.01	99.75
57	8	19604	0.04	99.79
58	3	19607	0.02	99.80
59	1	19608	0.01	99.81
60	3	19611	0.02	99.82
61	2	19613	0.01	99.83

(cont.)

VARIABLE MDVIS (cont.)

INPUT VARIABLES (cont.)

DEI1410	(Seattle) In the last 12 months--since (MONTH), 1974--how many times altogether did you see a doctor about your own health? This should not include visits while you was a patient in a hospital.
DEI1454	(Dayton) In addition to what you've told me about, during the past 12 months did (you/anyone in the family) do any of these things: a. Have a general medical or physical examination? 0. No 2. Yes, doctor already recorded 3. Yes, doctor is new name, add supplement
DEI1455	(Dayton) In addition to what you've told me about, during the past 12 months did (you/anyone in the family) do any of these things: b. See a doctor in a hospital emergency room or outpatient clinic? 0. No 2. Yes, doctor already recorded 3. Yes, doctor is new name, add supplement
DEI1456-DEI1458	(Dayton) In addition to what you've told me about, during the past 12 months did you do any of these things:
DEI1456	c. Go to any specialist such as a chiropractor?
DEI1457	d. Go to any places like those on this card? (HAND CARD 9.) READ LIST: public

(cont.)

VALUE	FREQ	CUM FREQ	%	CUM %
63	2	19615	0.01	99.84
64	1	19616	0.01	99.85
66	1	19617	0.01	99.85
68	2	19619	0.01	99.86
70	1	19620	0.01	99.87
71	2	19622	0.01	99.88
72	2	19624	0.01	99.89
79	2	19626	0.01	99.90
80	1	19627	0.01	99.90
85	1	19628	0.01	99.91
88	1	19629	0.01	99.91
90	1	19630	0.01	99.92
92	2	19632	0.01	99.93
95	1	19633	0.01	99.93
97	1	19634	0.01	99.94
99	3	19637	0.02	99.95
100	1	19638	0.01	99.96
101	1	19639	0.01	99.96
103	1	19640	0.01	99.97
105	1	19641	0.01	99.98
107	1	19642	0.01	99.98
119	1	19643	0.01	99.99
124	1	19644	0.01	99.99
142	1	19645	0.01	100.00
145	1	19646	0.01	100.00

VARIABLE MDVIS (cont.)

INPUT VARIABLES (cont.)

health center, family planning clinic, mental health clinic, TB chest x-ray unit, or student health center?

DEI1458 e. Been treated or examined by any other doctor, clinic, or health facility?
DO NOT INCLUDE DENTISTS.
0. No
2. Yes, doctor already recorded
3. Yes, doctor is new name, add supplement

DEI1566 (Massachusetts and South Carolina) Have you been treated or examined by any (other) clinic or doctor since (DATE OF INTERVIEW) a year ago, that is, an eye doctor, dermatologist, psychiatrist, surgeon, (obstetrician), (gynecologist), (pediatrician), or any other kind of doctor?
1. Yes
2. No

DEI1570 (Massachusetts and South Carolina) Since (DATE OF INTERVIEW) a year ago, have you had a general medical or physical examination?
1. Yes
2. No

DEI1571 (Massachusetts and South Carolina) What about hospital emergency rooms or hospital outpatient clinics? Were you treated or examined in an emergency room or outpatient clinic

(cont.)

VARIABLE MDVIS (cont.)

INPUT VARIABLES (cont.)

since (DATE OF INTERVIEW) a year ago?
1. Yes
2. No

DEI1572 (Massachusetts and South Carolina) Please look at this card and tell me if you have been treated or examined by any of these kinds of health specialists since (DATE OF INTERVIEW) a year ago, that is, persons such as chiropractors, Christian Science practitioners, chiropodists, clinical psychologists, or any other health care practitioner--not including dentists.
1. Yes
2. No

DEI1580 (Massachusetts and South Carolina) Have you gone to any place like those on this card since (DATE OF INTERVIEW) a year ago, that is, a public health center, a family planning clinic, mental health center, TB chest x-ray unit, or student health center?
1. Yes
2. No

DEI1581 (Massachusetts and South Carolina) Have you been treated or examined by any (other) doctor, clinic, or other health facility since (DATE OF INTERVIEW) a year ago?
1. Yes
2. No

DEI1879 (Dayton) Have you been treated or examined by
(cont.)

VARIABLE MDVIS (cont.)

INPUT VARIABLES (cont.)

	(PROVIDER) in the last twelve months? (Massachusetts and South Carolina) Have you been treated or examined by (this doctor/this clinic/any of these doctors or clinics) in the last 12 months--that is, since (DATE OF INTERVIEW) of last year? 1. Yes 2. No
DEI1886	(Dayton) Counting all visits for any reason, how many times did you go to (PROVIDER) in the past 12 months? IF NECESSARY EXPLAIN: Not counting visits while in the hospital. (Massachusetts and South Carolina) In the last 12 months, that is, since (DATE OF INTERVIEW) a year ago, how many times altogether did you see (1ST PROVIDER) about your own health? This should not include visits while you were a patient in a hospital.
DEI2027	(Massachusetts and South Carolina) In the last 12 months, that is, since (DATE OF INTERVIEW) a year ago, how many times altogether did you see (2ND PROVIDER) about your own health? This should not include visits while you were a patient in a hospital.

(cont.)

VARIABLE MDVIS (cont.)

INPUT VARIABLES (cont.)

DEI2100 (Massachusetts and South Carolina) In the last 12 months, that is, since (DATE OF INTERVIEW) a year ago, how many times altogether did you see (3RD PROVIDER) about your own health? This should not include visits while you were a patient in a hospital.

DEI2105 (Massachusetts and South Carolina) In the last 12 months, that is, since (DATE OF INTERVIEW) a year ago, how many times altogether did you see (4TH PROVIDER) about your own health? This should not include visits while you were a patient in a hospital.

DEI2799 (Massachusetts and South Carolina) Number of provider supplements.

DEI2846 (Massachusetts and South Carolina) What about hospital emergency rooms and hospital outpatient clinics? Were you treated or examined in an emergency room or out-patient clinic since (DATE OF INTERVIEW) a year ago?
1. Yes
2. No

DEI2847 (Massachusetts and South Carolina) Please look at this card and tell me if you have been treated or examined by any of these kinds of health specialists since (DATE OF INTERVIEW) a year ago, that is, persons such as chiropractors,
(cont.)

VARIABLE MDVIS (cont.)

INPUT VARIABLES (cont.)

Christian Science practitioners, chiropodists, clinical psychologists, or any other health care practitioner--not including dentists.
1. Yes
2. No

DE12848 (Massachusetts and South Carolina) Have you gone to any places like those on this card since (DATE OF INTERVIEW) a year ago, that is, a public health center, family planning clinic, mental health clinic, TB chest x-ray unit, or student health center?
1. Yes
2. No

DE12849 (Massachusetts and South Carolina) Have you been treated or examined by any (other) doctor, clinic, or other health facility since (DATE OF INTERVIEW) a year ago?
1. Yes
2. No

CONSTRUCTION

(Dayton)

(For persons present at baseline, MDVIS is constructed by summing the number of visits made by the participant. Responses to the baseline questionnaire indicated how many health care providers the participant saw. For each provider, a baseline physician care supplement was completed specifying the number of visits. MDVIS is the sum of visits recorded on those supplements. If the number of supplements indicated differed from the number of supplements found, MDVIS was coded missing because of conflicting data.)

(cont.)

VARIABLE MDVIS (cont.)

CONSTRUCTION (cont.)

(From baseline questionnaire data and physician care supplement.)

```
    IF DEI877 = 2 AND DEI878 = 0
       THEN MDVIS = 0;
    IF DEI877 = 1 OR DEI878 >  0 OR DEI879  = 1
        OR DEI1454 = 2
        OR DEI1454 = 3
        OR DEI1455 = 2
        OR DEI1455 = 3
        OR DEI1456 = 2
        OR DEI1456 = 3
        OR DEI1457 = 2
        OR DEI1457 = 3
        OR DEI1458 = 2
        OR DEI1458 = 3
       THEN DO OVER SUPPLEMENTS;

            IF DEI1879 = 2
               THEN DEI1886 = 0;
               MDVIS = SUM(MDVIS,DEI1886);

            END;
```

(From EVF new person supplement data (all such cases are newborns).)

```
       MDVIS = 0;
```

(Seattle)

(From baseline or EVF new person supplement data.)

```
       MDVIS = DEI1410;
```

(Massachusetts and South Carolina)

(MDVIS is constructed by summing the number of visits made by the participant, using baseline data or EVF new person supplement data for those not present at baseline. Baseline or EVF supplement responses indicated how many health care providers the participant saw. For each provider, a baseline physician care supplement (or portion of the EVF supplement) was completed specifying the number of visits made. MDVIS is the

(cont.)

VARIABLE MDVIS (cont.)

CONSTRUCTION (cont.)

sum of visits recorded on those supplements. If the number of providers indicated differed from the number of providers recorded, MDVIS was coded missing because of conflicting data.)

(From baseline questionnaire data and physician care supplement.)

```
IF DE1877 = 2
    AND (DE11879= 2 OR DE11879 = .)
    AND DE1879 = 2
    AND DE12846= 2
    AND DE12847= 2
    AND DE12848= 2
    AND DE12849= 2
    AND DE12799= 0
   THEN MDVIS = 0;

IF DE1877 = 1
    OR DE11879= 1
    OR DE1879 = 1
    OR DE12846= 1
    OR DE12847= 1
    OR DE12848= 1
    OR DE12849= 1
    OR DE12799> 0
   THEN DO OVER SUPPLEMENTS;

        MDVIS = SUM(MDVIS,DE11886);

        END;
```

(From EVF new person supplement data (for persons not present at baseline).)

```
IF (DE11270 = 2 OR DE11270 = .)
     AND DE11566 = 2
     AND DE11570 = 2
     AND DE11571 = 2
     AND DE11572 = 2
     AND DE11580 = 2
     AND DE11581 = 2
  THEN MDVIS = 0;
```

(cont.)

VARIABLE MDVIS (cont.)

CONSTRUCTION (cont.)

```
IF DE11270 = 1
     OR DE11566 = 1
     OR DE11570 = 1
     OR DE11571 = 1
     OR DE11572 = 1
     OR DE11580 = 1
     OR DE11581 = 1
   THEN MDVIS = SUM(DE11886,DE12027,DE12100,DE12105);
```

VARIABLE MDEXP FSD

Medical expenses

CODES

. - Missing or conflicting data
Dollar amount

MDEXP indicates the participant's medical expenses in the past year, excluding those for hospitalizations.

INPUT VARIABLES

Site	HIEI		Variable
Dayton	15/43,25,36	DE1877	(Dayton, Massachusetts, South Carolina) Are there any particular doctors or clinics you usually go to when you are sick or need medical advice? 1. Yes 2. No
Seattle	63,125		
Massachusetts	92,93,181		
South Carolina	147,148,192		
		DE1878	(Dayton) (Besides the doctors and/or clinics just mentioned) how many doctors altogether have you gone to during the last twelve months? (cont.)

MDEXP

NUMBER OF OBSERVATIONS	13787
NUMBER OF MISSING	12361
MEAN	84.57
MEDIAN	39.00
MINIMUM VALUE	0.00
MAXIMUM VALUE	9999.00
STANDARD DEVIATION	231.43
COEFFICIENT OF VARIATION	273.66
SKEWNESS	24.03
KURTOSIS	886.46

VARIABLE MDEXP (cont.)

INPUT VARIABLES (cont.)

DE1879	(Dayton) Are there any (other) doctors or clinics you go to regularly such as eye doctors, (women's doctors, children's doctors) and so forth? (Massachusetts and South Carolina) Have you been treated or examined by any (other) clinic or doctor since (DATE OF INTERVIEW) a year ago, that is, an eye doctor, dermatologist, psychiatrist, surgeon, (obstetrician), (gyne-cologist), (pediatrician), or any other kind of doctor? 1. Yes 2. No
DE11270	(Massachusetts and South Carolina) In the last 12 months, that is, since (DATE OF INTERVIEW) a year ago, have you been treated or examined by (this doctor/this clinic/ any of these doctors or clinics)? 1. Yes 2. No
DE11410	(Seattle) In the last 12 months--since (MONTH), 1974--how many times altogether did you see a doctor about your own health? This should not include visits while you was a patient in a hospital.
DE11415	(Seattle) What was the total cost of (that visit/ those visits), including costs paid by insurance, or some other source?

(cont.)

VARIABLE MDEXP (cont.)

INPUT VARIABLES (cont.)

DE11454	(Dayton) In addition to what you've told me about, during the past 12 months did (you/anyone in the family) do any of these things: a. Have a general medical or physical examination? 0. No 2. Yes, doctor already recorded 3. Yes, doctor is new name, add supplement
DE11455	(Dayton) In addition to what you've told me about, during the past 12 months did (you/anyone in the family) do any of these things: b. See a doctor in a hospital emergency room or outpatient clinic? 0. No 2. Yes, doctor already recorded 3. Yes, doctor is new name, add supplement
DE11456-DE11458	(Dayton) In addition to what you've told me about, during the past 12 months did you do any of these things:
DE11456	c. Go to any specialist such as a chiropractor?
DE11457	d. Go to any places like those on this card? (HAND CARD 9.) READ LIST: public health center, family planning clinic, mental health clinic, TB chest x-ray unit, or student health center?
DE11458	e. Been treated or examined by any other doctor, clinic, or health facility?

(cont.)

VARIABLE MDEXP (cont.)

INPUT VARIABLES (cont.)

DO NOT INCLUDE DENTISTS.
0. No
2. Yes, doctor already recorded
3. Yes, doctor is new name, add supplement

DE11566 (Massachusetts and South Carolina) Have you been treated or examined by any (other) clinic or doctor since (DATE OF INTERVIEW) a year ago, that is, an eye doctor, dermatologist, psychiatrist, surgeon, (obstetrician), (gynecologist), (pediatrician), or any other kind of doctor?
1. Yes
2. No

DE11570 (Massachusetts and South Carolina) Since (DATE OF INTERVIEW) a year ago, have you had a general medical or physical examination?
1. Yes
2. No

DE11571 (Massachusetts and South Carolina) What about hospital emergency rooms or hospital outpatient clinics? Were you treated or examined in an emergency room or outpatient clinic since (DATE OF INTERVIEW) a year ago?
1. Yes
2. No

DE11572 (Massachusetts and South Carolina) Please look at this card and tell me if you have been treated or examined by any of
(cont.)

VARIABLE MDEXP (cont.)

INPUT VARIABLES (cont.)

these kinds of health specialists since (DATE OF INTERVIEW) a year ago, that is, persons such as chiropractors, Christian Science practitioners, chiropodists, clinical psychologists, or any other health care practitioner--not including dentists.
1. Yes
2. No

DEI1580 (Massachusetts and South Carolina) Have you gone to any place like those on this card since (DATE OF INTERVIEW) a year ago, that is, a public health center, a family planning clinic, mental health center, TB chest x-ray unit, or student health center?
1. Yes
2. No

DEI1581 (Massachusetts and South Carolina) Have you been treated or examined by any (other) doctor, clinic, or other health facility since (DATE OF INTERVIEW) a year ago?
1. Yes
2. No

DEI1879 (Dayton) Have you been treated or examined by (PROVIDER) in the last twelve months?
(Massachusetts and South Carolina) Have you been treated or examined by (this doctor/this clinic/any of these doctors or clinics) in
(cont.)

VARIABLE MDEXP (cont.)

INPUT VARIABLES (cont.)

	the last 12 months--that is, since (DATE OF INTERVIEW) of last year? 1. Yes 2. No
DEI1888	(Dayton) What was the total cost of those visits, including costs covered by insurance? (Massachusetts and South Carolina) What was the total cost of those visits, including costs paid by insurance, or some other source?
DEI1894	(Dayton) Did you have any charges for lab tests or x-rays as a result of those visits not included in what you have already told me about? 1. Yes 2. No
DEI1895	(Dayton) What was the total cost of those tests or x-rays, including anything paid by insurance?
DEI1897	(Dayton) Were there any other charges resulting from those visits not included in what you have already told me about, such as eyeglasses, crutches, etc.? 1. Yes 2. No
DEI1898	(Dayton) What was the total cost of those extra things, including costs covered by insurance?
DEI2028	(Massachusetts and South Carolina) What was the total cost of those visits, including costs paid by insurance or some other source. (provider #2) (cont.)

VARIABLE MDEXP (cont.)

INPUT VARIABLES (cont.)

DE12101	(Massachusetts and South Carolina) What was the total cost of those visits, including costs paid by insurance or some other source. (provider #3)
DE12106	(Massachusetts and South Carolina) What was the total cost of those visits, including costs paid by insurance or some other source. (provider #4)
DE12799	(Massachusetts and South Carolina) Number of provider supplements.
DE12846	(Massachusetts and South Carolina) What about hospital emergency rooms and hospital outpatient clinics? Were you treated or examined in an emergency room or out-patient clinic since (DATE OF INTERVIEW) a year ago? 1. Yes 2. No
DE12847	(Massachusetts and South Carolina) Please look at this card and tell me if you have been treated or examined by any of these kinds of health specialists since (DATE OF INTERVIEW) a year ago, that is, persons such as chiropractors, Christian Science practitioners, chiropodists, clinical psychologists, or any other health care practitioner--not including dentists. 1. Yes 2. No

(cont.)

VARIABLE MDEXP (cont.)

INPUT VARIABLES (cont.)

DEI2848 (Massachusetts and South Carolina) Have you gone to any places like those on this card since (DATE OF INTERVIEW) a year ago, that is, a public health center, family planning clinic, mental health clinic, TB chest x-ray unit, or student health center?
1. Yes
2. No

DEI2849 (Massachusetts and South Carolina) Have you been treated or examined by any (other) doctor, clinic, or other health facility since (DATE OF INTERVIEW) a year ago?
1. Yes
2. No

CONSTRUCTION

(Dayton)

(For persons present at baseline, MDEXP is constructed by summing the expenses incurred by the participant. Responses to the baseline questionnaire indicated whether the participant had medical expenses, and from which health care providers. For each provider, a baseline physician care supplement was completed specifying the expenses. MDEXP is the sum of the expenses recorded on those supplements. If the number of supplements indicated differed from the number of supplements found, MDEXP was coded missing because of conflicting data.)

(From baseline questionnaire data and physician care supplement.)

```
IF DEI877 = 2 AND DEI878 = 0
   THEN MDEXP = 0;
```

(cont.)

VARIABLE MDEXP (cont.)

CONSTRUCTION (cont.)

```
    IF DE1877 = 1 OR DE1878 >  0 OR DE1879  = 1
          OR DE11454 = 2
          OR DE11454 = 3
          OR DE11455 = 2
          OR DE11455 = 3
          OR DE11456 = 2
          OR DE11456 = 3
          OR DE11457 = 2
          OR DE11457 = 3
          OR DE11458 = 2
          OR DE11458 = 3
       THEN DO OVER SUPPLEMENTS;

            IF DE11879 = 2
               THEN DE11888 = 0;
            IF DE11894 \= 1
               THEN DE11895 = 0;
            IF DE11897 \= 1
               THEN DE11898 = 0;
            MDEXP = SUM(MDEXP,DE11888,DE11895,DE11898);

            END;
```

(From EVF new person supplement data (all such cases are newborns).)

```
            MDEXP = 0;
```

(Seattle)

(From baseline or EVF new person supplement data.)

```
    IF DE11410 > 0 THEN MDEXP = DE11415;
    IF DE11410 = 0 THEN MDEXP = 0;
```

(Massachusetts and South Carolina)

(MDEXP is constructed by summing the expenses incurred by the participant, using baseline data or EVF new person supplement data for persons not present at baseline. Baseline or EVF supplement responses indicated whether the participant had medical expenses, and from which health care providers. For each provider, a baseline physician care supplement (or

(cont.)

VARIABLE MDEXP (cont.)

CONSTRUCTION (cont.)

portion of the EVF supplement) was completed specifying the expenses. MDEXP is the sum of the expenses recorded on the supplements. If the number of providers indicated differed from the number of providers recorded, MDEXP was coded missing because of conflicting data.)

(From baseline questionnaire data and physician care supplement.)

```
IF DEI877 = 2
     AND (DEI1879= 2 OR DEI1879 = .)
     AND DEI879  = 2
     AND DEI2846 = 2
     AND DEI2847 = 2
     AND DEI2848 = 2
     AND DEI2849 = 2
     AND DEI2799 = 0
   THEN MDEXP = 0;

IF DEI877 = 1
     OR DEI1879 = 1
     OR DEI879  = 1
     OR DEI2846 = 1
     OR DEI2847 = 1
     OR DEI2848 = 1
     OR DEI2849 = 1
     OR DEI2799 > 0
   THEN DO OVER SUPPLEMENTS;

        MDEXP = SUM(MDEXP,DEI1888);

        END;
```

(From EVF new person supplement for persons not present at baseline.)

```
IF (DEI1270 = 2 OR DEI1270 = .)
     AND DEI1566 = 2
     AND DEI1570 = 2
     AND DEI1571 = 2
     AND DEI1572 = 2
     AND DEI1580 = 2
     AND DEI1581 = 2
   THEN MDEXP = 0;
```

(cont.)

VARIABLE MDEXP (cont.)

CONSTRUCTION (cont.)

```
IF DE11270 = 1
     OR DE11566 = 1
     OR DE11570 = 1
     OR DE11571 = 1
     OR DE11572 = 1
     OR DE11580 = 1
     OR DE11581 = 1
   THEN MDEXP = SUM(MDEXP,DE11888,DE12028,DE12101,DE12106);
```

INTRODUCTION TO DENTAL VARIABLES

The nine variables pertaining to participants' dental care and expenses are complex. This introduction is intended to clarify them by highlighting their similarities and differences.

Several sources were used in deriving the dental data: (1) the baseline questionnaire and its dental supplements, (2) the EVF new person supplement, and (3) other derived variables in this file. Recall that supplements were completed to provide further detail for topics addressed in the main instrument. For example, if a participant reported a visit to the dentist in the baseline questionnaire, the baseline dental supplement was completed to elaborate on the providers and the services they rendered. If a participant had multiple providers and services, multiple supplements were completed. In the construction of each variable, the number of supplements to be completed (as reported in the baseline questionnaire) was compared with the number of supplements actually completed. If there was a discrepancy, the variable value was coded "missing" for the participant.

Data sources with HIEI numbers are identified in the variable descriptions, and the HIEI numbers are defined in Appendix C. Specific data items within those sources are defined by DEI number or variable name in the list of input variables at the end of this introduction.

The dental variables divide into three classes based on common data sources and similarity of construction. Each class is described below. The order of variables by class, which points up construction similarities of particular interest to programmers, differs somewhat from the order of the variable descriptions, which is for analytic convenience.

CLASS 1: DDSUSUAL AND DDSIND

These straightforward variables identify the participant's regular dentist (DDSUSUAL) and indicate whether the participant had multiple regular dentists (DDSIND) at baseline. If multiple dentists are cited, the first mentioned is assigned for the DDSUSUAL value. Both variables are constructed by checking all baseline dental supplements completed for the participant. There are no site differences in the method of construction except that Dayton data were unavailable for DDSUSUAL.

CLASS 2: HAVEDDS1-HAVEDDS3

These three variables indicate whether the participant visited a dentist for routine services (HAVEDDS1), for defined "special" services (HAVEDDS2), or for orthodontia (HAVEDDS3) during the previous year.

For persons present at baseline, each variable is constructed by first checking the responses to four "trigger" questions in the baseline instrument about whether the participant had had dental visits or services (DEI1482 - DEI1485). Unless all four questions were answered "No," the participant's baseline dental supplements were then checked to see if the relevant services were provided.

For persons not present at baseline, these variables are constructed similarly, using the EVF new person supplement, which contained both trigger questions and details about relevant services. The exception is Dayton, which had two EVF new person supplements--a basic form containing the trigger questions and a dental supplement detailing the services. Through an administrative error, however, the new person dental supplement data were never processed. Therefore, all Dayton participants who did not answer No to the four trigger questions have values of "missing" for these variables.

CLASS 3: DDSVSP, DDSVIS, DDSEXP, DDSORTHV

Three of these variables count the number of visits by the participant for special dental services (DDSVSP), for routine and special services (DDSVIS), and for orthodontia (DDSORTHV). The fourth variable totals the participant's expenses for routine and special dental services (DDSEXP). The four variables are constructed similarly for Dayton participants and for nonDayton participants.

For Dayton participants present at baseline, the construction method resembles that for the class 2 variables, starting with responses to the baseline trigger questions. Unless the participant answered No to all four questions, the number of relevant visits or amount of expenses was counted from the baseline dental supplements. For Dayton participants not present at baseline, class 3 variables have the same construction flaw as the class 2 variables.

For nonDayton participants present at baseline, class 3 variables are constructed by first checking the relevant class 2 variable(s) to determine whether the participant had any visits for special services, routine and special services, or orthodontia. If they did, the number of relevant visits or amount of expenses was counted using the baseline dental supplements. For those not present at baseline, the method was identical except that the visits and expenses were counted from the EVF new person supplement rather than the baseline dental supplements.

INPUT VARIABLES

DEI1178 (Seattle) During the last 12 months--that is, since (DATE OF INTERVIEW) a year ago--have you been treated or examined by any dentist? That would include periodontists, orthodontists, oral surgeons, and so on.
1. Yes
2. No

DEI1179 (Seattle) During the past 12 months--since (DATE OF INTERVIEW) a year ago--how many times did you visit a dentist for orthodontia treatment?

DEI1482 Is there a particular dentist or dental clinic you usually go to when you need dental care?
1. Yes
2. No

DEI1483 Were you treated or examined by any (other) dentist during the last twelve months? For example, orthodontists, periodontists, oral surgeons, and so forth?
1. Yes
2. No

DEI1484 WERE (SOME/NO) DENTISTS NAMED IN PREVIOUS QUESTION? CIRCLE ONE:
1. Some dentist(s) named
2. No dentist(s) named

DEI1485 (Dayton) Did you see a dentist for any of the following reasons during the last twelve months? (HAND CARD 10 AND READ LIST): fillings, inlay work, bridgework or replacement of teeth, gum treatments, cleaning, or any other.
(NonDayton) During the last 12 months, did you see a dentist for any reason--such as fillings, bridgework, gum treatments, pulling or replacing teeth, cleaning, check-up, or anything else?
1. Yes
2. No

DEI1730 (Massachusetts and South Carolina) What is the name of that dentist or dental clinic? (MAXIMUM: 4)

DEI2011 (Massachusetts and South Carolina) In the last 12 months, that is, since (DATE OF INTERVIEW) a year ago, have you been treated or examined by (this dentist/this clinic/any of these dentists or clinics)?
1. Yes
2. No

DEI2012 (Massachusetts and South Carolina) Since (DATE OF INTERVIEW) a year ago, were you treated or examined by any (other) dentist? That would include periodontists, orthodontists, oral surgeons, and so on.
1. Yes
2. No

DEI2038 (NonDayton) What was the total cost of (that visit/those visits)--including costs covered by insurance or paid by some other source? (SPECIAL SERVICES)

DEI2039 (NonDayton) Besides (that/those) (NUMBER OF VISITS IN DEI2085) visit(s), how many other visits did you make to (PROVIDER)?

DEI2042 (NonDayton) What was the total cost of (that visit/those visits)--including costs covered by insurance or paid by some other source? (ROUTINE SERVICES)

DEI2043 (NonDayton) Since a year ago, did you receive any:
1. SERVICES IN BOTH A-D AND E-L
2. SERVICES IN A-D
3. SERVICES IN E-L (Seattle only)
4. NO SERVICES

A. CHECK-UP OR EXAM
B. TEETH CLEANED
C. X-RAYS
D. FLUORIDE TREATMENT
E. TOOTH OR TEETH FILLED
F. CROWNS, CAPPING OR INLAYS
G. DENTURES, PLATES, OR BRIDGEWORK--MADE, REPAIRED, REPLACED, OR ADJUSTED
H. GUM TREATMENT
I. TOOTH OR TEETH PULLED
J. ROOT CANAL
K. ORAL SURGERY
L. OTHER

DEI2056 (NonDayton) Did (PROVIDER) give you any other kind of dental care, for which (PROVIDER) charged in addition to the charges for orthodontia?
1. Yes
2. No

DEI2080 IS THIS DENTIST YOUR USUAL PROVIDER OF DENTAL CARE? CIRCLE ONE:
1. Usual provider
2. Other provider

DEI2081 (Dayton) Have you been treated or examined by (USUAL DENTIST) in the last twelve months? (NonDayton) Since (DATE OF INTERVIEW) a year ago have you been treated or examined by (PROVIDER)?
1. Yes
2. No

DEI2083 Were any of the visits you made to any dentists for orthodontia--teeth straightening?
1. Yes
2. No

DEI2084 (Dayton) How many times did you go to (DENTIST) in the past 12 months? Please include visits for any reason, including (HAND CARD 9 AND READ LIST) fillings, inlay work, bridgework or replacement of teeth, gum treatment, cleaning, or any other.

DEI2085 (Dayton) How many of those visits to (DENTIST) were to have your teeth cleaned, x-rayed, or checked only (i.e., no fillings were done)?

DEI2087 (Dayton) What was the cost of those visits during the last twelve months including costs covered by insurance?

DEI2092 Since (DATE OF INTERVIEW) a year ago--how many times did you visit (PROVIDER) for orthodontia treatment?

DEI3411 (NonDayton) DENTAL PROVIDER IDENTIFIER

DEI3653 (NonDayton) How many of those visits to (DENTIST) were to have your teeth cleaned, x-rayed, or checked only (i.e., no fillings were done)? (REPEAT ROUTINE SERVICES)

DEI3654 (NonDayton) What was the total cost of (that visit/those visits)--including costs covered by insurance or paid by some other source? (ROUTINE VISITS--REPEAT SERVICES)

DEI4055 (NonDayton) Altogether, how many times did you visit (PROVIDER) since (DATE OF INTERVIEW) a year ago for those services?

DEI4072 (NonDayton) What was the total cost of (that visit/those visits)--including costs covered by insurance or paid by some other source? (SPECIAL SERVICES)

DENTCNT (Massachusetts and South Carolina) Temporary variable--number of dental providers listed on EVF new person supplement

HAVEDDS1 Any visit for routine dental services

HAVEDDS2 Any visit for special dental services

HAVEDDS3 Any visit for orthodontia

VARIABLE DDSUSUAL FSD

Usual dentist at baseline

DDSUSUAL is an 8-character alphanumeric code that uniquely identifies the participant's usual dentist. All such provider codes are defined in an HIE data file (see Appendix B, item RF2).

INPUT VARIABLES

Site	HIEI	Variables
Seattle	65	See "Introduction to Dental Variables" above.
Massachusetts	94	
South Carolina	149	

CONSTRUCTION

(Seattle, Massachusetts, and South Carolina)

```
DO OVER DENTAL SUPPLEMENTS;

   IF DEI2080 = 1 AND DDSUSUAL = '        '
      THEN DDSUSUAL = DEI3411;

END;
```

VARIABLE DDSIND FSD

Multiple dentists at baseline

CODES

. - Missing or no usual dentist
0 - Only one usual dentist
1 - More than one usual dentist

DDSIND indicates whether participant had more than one usual dentist.

INPUT VARIABLES

Site	HIEI	Variables
Dayton	27	See "Introduction to Dental Variables" above.
Seattle	65	
Massachusetts	94	
South Carolina	149	

CONSTRUCTION

(All sites)

```
      DO OVER DENTAL SUPPLEMENTS;

      IF DEI2080 = 1
         THEN IF DDSIND = .
                 THEN DDSIND = 0;
                 ELSE DDSIND = 1;

      END;
```

DDSIND

VALUE	FREQ	CUM FREQ	%	CUM %
.	15501	.	.	.
0	10273	10273	96.49	96.49
1	374	10647	3.51	100.00

VARIABLE HAVEDDS1 FSD

Any visit for routine dental services

CODES

. - Missing
0 - No visit for routine services
1 - One or more visits for routine services

HAVEDDS1 indicates whether participant went to the dentist during the previous year for routine services, including cleaning, x-rays, checkups, and (nonDayton) fluoride treatment.

INPUT VARIABLES

Site	HIEI	Variables
Dayton	15/43,27,36	See "Introduction to Dental Variables" above.
Seattle	63,65,125	
Massachusetts	92,94,181	
South Carolina	147,149,192	

CONSTRUCTION

(Dayton)

(From baseline data.)

```
IF DEI1482 = 2 & DEI1483 = 2 & DEI1484 = 2 & DEI1485 = 2
   THEN HAVEDDS1 = 0;

   ELSE DO OVER DENTAL SUPPLEMENTS;

           IF DEI2085 > 0 ON ANY DENTAL SUPPLEMENT
              THEN HAVEDDS1 = 1;
           IF DEI2085 = 0 ON ALL DENTAL SUPPLEMENTS
              THEN HAVEDDS1 = 0;
           IF DEI2083 = 1 AND HAVEDDS1 \= 1
              THEN HAVEDDS1 = 0;

        END;
```

(cont.)

HAVEDDS1

VALUE	FREQ	CUM FREQ	%	CUM %
.	11371	.	.	.
0	4449	4449	30.11	30.11
1	10328	14777	69.89	100.00

```
VARIABLE HAVEDDS1 (cont.)

  CONSTRUCTION (cont.)

  (From EVF new person supplement data.)

  IF DEI1482 = 2 & DEI1483 = 2 & DEI1484 = 2 & DEI1485 = 2
     THEN HAVEDDS1 = 0;


  (Seattle)

  (From baseline data.)

  IF DEI1482 = 2 & DEI1483 = 2 & DEI1484 = 2 & DEI1485 = 2
     THEN HAVEDDS1 = 0;

     ELSE DO OVER DENTAL SUPPLEMENTS;

          IF DEI2081 = 1 OR DEI2083 = 1 OR DEI2043 > 0
             THEN DO;
                  IF (DEI2043 = 1 OR DEI2043 = 2)
                     THEN HAVEDDS1 = 1;
                     ELSE IF DEI2043 = 3 AND HAVEDDS1 \= 1
                             THEN HAVEDDS1 = 0;
                  IF DEI2083 = 1 AND DEI2056 = 2 AND HAVEDDS1 \= 1
                     THEN HAVEDDS1 = 0;
                  END;
          END;


  (From EVF new person supplement data.)

      IF DEI1178 = 2
         THEN HAVEDDS1 = 0;

         ELSE DO;

              IF DEI2043 = 1 OR DEI2043 = 2
                 THEN HAVEDDS1 = 1;
                 ELSE IF DEI2043 = 3 OR DEI2043 = 4
                         THEN HAVEDDS1 = 0;
              IF DEI2083 = 1 AND HAVEDDS1 \= 1
                 THEN HAVEDDS1 = 0;

              END;
```

(cont.)

```
VARIABLE HAVEDDS1 (cont.)

  CONSTRUCTION (cont.)

  (Massachusetts, South Carolina)

  (From baseline data.)

      IF DEI1482 = 2 & DEI1483 = 2 & DEI1484 = 2 & DEI1485 = 2
      THEN HAVEDDS1 = 0;

      ELSE DO OVER DENTAL SUPPLEMENTS;

           IF DEI2081 = 1 OR DEI2083 = 1 OR DEI2043 > 0
              THEN DO;

                   IF (DEI2043 = 1 OR DEI2043 = 2)
                      THEN HAVEDDS1 = 1;
                      ELSE IF DEI2043 = 3 AND HAVEDDS1 \=1
                               THEN HAVEDDS1 = 0;
                   IF DEI2083 = 1 AND DEI2056 = 2 AND HAVEDDS1 \= 1
                      THEN HAVEDDS1 = 0;

                   END;

           END;

  (From EVF new person supplement data.)

      IF (DEI2011 = 2 OR DEI2011 = .) AND
         (DEI2012 = 2 OR DEI2012 = .) AND
         DENTCNT = 0
         THEN HAVEDDS1 = 0;

         ELSE DO OVER DENTCNT;

              IF DEI2043 = 1 OR DEI2043 = 2
                 THEN HAVEDDS1 = 1;
                 ELSE IF DEI2043 = 3 AND HAVEDDS1 \= 1;
                          THEN HAVEDDS1 = 0;
              IF DEI2083 = 1 AND DEI2056 = 2 AND HAVEDDS1 \= 1
                 THEN HAVEDDS1 = 0;

              END;
```

VARIABLE HAVEDDS2 FSD

Any visit for special dental services

CODES

. - Missing
0 - No visit for special services
1 - One or more visits for special services

HAVEDDS2 indicates whether participant went to the dentist during the previous year for special services, including filling, crown, capping, or inlay; denture, plate, or bridgework; gum treatment; extraction, root canal, or oral surgery.

INPUT VARIABLES

Site	HIEI	Variables
Dayton	15/43,27,36	See "Introduction to
Seattle	63,65,125,	Dental Variables" above.
Massachusetts	92,94,181,	
South Carolina	147,149,192	

CONSTRUCTION

(Dayton)

(From baseline data.)

```
IF DEI1482 = 2 & DEI1483 = 2 & DEI1484 = 2 & DEI1485 = 2
   THEN HAVEDDS2 = 0;

   ELSE DO OVER DENTAL SUPPLEMENTS;

        IF (DEI2084 - DEI2085) > 0 ON ANY DENTAL SUPPLEMENT
           THEN HAVEDDS2 = 1;
        IF (DEI2084 - DEI2085) = 0 ON ALL DENTAL SUPPLEMENT
           THEN HAVEDDS2 = 0;
        IF DEI2083 = 1 AND HAVEDDS2 \= 1
           THEN HAVEDDS2 = 0;
        END;
```

(cont.)

HAVEDDS2

VALUE	FREQ	CUM FREQ	%	CUM %
.	11371	.	.	.
0	6835	6835	46.25	46.25
1	7942	14777	53.75	100.00

```
VARIABLE HAVEDDS2 (cont.)

  CONSTRUCTION (cont.)

  (From EVF new person supplement data.)

  IF DEI1482 = 2 & DEI1483 = 2 & DEI1484 = 2 & DEI1485 = 2
     THEN HAVEDDS2 = 0;


  (Seattle)

  (From baseline data.)

  IF DEI1482 = 2 & DEI1483 = 2 & DEI1484 = 2 & DEI1485 = 2
     THEN HAVEDDS2 = 0;

     ELSE DO OVER DENTAL SUPPLEMENTS;

          IF DEI2081 = 1 OR DEI2083 = 1 OR DEI2043 > 0
             THEN DO;

                  IF DEI2043 = 1
                     THEN HAVEDDS2 = 1;
                     ELSE IF DEI2043 = 2 AND HAVEDDS2 \=1
                             THEN HAVEDDS2 = 0;
                     ELSE IF DEI2043 = 3
                             THEN HAVEDDS2 = 1;
                  IF DEI2083 = 1 AND DEI2056 = 2 AND HAVEDDS2 \= 1
                     THEN HAVEDDS2 = 0;

                  END;
          END;


  (From EVF new person supplement data.)

    IF DEI1178 = 2 THEN HAVEDDS2 = 0;
       ELSE DO;

            IF DEI2043 = 1
               THEN HAVEDDS2 = 1;
               ELSE IF DEI2043 = 2
                       THEN HAVEDDS2 = 0;
               ELSE IF DEI2043 = 3
                       THEN HAVEDDS2 = 1;
               ELSE IF DEI2043 = 4
                       THEN HAVEDDS2 = 0;
```

(cont.)

VARIABLE HAVEDDS2 (cont.)

CONSTRUCTION (cont.)

```
          IF DEI2083 = 1 AND DEI2056 = 2 AND HAVEDDS2 \= 1
             THEN HAVEDDS2 = 0;

          END;
```

(Massachusetts, South Carolina)

(From baseline data.)

```
IF DEI1482 = 2 & DEI1483 = 2 & DEI1484 = 2 & DEI1485 = 2
   THEN HAVEDDS2 = 0;

   ELSE DO OVER DENTAL SUPPLEMENTS;

        IF DEI2081 = 1 OR DEI2083 = 1 OR DEI2043 > 0
           THEN DO;

                IF DEI2043 = 1
                   THEN HAVEDDS2 = 1;
                   ELSE IF DEI2043 = 2 AND HAVEDDS2 \= 1
                           THEN HAVEDDS2 = 0;
                   ELSE IF DEI2043 = 3
                           THEN HAVEDDS2 = 1;
                IF DEI2083 = 1 AND DEI2056 = 2 AND HAVEDDS2 \= 1
                   THEN HAVEDDS2 = 0;

                END;

        END;
```

(From EVF new person supplement data.)

```
    IF (DEI2011 = 2 OR DEI2011 = .) AND
       (DEI2012 = 2 OR DEI2012 = .) AND
       DENTCNT = 0
       THEN HAVEDDS2 = 0;
```

(cont.)

VARIABLE HAVEDDS2 (cont.)

CONSTRUCTION (cont.)

```
        ELSE DO OVER DENTCNT;

             IF DEI2043 = 1
                THEN HAVEDDS2 = 1;
                ELSE IF DEI2043 = 2 AND HAVEDDS2 \= 1
                        THEN HAVEDDS2 = 0;
                ELSE IF DEI2043 = 3
                        THEN HAVEDDS2 = 1;
             IF DEI2083 = 1 AND DEI2056 = 2 AND HAVEDDS2 \= 1
                THEN HAVEDDS2 = 0;

             END;
```

VARIABLE DDSVSP FSD

Number of visits for special dental services

CODES

. - Missing

DDSVSP identifies the number of times the participant saw dentist during the previous year for special services, including filling, crown, capping, or inlay; denture, plate, or bridgework; gum treatment; extraction, root canal, or oral surgery.

INPUT VARIABLES

Site	HIEI	Variables
Dayton	15/43,27,36	See "Introduction to
Seattle	63,65,125	Dental Variables" above.
Massachusetts	92,94 181	
South Carolina	147,149,192	

(cont.)

DDSVSP

VALUE	FREQ	CUM FREQ	%	CUM %
.	11460	.	.	.
0	8653	8653	58.91	58.91
1	2610	11263	17.77	76.68
2	1350	12613	9.19	85.87
3	750	13363	5.11	90.98
4	446	13809	3.04	94.02
5	313	14122	2.13	96.15
6	201	14323	1.37	97.52
7	79	14402	0.54	98.05
8	73	14475	0.50	98.55
9	33	14508	0.23	98.78
10	62	14570	0.42	99.20
11	17	14587	0.12	99.31
12	40	14627	0.27	99.59
13	5	14632	0.03	99.62
14	9	14641	0.06	99.68
15	10	14651	0.07	99.75
16	6	14657	0.04	99.79
17	2	14659	0.01	99.80
18	4	14663	0.03	99.83
19	3	14666	0.02	99.85
20	10	14676	0.07	99.92
22	1	14677	0.01	99.93

(cont.)

VARIABLE DDSVSP (cont.)

```
CONSTRUCTION

(Dayton)

(From baseline data.)

IF DEI1482 = 2 & DEI1483 = 2 & DEI1484 = 2 & DEI1485 = 2
   THEN DDSVSP = 0;

   ELSE DO OVER DENTAL SUPPLEMENTS;

        IF ((DEI2080 = 2 OR DEI2080 = .) OR
           (DEI2081 = 1 OR DEI2081 = .)) AND
           DEI2083 = 2
           THEN DDSVSP = SUM(DDSVSP,(DEI2084 - DEI2085));

        END;


(From EVF new person supplement data.)

  IF DEI1482 = 2 & DEI1483 = 2 & DEI1484 = 2 & DEI1485 = 2
     THEN DDSVSP = 0;


(Seattle)

(From baseline data.)

IF HAVEDDS2 = 0
   THEN DDSVSP = 0;

   ELSE DO OVER DENTAL SUPPLEMENTS;

        IF DEI2081 = 1 OR DEI2043 > 0
           THEN DO;

                IF DEI2043 = 1 OR DEI2043 = 3
                   THEN DDSVSP = SUM(DDSVSP,DEI2039);

                END;

        END;
```

(cont.)

VALUE	FREQ	CUM FREQ	%	CUM %
23	1	14678	0.01	99.93
24	2	14680	0.01	99.95
25	2	14682	0.01	99.96
30	1	14683	0.01	99.97
34	1	14684	0.01	99.97
36	1	14685	0.01	99.98
40	1	14686	0.01	99.99
55	1	14687	0.01	99.99
72	1	14688	0.01	100.00

```
VARIABLE DDSVSP (cont.)

  CONSTRUCTION (cont.)

  (From EVF new person supplement data.)

  IF HAVEDDS2 = 0
     THEN DDSVSP = 0;

     ELSE DO;

          IF DEI2039 = . THEN DEI2039 = DEI4055;
          IF DEI2043 = 1 OR DEI2043 = 3
             THEN DDSVSP = SUM(DDSVSP,DEI2039);

          END;


  (Massachusetts, South Carolina)

  (From baseline data.)

  IF HAVEDDS2 = 0
     THEN DDSVSP = 0;

     ELSE DO OVER DENTAL SUPPLEMENTS;

          IF DEI2081 = 1 OR DEI2043 > 0
             THEN DO;

                  IF DEI2039 = .
                     THEN DEI2039 = DEI4055;
                  IF DEI2043 = 1 OR DEI2043 = 3
                     THEN DDSVSP = SUM(DDSVSP,DEI2039);

                  END;
          END;
```

(cont.)

VARIABLE DDSVSP (cont.)

CONSTRUCTION (cont.)

(From EVF new person supplement data.)

```
IF HAVEDDS2 = 0
   THEN DDSVSP = 0;
   ELSE DO OVER DENTCNT;

        IF DEI2039 = . THEN DEI2039 = DEI4055;
        IF DEI2043 = 1 OR DEI2043 = 3
           THEN DDSVSP = SUM(DDSVSP,DEI2039));

        END;
```

VARIABLE DDSVIS — FSD

Number of dental visits for routine and special services

CODES

. - Missing

DDSVIS identifies the number of times the participant saw dentist during the previous year for routine and special services.

INPUT VARIABLES

Site	HIEI	Variables
Dayton	15/43,27,36	See "Introduction to Dental Variables" above.
Seattle	63,65,125	
Massachusetts	92,94 181	
South Carolina	147,149,192	

CONSTRUCTION

(Dayton)

(From baseline data.)

```
IF DEI1482 = 2 & DEI1483 = 2 & DEI1484 = 2 & DEI1485 = 2
   THEN DDSVIS = 0;
```

(cont.)

DDSVIS

VALUE	FREQ	CUM FREQ	%	CUM %
.	11501	.	.	.
0	3438	3438	23.47	23.47
1	3325	6763	22.70	46.17
2	3169	9932	21.64	67.81
3	1691	11623	11.55	79.35
4	1039	12662	7.09	86.45
5	657	13319	4.49	90.93
6	437	13756	2.98	93.92
7	233	13989	1.59	95.51
8	174	14163	1.19	96.70
9	103	14266	0.70	97.40
10	102	14368	0.70	98.10
11	50	14418	0.34	98.44
12	61	14479	0.42	98.85
13	27	14506	0.18	99.04
14	30	14536	0.21	99.24
15	25	14561	0.17	99.41
16	18	14579	0.12	99.54
17	5	14584	0.03	99.57
18	12	14596	0.08	99.65
19	7	14603	0.05	99.70
20	10	14613	0.07	99.77
21	5	14618	0.03	99.80
22	5	14623	0.03	99.84
23	1	14624	0.01	99.84
24	3	14627	0.02	99.86
25	2	14629	0.01	99.88
26	1	14630	0.01	99.88
27	3	14633	0.02	99.90
28	3	14636	0.02	99.93
30	2	14638	0.01	99.94

(cont.)

VARIABLE DDSVIS (cont.)

```
CONSTRUCTION (cont.)

   ELSE DO OVER DENTAL SUPPLEMENTS;

        IF (DEI2080 = 2 OR DEI2080 = .) OR
           (DEI2081 = 1 OR DEI2081 = .) AND DEI2083 = 2
           THEN DDSVIS = SUM(DDSVIS,DEI2084);

        END;


(From EVF new person supplement data.)

IF DEI1482 = 2 & DEI1483 = 2 & DEI1484 = 2 & DEI1485 = 2
   THEN DDSVIS = 0;


(Seattle)

(From baseline data.)

IF HAVEDDS1 = 0 & HAVEDDS2 = 0
   THEN DDSVIS = 0;

   ELSE DO OVER DENTAL SUPPLEMENTS;

        IF DEI2081 = 1 OR DEI2043 > 0
           THEN DO;

                IF DEI2043 = 1
                   THEN DDSVIS = SUM(DDSVIS,DEI2039,DEI2085);
                   ELSE IF DEI2043 = 2
                           THEN DDSVIS = SUM(DDSVIS,DEI2085);
                   ELSE IF DEI2043 = 3
                           THEN DDSVIS = SUM(DDSVIS,DEI2039);

                END;

        END;


(From EVF new person supplement data.)

  IF HAVEDDS1 = 0 & HAVEDDS2 = 0
     THEN DDSVIS = 0;
```

(cont.)

VALUE	FREQ	CUM FREQ	%	CUM %
31	2	14640	0.01	99.95
34	1	14641	0.01	99.96
35	1	14642	0.01	99.97
36	2	14644	0.01	99.98
40	1	14645	0.01	99.99
56	1	14646	0.01	99.99
76	1	14647	0.01	100.00

VARIABLE DDSVIS (cont.)

CONSTRUCTION (cont.)

```
      ELSE DO;

              IF DE12039 = . THEN DE12039 = DE14055;
              IF DE12085 = . THEN DE12085 = DE13653;
              IF DE12043 = 1
                 THEN DDSVIS = SUM(DDSVIS,DE12039,DE12085);
                 ELSE IF DE12043 = 2
                         THEN DDSVIS = SUM(DDSVIS,DE12085);
                 ELSE IF DE12043 = 3
                         THEN DDSVIS = SUM(DDSVIS,DE12039);

           END;
```

(Massachusetts, South Carolina)

(From baseline data.)

```
IF HAVEDDS1 = 0 & HAVEDDS2 = 0
   THEN DDSVIS = 0;

   ELSE DO OVER DENTAL SUPPLEMENTS;

        IF DE12081 = 1 OR DE12043 > 0
           THEN DO;

                IF DE12039 = . THEN DE12039 = DE14055;
                IF DE12085 = . THEN DE12085 = DE13653;
                IF DE12043 = 1
                   THEN DDSVIS = SUM(DDSVIS,DE12039,DE12085);
                   ELSE IF DE12043 = 2
                           THEN DDSVIS = SUM(DDSVIS,DE12085);
                   ELSE IF DE12043 = 3
                           THEN DDSVIS = SUM(DDSVIS,DE12039);

                END;
        END;
```

(From EVF new person supplement data.)

```
IF HAVEDDS1 = 0 & HAVEDDS2 = 0
   THEN DDSVIS = 0;
```

(cont.)

VARIABLE DDSVIS (cont.)

CONSTRUCTION (cont.)

```
   ELSE DO OVER DENTCNT;

        IF DE12039 = . THEN DE12039 = DE14055;

        IF DE12085 = . THEN DE12085 = DE13653;
        IF DE12043 = 1
           THEN DDSVIS = SUM(DDSVIS,DE12039,DE12085);
           ELSE IF DE12043 = 2
                   THEN DDSVIS = SUM(DDSVIS,DE12085);
           ELSE IF DE12043 = 3
                   THEN DDSVIS = SUM(DDSVIS,DE12039);

        END;
```

VARIABLE DDSEXP FSD

Dental expenses for routine and special services

CODES

. - Missing
Dollar amount

DDSEXP reports the participant's total expenses during the previous year for routine and special dental services.

INPUT VARIABLES

Site	HIEI	Variables
Dayton	15/43,27,36	See "Introduction to Dental Variables" above.
Seattle	63,65,125	
Massachusetts	92,94,181	
South Carolina	147,149,192	

(cont.)

DDSEXP

NUMBER OF OBSERVATIONS	10572
NUMBER OF MISSING	15576
MEAN	57.92
MEDIAN	20.00
MINIMUM VALUE	0.00
MAXIMUM VALUE	4130.00
STANDARD DEVIATION	153.83
COEFFICIENT OF VARIATION	265.60
SKEWNESS	9.94
KURTOSIS	161.83

VARIABLE DDSEXP (cont.)

```
CONSTRUCTION

(Dayton)

(From baseline data.)

IF DEI1482 = 2 & DEI1483 = 2 & DEI1484 = 2 & DEI1485 = 2
   THEN DDSEXP = 0;

   ELSE DO OVER DENTAL SUPPLEMENTS;

        IF (DEI2080 = 2 OR DEI2080 = .) OR
           (DEI2081 = 1 OR DEI2081 = .) AND DEI2083 = 2
           THEN DDSEXP = SUM(DDSEXP,DEI2087);

        END;


(From EVF new person supplement data.)

IF DEI1482 = 2 & DEI1483 = 2 & DEI1484 = 2 & DEI1485 = 2
   THEN DDSEXP = 0;


(Seattle)

(From baseline data.)

IF HAVEDDS1 = 0 & HAVEDDS2 = 0
   THEN DDSEXP = 0;

   ELSE DO OVER DENTAL SUPPLEMENTS;

        IF DEI2081 = 1 OR DEI2043 > 0
           THEN DO;

                IF DEI2043 = 1
                   THEN DDSEXP = SUM(DDSEXP,DEI2042,DEI2038);
                   ELSE IF DEI2043 = 2
                           THEN DDSEXP = SUM(DDSEXP,DEI2042);
                   ELSE IF DEI2043 = 3
                           THEN DDSEXP = SUM(DDSEXP,DEI2038);

                END

        END;
```

(cont.)

VARIABLE DDSEXP (cont.)

CONSTRUCTION (cont.)

(From EVF new person supplement data.)

```
IF HAVEDDS1 = 0 & HAVEDDS2 = 0
   THEN DDSEXP = 0;

   ELSE DO;

           IF DEI2042 = . THEN DEI2042 = DEI3654;
           IF DEI2038 = . THEN DEI2038 = DEI4072;
           IF DEI2043 = 1
              THEN DDSEXP = SUM(DDSEXP,DEI2042,DEI2038);
              ELSE IF DEI2043 = 2
                   THEN DDSEXP = SUM(DDSEXP,DEI2042);
              ELSE IF DEI2043 = 3
                   THEN DDSEXP = SUM(DDSEXP,DEI2038);

        END;
```

(Massachusetts, South Carolina)

(From baseline data.)

```
IF HAVEDDS1 = 0 & HAVEDDS2 = 0
   THEN DDSEXP = 0;

   ELSE DO OVER DENTAL SUPPLEMENTS;

        IF DEI2081 = 1 OR DEI2043 > 0
           THEN DO;

                IF DEI2042 = . THEN DEI2042 = DEI3654;
                IF DEI2038 = . THEN DEI2038 = DEI4072;
                IF DEI2043 = 1
                   THEN DDSEXP = SUM(DDSEXP,DEI2042,DEI2038);
                ELSE IF DEI2043 = 2
                        THEN DDSEXP = SUM(DDSEXP,DEI2042);
                ELSE IF DEI2043 = 3
                        THEN DDSEXP = SUM(DDSEXP,DEI2038);

                END;

        END;
```

(cont.)

VARIABLE DDSEXP (cont.)

CONSTRUCTION (cont.)

(From EVF new person supplement data.)

```
IF HAVEDDS1 = 0 & HAVEDDS2 = 0
   THEN DDSEXP = 0;

   ELSE DO OVER DENTCNT;

        IF DE12042 = . THEN DE12042 = DE13654;
        IF DE12038 = . THEN DE12038 = DE14072;
        IF DE12043 = 1
           THEN DDSEXP = SUM(DDSEXP,DE12042,DE12038);
           ELSE IF DE12043 = 2
                   THEN DDSEXP = SUM(DDSEXP,DE12042);
           ELSE IF DE12043 = 3
                   THEN DDSEXP = SUM(DDSEXP,DE12038);

        END;
```

VARIABLE HAVEDDS3 FSD

Any visit for orthodontia

CODES

. - Missing
0 - No visit for orthodontia
1 - One or more visits for orthodontia

HAVEDDS3 indicates whether participant went to the dentist during the previous year for orthodontic work.

INPUT VARIABLES

Site	HIEI	Variables
Dayton	15/43,27,36	See "Introduction to
Seattle	63,65,125	Dental Variables" above.
Massachusetts	92,94 181	
South Carolina	147,149,192	

(cont.)

HAVEDDS3

VALUE	FREQ	CUM FREQ	%	CUM %
.	11397	.	.	.
0	14102	14102	95.60	95.60
1	649	14751	4.40	100.00

VARIABLE HAVEDDS3 (cont.)

```
CONSTRUCTION

(Dayton)

(From baseline data.)

IF DEI1482 = 2 & DEI1483 = 2 & DEI1484 = 2 & DEI1485 = 2
   THEN HAVEDDS3 = 0;

   ELSE DO OVER DENTAL SUPPLEMENTS;

           IF DEI2083 = 1 ON ANY DENTAL SUPPLEMENTS
              THEN HAVEDDS3 = 1;
           IF DEI2083 = 2 ON ALL DENTAL SUPPLEMENTS
              THEN HAVEDDS3 = 0;

        END;


(From EVF new person supplement data.)

IF DEI1482 = 2 & DEI1483 = 2 & DEI1484 = 2 & DEI1485 = 2
   THEN HAVEDDS3 = 0;


(Seattle)

(From baseline data.)

IF DEI1482 = 2 & DEI1483 = 2 & DEI1484 = 2 & DEI1485 = 2
   THEN HAVEDDS3 = 0;

   ELSE DO OVER DENTAL SUPPLEMENTS;

           IF DEI2081 = 1
              THEN IF DEI2083 = 1
                      THEN HAVEDDS3 = 1;
                      ELSE IF DEI2083 = 2 AND HAVEDDS3 \= 1
                              THEN HAVEDDS3 = 0;
        END;
```

(cont.)

```
VARIABLE HAVEDDS3 (cont.)

  CONSTRUCTION (cont.)

  (From EVF new person supplement data.)

  IF DEI1178 = 2
     THEN HAVEDDS3 = 0;
     ELSE IF DEI2083 = 1
             THEN HAVEDDS3 = 1;
     ELSE IF DEI2083 = 2 AND HAVEDDS3 \= 1
             THEN HAVEDDS3 = 0;


  (Massachusetts, South Carolina)

  (From baseline data.)

  IF DEI1482 = 2 & DEI1483 = 2 & DEI1484 = 2 & DEI1485 = 2
     THEN HAVEDDS3 = 0;

     ELSE DO OVER DENTAL SUPPLEMENTS;

          IF DEI2081 = 1
             THEN IF DEI2083 = 1
                     THEN HAVEDDS3 = 1;
                     ELSE IF DEI2083 = 2 AND HAVEDDS3 \= 1
                             THEN HAVEDDS3 = 0;
          END;

  (From EVF new person supplement data.)

     IF (DEI2011 = 2 OR DEI2011 = .) AND
        (DEI2012 = 2 OR DEI2012 = .) AND DENTCNT = 0
        THEN HAVEDDS3 = 0;

        ELSE DO OVER DENTCNT;

             IF DEI2083 = 1
                THEN HAVEDDS3 = 1;
                ELSE IF DEI2083 = 2 AND HAVEDDS3 \= 1
                        THEN HAVEDDS3 = 0;

             END;
```

VARIABLE DDSORTHV FSD

Number of visits for orthodontia

CODES

. - Missing

DDSORTHV identifies the number of times the participant saw dentist for orthodontic work.

INPUT VARIABLES

Site	HIEI	Variables
Dayton	15/43,27,36	See "Introduction to Dental Variables" above.
Seattle	63,65,125	
Massachusetts	92,94,181	
South Carolina	147,149,192	

CONSTRUCTION

(Dayton)

(From baseline data.)

```
IF DEI1482 = 2 & DEI1483 = 2 & DEI1484 = 2 & DEI1485 = 2
   THEN DDSORTHV = 0;

   ELSE DO OVER DENTAL SUPPLEMENTS;

        IF (DEI2080 = 2 OR DEI2080 = .) OR
           (DEI2081 = 1 OR DEI2081 = .) AND DEI2083 = 1
           THEN DDSORTHV = SUM(DDSORTHV,DEI2092);

        END;
```

(From EVF new person supplement data.)

```
IF DEI1482 = 2 & DEI1483 = 2 & DEI1484 = 2 & DEI1485 = 2
   THEN DDSORTHV = 0;
```

(cont.)

DDSORTHV

VALUE	FREQ	CUM FREQ	%	CUM %
.	11347	.	.	.
0	14169	14169	95.73	95.73
1	101	14270	0.68	96.41
2	66	14336	0.45	96.86
3	51	14387	0.35	97.20
4	50	14437	0.34	97.54
5	36	14473	0.24	97.78
6	41	14514	0.28	98.06
7	15	14529	0.10	98.16
8	41	14570	0.28	98.44
9	19	14589	0.13	98.57
10	27	14616	0.18	98.75
11	12	14628	0.08	98.83
12	97	14725	0.66	99.49
13	8	14733	0.05	99.54
14	8	14741	0.05	99.60
15	13	14754	0.09	99.68
16	8	14762	0.05	99.74
17	1	14763	0.01	99.74
18	11	14774	0.07	99.82
19	1	14775	0.01	99.82
20	8	14783	0.05	99.88
24	9	14792	0.06	99.94
25	2	14794	0.01	99.95
26	1	14795	0.01	99.96
30	5	14800	0.03	99.99
52	1	14801	0.01	100.00

```
VARIABLE DDSORTHV (cont.)

  CONSTRUCTION (cont.)

  (Seattle)

  (From baseline data.)

  IF HAVEDDS3 = 0
     THEN DDSORTHV = 0;

     ELSE DO OVER DENTAL SUPPLEMENTS;

          IF DEI2081 = 1
             THEN IF DEI2083 = 1
                     THEN DDSORTHV = SUM(DDSORTHV,DEI2092);

          END;


  (From EVF new person supplement data.)

  IF HAVEDDS3 = 0
     THEN DDSORTHV = 0;

     ELSE IF DEI2083 = 1
             THEN DDSORTHV = SUM(DDSORTHV,DEI1179);


  (Massachusetts, South Carolina)

  (From baseline data.)

  IF HAVEDDS3 = 0
     THEN DDSORTHV = 0;

     ELSE DO OVER DENTAL SUPPLEMENTS;

          IF DEI2081 = 1
             THEN IF DEI2083 = 1
                     THEN DDSORTHV = SUM(DDSORTHV,DEI2092);
          END;
```

(cont.)

```
VARIABLE DDSORTHV (cont.)

  CONSTRUCTION (cont.)

  (From EVF new person supplement data.)

  IF HAVEDDS3 = 0
     THEN DDSORTHV = 0;

     ELSE DO OVER DENTCNT;

          IF DE12083 = 1
             THEN DDSORTHV = SUM(DDSORTHV,DE12092);

          END;
```

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

---

[1]Participation 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.

[2]In 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 quesionnaire 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

---

[3]Calculation of PI is further described in Clasquin and Brown, op. cit. The formula on p. 20 of that report should read PI = max[K x PG, PR].

[4]The percentage of PI withheld depended on the site and assigned enrollment term, as follows:

	3-yr Term	*5-yr Term*
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.

[5]The 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]

---

[6]The 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.)

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

AC2. FFS outpatient visits

AC3. FFS inpatient visits

AC4. FFS dental visits

AC5. FFS treatment episodes

AC6. FFS annual episode counts

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

LI1. FFS data: hospital inpatient services

LI2. FFS data: inpatient physician procedures billed by institutions

LI3. FFS data: drugs prescribed by physicians

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

L19. FFS data: outpatient services billed by institutions

TO BE ISSUED (cont.)

Claims Line-Items Series (cont.)

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

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

LI30. Seattle FFS data for HMO comparison: outpatient services billed by institutions

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

MH1. Dayton adults at enrollment

MH2. NonDayton adults at enrollment

MH3. Adults at exit

MH4. Dayton children at enrollment

MH5. NonDayton children at enrollment

MH6. Children at exit

MH7. Dayton infants at enrollment

MH8. NonDayton infants at enrollment

MH9. Infants at exit

Appendix C
DATA SOURCES

This appendix identifies the data collection instruments and other sources of data in the full sample demographic file. The source types, shown as centered headings in the table below, are the EVF and its supplements, baseline questionnaire and its supplements, screening questionnaire, annual income report, and HIE administrative files. Within each category, separately administered versions of the instruments are identified by HIEI number, general topic addressed, site covered, inclusive dates administered, and FSD variables to which they contributed.

APPENDIX C (cont.)

HIEI Number	Topic	Site	Dates Administered	Relevant Variables
		EVF (interviewer-administered)		
39	Family changes since baseline	Dayton	10/74-1/75	MARSTAT, ESTATUS, INSURED, PUBLINS
123	Screener for family changes since baseline	Seattle	11/75-9/76	MARSTAT
124	Nature of family changes since baseline	Seattle	11/75-9/76	OCC, INDUSTRY, DEIWG1E, SSI
176	Screener for family changes since baseline	Massachusetts	5-10/76	MARSTAT
177	Nature of family changes since baseline	Massachusetts	5-10/76	OCC, INDUSTRY, DEIWG1E, SSI
187	Screener for family changes since baseline	South Carolina	9/76-1/77	MARSTAT
188	Nature of family changes since baseline [1]	South Carolina	9/76-1/77	INDUSTRY, DEIWG1E, SSI
377	Nature of family changes since baseline [1]	South Carolina	9/78-1/79	OCC, DEIWG1E

[1] For 3-year South Carolina enrollees who were members of the PEG, HIEIs 188 and 192 are the "preenrollment" EVF and EVF new person supplement, respectively; HIEIs 377 and 380 are the "enrollment" EVF and EVF new person supplement.

APPENDIX C (cont.)

HIEI Number	Topic	Site	Dates Administered	Relevant Variables
		EVF New Person Supplement (interviewer-administered)		
36	Demographic and health information about new family member	Dayton	10/74-1/75	EDUCPER, BACKGRND, INCOME1, LFEXPER, PAINBAS, WORRYBAS, HOSP, HAVEMD, MDEXAM, MDVIS, MDEXP, HAVEDDS1-3, DDSVSP, DDSVIS, DDSEXP, DDSORTHV
125	Demographic and health information about new family member	Seattle	11/75-9/76	EDUCPER, BACKGRND, INCOME1, ESELF, LFEXPER, DEIWG1B, HOSP, MDVIS, MDEXP, HAVEDDS1-3, DDSVSP, DDSVIS, DDSEXP, DDSORTHV
181	Demographic and health information about new family member	Massachusetts	5-10/76	EDUCPER, BACKGRND, INCOME1, ESELF, LFEXPER, DEIWG1B, HOSP, HAVEMD, MDEXAM, MDVIS, MDEXP, HAVEDDS1-3, DDSVSP, DDSVIS, DDSEXP, DDSORTHV
192	Demographic and health information about new family member [1]	South Carolina	9/76-1/77	EDUCPER, BACKGRND, INCOME1, ESELF, LFEXPER, DEIWG1B, HOSP, HAVEMD, MDEXAM, MDVIS, MDEXP, HAVEDDS1-3, DDSVSP, DDSVIS, DDSEXP, DDSORTHV
380	Demographic and health information about new family member [1]	South Carolina	9/78-1/79	DEIWG1B, HOSP, MDVIS

[1] For 3-year South Carolina enrollees who were members of the PEG, HIEIs 188 and 192 are the "preenrollment" EVF and EVF new person supplement, respectively; HIEIs 377 and 380 are the "enrollment" EVF and EVF new person supplement.

APPENDIX C (cont.)

HIEI Number	Topic	Site	Dates Administered	Relevant Variables
		EVF Employment Supplement (interviewer-administered)		
42	Wages	Dayton	10/74-1/75	DEIWG1E
127	Wages	Seattle	11/75-9/76	DEIWG1E
178	Wages	Massachusetts	5-10/76	DEIWG1E
189	Wages	South Carolina	9/76-1/77	DEIWG1E
381	Wages	South Carolina	9/78-1/79	DEIWG1E
		EVF New Head Supplement (interviewer-administered)		
50	Demographic information about new household head	Dayton	10/74-1/75	RACE, ETHNOS
126	Demographic information about new household head	Seattle	11/75-9/76	RACE, ETHNOS
182	Demographic information about new household head	Massachusetts	5-10/76	RACE, ETHNOS
193	Demographic information about new household head	South Carolina	9/76-1/77	RACE, ETHNOS

APPENDIX C (cont.)

HIEI Number	Topic	Site	Dates Administered	Relevant Variables
	Baseline Questionnaire (interviewer-administered [2])			
15/43	Income, employment, family composition, health status; self-administered: health care experience, insurance coverage, satisfaction with medical care	Dayton	6-9/74	BASELD, RACE, ETHNOS, MARSTAT, EDUCPER, BACKGRND, INCOME1, INCOME2, ESTATUS, EFULL, ESELF, OCC, INDUSTRY, LFEXPER, DEIWG1B, INSURED, PUBLINS, AFDC, SSI, FOODSTMP, WELFARE, EGFPBAS, HSELFREP, PAINBAS, WORRYBAS, HOSP, HAVEMD, MDEXAM, MDVIS, MDEXP, HAVEDDS1-3, DDSVSP, DDSVIS, DDSEXP, DDSORTHV
63	Income, employment, family composition, health status; self-administered: health care experience, insurance coverage, satisfaction with medical care	Seattle	6-11/75	RACE, ETHNOS, EDUCPER, ECOLLEGE, BACKGRND, INCOME1, INCOME2, ESTATUS, ESELF, INDUSTRY, LFEXPER, DEIWG1B, INSURED, PUBLINS, AFDC, SSI, FOODSTMP, WELFARE, EGFPBAS, HSELFREP, PAINBAS, WORRYBAS, HOSP, MDEXAM, MDVIS, MDEXP, HAVEDDS1-3, DDSVSP, DDSVIS, DDSEXP, DDSORTHV
92	Income, employment, family composition, health status; self-administered: health care experience, insurance coverage, satisfaction with medical care	Massachusetts	10/75-3/76	BASELD, RACE, ETHNOS, EDUCPER, ECOLLEGE, BACKGRND, INCOME1, INCOME2, ESTATUS, EFULL, ESELF, INDUSTRY, LFEXPER, DEIWG1B, INSURED, PUBLINS, EGFPBAS, HSELFREP, PAINBAS, WORRYBAS, HOSP, HAVEMD, MDEXAM, MDVIS, MDEXP, HAVEDDS1-3, DDSVSP, DDSVIS, DDSEXP, DDSORTHV
147	Income, employment, family composition, health status; self-administered: health care experience, insurance coverage, satisfaction with medical care	South Carolina	1-5/76	BASELD, RACE, ETHNOS, EDUCPER, ECOLLEGE, BACKGRND, INCOME1, ESTATUS, EFULL, ESELF, INDUSTRY, LFEXPER, DEIWG1B, INSURED, PUBLINS, EGFPBAS, HSELFREP, PAINBAS, WORRYBAS, HOSP, HAVEMD, MDEXAM, MDVIS, MDEXP, HAVEDDS1-3, DDSVSP, DDSVIS, DDSEXP, DDSORTHV

[2] Except where noted otherwise.

APPENDIX C (cont.)

HIEI Number	Topic	Site	Dates Administered	Relevant Variables
		Baseline Dental Supplement (interviewer-administered)		
27	Dental services and providers	Dayton	6-9/74	DDSIND, HAVEDDS1-3, DDSVSP, DDSVIS, DDSEXP, DDSORTHV
65	Dental services and providers	Seattle	6-11/75	DDSUSUAL, DDSIND, HAVEDDS1-3, DDSVSP, DDSVIS, DDSEXP, DDSORTHV
94	Dental services and providers	Massachusetts	10/75-3/76	DDSUSUAL, DDSIND, HAVEDDS1-3, DDSVSP, DDSVIS, DDSORTHV
149	Dental services and providers	South Carolina	1-5/76	DDSUSUAL, DDSIND, HAVEDDS1-3, DDSVSP, DDSVIS, DDSEXP, DDSORTHV
		Baseline Physician Supplement (interviewer-administered)		
25	Medical visits, providers, and expenses	Dayton	6-9/74	MDVIS, MDEXP
93	Medical visits, providers, and expenses	Massachusetts	10/75-3/76	MDVIS, MDEXP
148	Medical visits, providers, and expenses	South Carolina	1-5/76	MDVIS, MDEXP
		Baseline Insurance Supplement (interviewer-administered)		
67	Type of health insurance	Seattle	6-11/75	PRIVINS, WORKINS
96	Type of health insurance	Massachusetts	10/75-3/76	PRIVINS, WORKINS
151	Type of health insurance	South Carolina	1-5/76	PRIVINS, WORKINS

APPENDIX C (cont.)

HIEI Number	Topic	Site	Dates Administered	Relevant Variables
		Screening Questionnaire (interviewer-administered)		
9	Demographic information to establish basic eligibility	Dayton	6-9/74	MARSTAT, ECOLLEGE, INSURED, EGFPBAS
62	Demographic information to establish basic eligibility	Seattle	6-11/75	MARSTAT, EDUCPER, EGFPBAS
91	Demographic information to establish basic eligibility	Massachusetts	10/75-3/76	MARSTAT, EDUCPER, EGFPBAS
146	Demographic information to establish basic eligibility	South Carolina	1-5/76	MARSTAT, EDUCPER, EGFPBAS
		Annual Income Report (self-administered)		
78	Amount and sources of family income, taxes paid in 1974	Dayton	8-12/75	TINC
171	Amount and sources of family income, taxes paid in 1975	Seattle	5/76-9/77	TINC
255	Amount and sources of family income, taxes paid in 1976	Massachusetts, South Carolina	4/77-9/77	TINC
435	Amount and sources of family income, taxes paid in 1978	South Carolina	4-7/79	TINC
		HIE Administrative Files		
--	Document accountability file	All	--	INSTAT, PLAN, ENRTERM
--	Sample file	All	--	ANND, ENRDATE
--	Sex/birth file	All	--	SEX, AGE
--	Participant master file	All	--	MDEOFF, PIOFF, SUPERPI
--	Master demographic file	All	--	TINC
--	Enrollment screening exam file	All	--	ASGNPHYS

Appendix D
FILE DICTIONARY

This appendix describes the character version of the full sample demographic file in technical terms. Basic identifying data (Table D.1) are followed by lists showing the location (starting column), length, and type of each variable (Tables D.2 and D.3).

Table D.1

BASIC IDENTIFYING DATA

Data file name	DSF0AA01.PUF.DATA
Creation date	April 21, 1986
Variable format	Character
Total number of data elements	62
Header length (bytes)	40
Derived data length (bytes)	440
Record length (bytes)	480

Table D.2

LISTING BY ALPHABETIC ORDER

Name	Location	Length	Type	Name	Location	Length	Type
AFDC	305	8	I	HSELFREP	345	8	I
*AGE	113	8	I	INCOME1	169	8.2	F
ANND	65	8	I	INCOME2	177	8.2	F
BACKGRND	161	8	I	INDUSTRY	241	8	I
BASELD	41	8	I	INSTAT	16	1	A
BFAMILY	17	8	A	INSURED	273	8	I
BHH	25	8	A	LFEXPER	249	8	I
DDSEXP	457	8.2	F	MARSTAT	137	8	I
DDSIND	417	8	I	MDEOFF	81	8.2	F
DDSORTHV	473	8	I	MDEXAM	385	8	I
DDSUSUAL	409	8	A	MDEXP	401	8.2	F
DDSVIS	449	8	I	MDVIS	393	8	I
DDSVSP	441	8	I	OCC	233	8	I
DEIWG1B	257	8.2	F	PAINBAS	353	8	I
DEIWG1E	265	8.2	F	PERSON	7	8	A
ECOLLEGE	153	8	I	PIOFF	89	8.2	F
EDUCPER	145	8.1	F	PLAN	73	8	I
EFULL	217	8	I	PRIVINS	281	8	I
EGFPBAS	337	8	I	PUBLINS	297	8	I
ENRDATE	57	8	I	RACE	121	8	I
ENRTERM	49	8	I	SEX	105	8	I
ESELF	225	8	I	SITE	15	1	A
ESTATUS	209	8	I	SSI	313	8	I
ETHNOS	129	8	I	SUPERPI	97	8	I
FILENAME	1	6	A	TINC	185	8.4	F
FOODSTMP	321	8	I	TINCCAT	193	8	I
HAVEDDS1	425	8	I	TINCSE	201	8.6	F
HAVEDDS2	433	8	I	WELFARE	329	8	I
HAVEDDS3	465	8	I	WORKINS	289	8	I
HAVEMD	377	8	I	WORRYBAS	361	8	I
HOSP	369	8	I	XPERSON	33	8	A

NOTE: "Type" refers to whether the variable values are alphanumeric (A), integer (I), or fixed-decimal (F). For fixed-decimal variables, the placement of the decimal point is shown in the "LENGTH" column; the number to the right of the dot "." tells the number of digits to the right of the decimal point (e.g., 8.2 means the numbers will be written "nnnnn.nn"). Missing values are written differently for each variable type: A = bbbbbbbb, I = bbbbbbb., F8.1 = bbbbbb.b, F8.2 = bbbbb.bb, and F8.6 = b.bbbbbb ("b" meaning blank). An asterisk indicates that the variable has special missing values in the form bbbbbbbA. To obtain the appropriate positive and missing values, read all values as alphanumeric, then convert "I" data to integers and "F" data to the specified floating-point format.

Table D.3

LISTING BY LOCATION

Name	Location	Length	Type	Name	Location	Length	Type
FILENAME	1	6	A	OCC	233	8	I
PERSON	7	8	A	INDUSTRY	241	8	I
SITE	15	1	A	LFEXPER	249	8	I
INSTAT	16	1	A	DEIWG1B	257	8.2	F
BFAMILY	17	8	A	DEIWG1E	265	8.2	F
BHH	25	8	A	INSURED	273	8	I
XPERSON	33	8	A	PRIVINS	281	8	I
BASELD	41	8	I	WORKINS	289	8	I
ENRTERM	49	8	I	PUBLINS	297	8	I
ENRDATE	57	8	I	AFDC	305	8	I
ANND	65	8	I	SSI	313	8	I
PLAN	73	8	I	FOODSTMP	321	8	I
MDEOFF	81	8.2	F	WELFARE	329	8	I
PIOFF	89	8.2	F	EGFPBAS	337	8	I
SUPERPI	97	8	I	HSELFREP	345	8	I
SEX	105	8	I	PAINBAS	353	8	I
*AGE	113	8	I	WORRYBAS	361	8	I
RACE	121	8	I	HOSP	369	8	I
ETHNOS	129	8	I	HAVEMD	377	8	I
MARSTAT	137	8	I	MDEXAM	385	8	I
EDUCPER	145	8.1	F	MDVIS	393	8	I
ECOLLEGE	153	8	I	MDEXP	401	8.2	F
BACKGRND	161	8	I	DDSUSUAL	409	8	A
INCOME1	169	8.2	F	DDSIND	417	8	I
INCOME2	177	8.2	F	HAVEDDS1	425	8	I
TINC	185	8.4	F	HAVEDDS2	433	8	I
TINCCAT	193	8	I	DDSVSP	441	8	I
TINCSE	201	8.6	F	DDSVIS	449	8	I
ESTATUS	209	8	I	DDSEXP	457	8.2	F
EFULL	217	8	I	HAVEDDS3	465	8	I
ESELF	225	8	I	DDSORTHV	473	8	I

NOTE: "Type" refers to whether the variable values are alphanumeric (A), integer (I), or fixed-decimal (F). For fixed-decimal variables, the placement of the decimal point is shown in the "LENGTH" column; the number to the right of the dot "." tells the number of digits to the right of the decimal point (e.g., 8.2 means the numbers will be written "nnnnn.nn"). Missing values are written differently for each variable type: A = bbbbbbbb, I = bbbbbbb., F8.1 = bbbbbb.b, F8.2 = bbbbb.bb, and F8.6 = b.bbbbbb ("b" meaning blank). An asterisk indicates that the variable has special missing values in the form bbbbbbbA. To obtain the appropriate positive and missing values, read all values as alphanumeric, then convert "I" data to integers and "F" data to the specified floating-point format.

GLOSSARY

Adjunct enrollee	Uninsured member of insured family/household (person/family of interest) or member of Dayton control group.
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, either remaining a baseline-only participant or becoming an enrollee.
Baseline-only participant	Person considered for enrollment at the beginning of the experiment in the site who did not enroll.
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.
Dayton control group	Group of 669 uninsured enrollees who participated from November 1974 to February 1976. Formed to compare the community's use of health services with use by insured Dayton enrollees. Members retained their own insurance but were asked to complete the same questionnaires as insured enrollees. Group was discontinued because complete data appeared unobtainable from them.
DEI	Data element indicator. Unique label assigned to every element in database. Most DEIs represent questions on data collection instruments.
Enrollee	Person whose family or household signed an enrollment contract with the HIE. An insured person or uninsured person. Any of the following: HIE-insured, HMO-insured, person of interest, family of interest, member of Dayton control group. (See also "adjunct enrollee," "insured enrollee.")
EVF	Enrollment verification form (see Table 2, item 3). With its supplements ("new person," employment, new household head), the LEVF is a primary data source for the full sample demographic file.

Exit	Departure from the experiment after completion of assigned enrollment term, three or five years.
Experimental insurance treatment	One of sixteen groups in which experimental subjects participated. Fifteen were insurance plans with varying coinsurance rates, out-of-pocket expenditure limits, and both FFS and HMO delivery systems. The sixteenth was the HMO control group.
Family of interest	Uninsured, self-supporting member of insured family or member of uninsured self-supporting family residing in the household of an insured family. Compare "person of interest."
FFS	Fee for service.
FSD	Full sample demographic (file name).
GHC	Group Health Cooperative of Puget Sound, the Seattle HMO that participated in the experiment.
HIE	Health Insurance Experiment.
HIEI	Health Insurance Experiment Instrument. Each separately administered version of a data collection instrument was given a unique HIE number.
HIE-insured	Enrollee assigned to an experimental health insurance plan paid by the HIE (plans A-O, described on pp. 3-4). 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.
Insured	Either HIE-insured or HMO-insured.
Insured enrollee	Person assigned to an experimental treatment; HIE-insured or HMO-insured.

MDE	Maximum dollar expenditure--maximum out-of-pocket expense to be paid by HIE-insured family before health care was free. The amount was a function of the family's assigned insurance plan.
Participant	Anyone with a record in the HIE database; includes baseline-only participants and enrollees.
PEG	South Carolina preenrollment group.
Person of interest	Uninsured member of insured family/household who was financially dependent on insured family/household. Compare "family of interest."
PI	Participation incentive.
Preenrollee	Person who participated in preenrollment phase in South Carolina; PEG member. May or may not have formally enrolled in the experiment as a primary enrollee.
SAS	Statistical Analysis System. HIE files contain data in both SAS and character formats.
SSI	Supplemental Security Income.
Suspension	Revocation of HIE-provided insurance benefits because of ineligibility expected to be temporary. Suspended persons remained enrollees.
Termination	Involuntary departure from the experiment. Cancellation of enrollment for permanent ineligibility or failure to fulfill obligations.
Uninsured	Neither HIE-insured nor HMO-insured. Person/family of interest or member of Dayton control group. Uninsured persons did not necessarily lack health insurance; they were uninsured only with respect to HIE experimental treatments.