

VITAL and HEALTH STATISTICS
PROGRAMS AND COLLECTION PROCEDURES

Development and Maintenance of a National Inventory of Hospitals and Institutions

A description of the inventory including the procedures used in developing it and the plans to maintain it as the sampling frame for a program of surveys of hospitals and institutions conducted by the National Center for Health Statistics.

Washington, D.C.

February 1965

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Anthony J. Celebrezze
Secretary

Public Health Service
Luther L. Terry
Surgeon General



Public Health Service Publication No. 1000-Series 1-No. 3

For sale by the Superintendent of Documents, Government Printing Office
Washington, D.C., 20402 - Price 25 cents

NATIONAL CENTER FOR HEALTH STATISTICS

FORREST E. LINDER, PH. D., *Director*

THEODORE D. WOOLSEY, *Deputy Director*

O. K. SAGEN, PH. D., *Assistant Director*

WALT R. SIMMONS, M.A., *Statistical Advisor*

ALICE M. WATERHOUSE, M.D., *Medical Advisor*

JAMES E. KELLY, D.D.S., *Dental Advisor*

LOUIS R. STOLCIS, M.A., *Executive Officer*

OFFICE OF HEALTH STATISTICS ANALYSIS

IWAO M. MORIYAMA, PH. D., *Chief*

DIVISION OF VITAL STATISTICS

ROBERT D. GROVE, PH. D., *Chief*

DIVISION OF HEALTH INTERVIEW STATISTICS

PHILIP S. LAWRENCE, Sc. D., *Chief*

DIVISION OF HEALTH RECORDS STATISTICS

MONROE G. SIRKEN, PH. D., *Chief*

DIVISION OF HEALTH EXAMINATION STATISTICS

ARTHUR J. McDOWELL, *Chief*

DIVISION OF DATA PROCESSING

SIDNEY BINDER, *Chief*

Public Health Service Publication No. 1000-Series 1-No. 3

Library of Congress Card Number 65-60016

PREFACE

The Health Records Survey is one of the major data collection programs of the National Health Survey. It is a family of surveys with the common objective of providing comprehensive statistics on the health of the institutional population as well as on the utilization of all types of health facilities and services. These probability sample surveys are most efficient when the samples can be drawn from an up-to-date list of places in the universe, properly classified, and accompanied by such critical identifying attributes as numbers of employees and beds. The Master Facility Inventory is this list.

The development of the Inventory was made possible through the cooperation of many individuals who completed questionnaires in a mail survey of establishments and of a number of agencies which provided establishment lists for consolidation. Their cooperation is gratefully acknowledged.

In the survey of hospitals and institutions conducted by the National Center for Health Statistics, assurance was given that "All information which would permit identification of an individual or of an establishment will be held strictly confidential, will be used only by persons engaged in and for the purposes of the survey and will not be disclosed or released to other persons or used for any other purpose." Therefore, the identity of individual establishments will be kept confidential and a directory of establishments will not be published.

The U.S. Bureau of the Census made especially valuable contributions to the development of the MFI including, in particular, many operations in which names of hospitals and institutions on different lists were matched to eliminate duplicates, and the collection of data from establishments to determine their current status and nature of business. Overall plans for the Inventory, including the development of procedures and general specifications for collating lists and surveying establishments, were the responsibility of the National Center for Health Statistics.

CONTENTS

| | Page |
|--|------|
| Preface ----- | i |
| Introduction ----- | 1 |
| Development of the Master Facility Inventory----- | 2 |
| Scope of the MFI----- | 2 |
| Sources Used in Assembling the MFI----- | 3 |
| Matching Procedures----- | 4 |
| Survey of Establishments----- | 4 |
| The Questionnaire and Classification Procedures----- | 4 |
| Contents of the Master Facility Inventory----- | 7 |
| General ----- | 7 |
| Establishments in Group I----- | 8 |
| Short-Stay Hospitals ----- | 8 |
| Resident Institutions ----- | 9 |
| Long-Stay Hospitals----- | 10 |
| Nursing, Personal, or Domiciliary Care Establishments----- | 11 |
| Custodial Care Homes----- | 12 |
| Correctional Institutions----- | 14 |
| Hospital Departments of Institutions----- | 14 |
| Establishments in Group II----- | 14 |
| The Complement Survey----- | 16 |
| Plans for Maintaining the Master Facility Inventory----- | 16 |
| Appendix I. Sources Used in Assembling the Master Facility Inventory----- | 18 |
| Appendix II. Questionnaire and Covering Letter----- | 19 |
| Appendix III. Definitions and Classification Procedures----- | 23 |
| A. Criteria for Classifying Nursing, Personal, or Domiciliary Care Homes----- | 23 |
| B. Definitions of Other Terms----- | 24 |

SYMBOLS

| | |
|--|-----|
| Data not available----- | --- |
| Category not applicable----- | ... |
| Quantity zero----- | - |
| Quantity more than 0 but less than 0,05----- | 0.0 |
| Figure does not meet standards of reliability or precision----- | * |

DEVELOPMENT AND MAINTENANCE OF THE MASTER FACILITY INVENTORY

INTRODUCTION

The National Center for Health Statistics maintains a system of mechanisms for collecting data on health and health-related topics. In addition to compiling national figures from State and local registration of vital events such as births, deaths, marriages, and divorces, the Center conducts a variety of both continuing and *ad hoc* sample surveys. Especially prominent in this latter group are the Health Interview Survey (HIS), the Health Examination Survey (HES), and the Health and Vital Records Surveys.

The Health Interview Survey, the oldest of the three programs, is a continuous sampling and interviewing of the civilian, noninstitutional population of the United States. Each week a representative sample of households is interviewed to obtain statistics on such things as acute and chronic illness, impairments, disability, accidental injury, bed-days, and work loss. The Health Examination Survey is designed to provide statistics on certain physical and physiological measurements and on the medically defined prevalence of specific diseases using standardized diagnostic criteria. The primary objective of the Vital Records Survey is to supplement statistics that are derived directly from the vital statistics registration system.

The Health Records Survey augments HIS and HES by providing health statistics on the institutional population, and it represents the most efficient medium for the collection of utilization statistics for hospitals, resident institutions, and

other types of health facilities. An important distinction between the Health Records Survey (HRS) and the other programs of the National Health Survey is that HRS information is obtained from the facility providing service instead of from the individual, and a major part of the data collected is based on existing records. A detailed description of the National Health Survey (NHS) program as well as of the Health Interview Survey and the Health Examination Survey has been published.^{1 2 3}

The concept of the Health Records Survey encompasses records from all types of medical facilities and institutions, including those from such facilities as hospitals, clinics, dispensaries, physicians' and dentists' offices, and nursing homes. Among this family of health records surveys, early emphasis has been placed on three major projects: (1) a series of *ad hoc* surveys of the institutional population, (2) a continuing survey of discharges from short-stay hospitals, and (3) a Master Facility Inventory (MFI).

The Institutional Population Surveys provide statistics on the health of residents in institutions and on factors relating to their care, including the training of staff, the provision of services, and the availability of facilities. Health data about the institutional population are being collected in a series of surveys of specific types of institutions. In these surveys, certain data are collected to complement that obtained in the Health Interview Survey about the noninstitutional population, such as

chronic conditions, impairments, and use of prosthetic devices. In addition other data are collected which relate specifically to the types of establishments or the group of people being studied. In a recent survey of nursing homes and related facilities, for example, questions were asked about the types of nursing and personal services provided to patients and experience and special training of the staff to provide care to the aged.

The Hospital Discharge Survey is designed to provide comprehensive statistics on the utilization of short-stay hospitals in the United States, including information on the characteristics of the patients, on the conditions causing hospitalization, on operations performed, and on other services provided by the hospital. The Survey, which is now in its developmental phase, is scheduled to evolve gradually. Initially, the items of information to be collected will be limited to those few on the face sheet of the patient's medical record. Later, the scope will be enlarged to include other information contained in the patient's medical folder, in the bursar's office, and elsewhere.

The Master Facility Inventory is the universe or sampling frame for health record surveys.

Conceptually, it includes all types of facilities or establishments within scope of the Health Records Survey program. At the present time, however, the MFI is restricted to establishments in the scope of the Hospital Discharge Survey or the Institutional Population Survey. When the program of the Health Records Survey expands to include other types of establishments or health facilities, the MFI will also be expanded to include the appropriate places.

The program of the MFI includes the development and maintenance of a list of names and addresses of all facilities or establishments within its scope and the collection of information from these places which describe them with respect to their size, type, and current status of business. The information not only provides a basis for stratifying the MFI into homogeneous groups for the purpose of sampling designs, but also provides important national statistics about the availability of such facilities in the Nation.

This report describes the MFI in terms of its development, content, evaluation of coverage, and future maintenance plans.

DEVELOPMENT OF THE MASTER FACILITY INVENTORY

There were three basic operations in the development of the MFI. First, an extensive investigation was made to determine what establishment files were available in the United States and which of the files should be merged to produce the most complete list of establishments. Second, the selected files were matched to eliminate duplicate names. Then, a questionnaire was mailed to each address on the "unduplicated" list to determine if the place existed and to collect information for classifying the establishment by its nature of business, that is, by its type of business, ownership, and size. This section describes how the MFI was developed in terms of these operations.

SCOPE OF THE MFI

The scope of the Inventory, in its present stage of development, includes all hospitals in the United States with 6 or more beds, as well as all resident

institutions, except for nursing or personal care homes with less than 3 beds.

"Institutions" included in the MFI are establishments which are in business to provide medical, nursing, personal, or custodial care to groups of unrelated individuals who have no usual place of residence elsewhere. The following types of places are illustrative of institutions:

1. Establishments which provide nursing or personal care to the aged, infirm, or chronically ill. These include places referred to as nursing homes, convalescent homes, homes for the aged, rest homes, boarding homes for the aged, and homes for the needy such as almshouses, county homes, and "poor" farms. The primary factor which determines that such establishments are in the scope of the MFI is their function of providing some kind of

care besides room and board. A home for the aged, for example, which does not routinely provide nursing or personal care—that is, provides only room and board—is not considered an institution and is therefore not in the scope of the Inventory

2. Residential schools or homes for the deaf
3. Residential schools or homes for the blind
4. Homes for unwed mothers
5. Orphan asylums and homes for dependent children
6. Homes for crippled children
7. Homes for incurables
8. Residential schools or detention homes for juvenile delinquents
9. Prisons, reformatories, and penitentiaries that are operated by the Federal or State governments. Penal institutions operated by local governments are excluded, primarily because of the difficulty of obtaining and maintaining a complete list of these places

The MFI does not include special dwelling places or group quarters such as hotels, private residential clubs, fraternity or sorority houses, monasteries, nurse's homes, "flophouses," labor camps, et cetera.

SOURCES USED IN ASSEMBLING THE MFI

The Inventory was constructed by merging a number of published and unpublished lists of hospitals and institutions. The sources of these lists are shown in Appendix I of this report.

The MFI was assembled in three stages. First, several lists of varying degrees of comprehensiveness that were available in the Public Health Service (PHS) were matched with a file developed by the Bureau of the Census. The PHS list was composed of (1) hospitals and nursing homes reported by the States to the Division of Hospital and Medical Facilities (DHMF) under provision of the Hill-Burton Hospital Construction Act; (2) a register of hospitals which had been developed by DHMF in 1959 by integrating other

smaller lists, including a list published by the American Hospital Association (AHA), and hospitals in the State Plans (Hill-Burton); (3) a list of hospitals and, nursing homes, developed in 1958 by the National Vital Statistics Division; and (4) hospitals which began operating between 1957 and 1960 that were listed by the American Hospital Association in their 1960 Guide Issue of *Hospitals*. This latter group brought the PHS file up-to-date for hospitals listed by the AHA.

Although the Bureau of the Census file was developed much in the same way as the PHS integrated list, it was not limited to medical, nursing, or personal care facilities. It also included custodial-type institutions such as prisons and orphan asylums. The merging of these two major files yielded a total of about 40,000 "addresses."

The second stage of assembling the MFI involved the integration of a list of nursing homes and related facilities reported to the Division of Hospital and Medical Facilities by State licensure agencies in 1961 (the 1961 Nursing Home Inventory). The list consisted of about 17,500 names which were made available to the National Center for Health Statistics in 1962. Approximately 4,900 new names were added to the Master Facility Inventory.

The third stage of developing the MFI involved matching a list of about 23,000 establishments which were contained in the files of the Social Security Administration (SSA). This file includes the names, addresses, and types of business of all establishments in the United States that operate for profit and employ one or more persons, since such employers are required by law to file an "Application for Employer Identification Number." The Employer Identification (EI) number subsequently issued serves as the employer's account number under the Old Age Survivors Insurance (OASI) Act. The file also includes government and nonprofit establishments and establishments operated by the self-employed if their employees have elected to be covered by OASI.

Of the 23,000 establishment names obtained from the Social Security Administration a match was not established for about 2,200 places. These places were added to the MFI.

MATCHING PROCEDURES

The major part of the matching operations was accomplished by visual inspection and comparison of the information which appeared on the lists being collated. The name, address, and certain coded information about the type of service, ownership, and size, as well as a code for the county and State, were punched on a card for each establishment listed. The files to be collated were put in alphabetical order by name of establishment within each county of each State, and print-outs were obtained which provided the name, address, and the descriptive information about each establishment. The names on the Census list, for example, were then compared with those on the MFI for corresponding counties. Two establishments were considered to be matched and hence the same establishment if they had the same or similar name and the same address. The information about type of service, ownership, and size was used as an aid in matching, but no definite rules were set. In general, a place was considered not matched if the name or address was appreciably different on the two lists. This procedure tended to maximize coverage, but in some instances it resulted in the mailing of several questionnaires to the same establishment. Initially it brought about the inclusion of a certain number of duplicates in the MFI. Steps were taken later, however, to locate and to delete duplicate names from the inventory file.

The establishment file obtained from the Social Security Administration was first matched with the MFI by computer on the basis of the Employer Identification number. This procedure was feasible because the questionnaire (to be described later) which had previously been mailed to establishments on the MFI had requested the EI number. Since the EI number was obtained for less than half the places on the MFI a clerical matching procedure was used for a substantial proportion of the places in the SSA file.

SURVEY OF ESTABLISHMENTS

After each stage of developing the Master Facility Inventory, a mail survey was conducted to determine the current status and nature of

business of the places listed. The first survey was conducted during April-June 1962 and involved the mailing of about 40,000 questionnaires. The questionnaire and covering letter used in the survey are reproduced in Appendix II of this report. A survey of about 4,900 establishments added to the MFI from the 1961 Nursing Home Inventory was conducted during September-October 1962. Then during July 1963 questionnaires were mailed to the 2,200 establishments which had been tentatively added to the MFI from the SSA files. The survey procedure involved an initial correspondence by first-class mail, two follow-up letters to nonrespondents spaced 3 weeks apart, and telephone calls to establishments not responding to the mail inquiries. The first mail follow-up letter was sent by first-class mail, the second by certified mail. Table A shows the response status of all questionnaires mailed for each of the three surveys.

The Master Facility Inventory is composed of two groups of establishments. As of September 1963 Group I contained 28,133 places which returned completed questionnaires and which were considered in the scope of the MFI. Group II is composed of 2,035 places which were not confirmed as either in business or out of business; namely, nonrespondents and questionnaires returned by the Post Office because of "insufficient address" or "refusal." Establishments reported either by the respondent or the postmaster to be out of business, those which were out of the scope of the MFI because of size or absence of nursing or personal service, and city or county operated penal institutions are not part of the Master Facility Inventory (places labeled Group III in table A).

THE QUESTIONNAIRE AND CLASSIFICATION PROCEDURES

The questionnaire used in the establishment mail surveys was designed to classify all types of places appearing on the Inventory. This type of questionnaire was needed since the information available before the survey did not always adequately identify the type of facility. (For example, a place might be called a hospital but be a nursing home, or vice versa.) To accomplish this the questionnaire was divided into an address block

Table A. Distribution of the number of questionnaires mailed in developing the Master Facility Inventory, by status of response, stage of development, and type of establishment

| Stage of development and type of establishment | Status of response | | | | | | | Questionnaires returned by Post Office; establishment out of business, building torn down |
|--|-----------------------------|---|--|--|---------------------------------------|--------------|---|---|
| | Total questionnaires mailed | Completed questionnaires received; establishments in business and in scope (Group I) | Questionnaires returned by Post Office (Group II) | Questionnaires not returned by respondent or Post Office | Questionnaires returned by respondent | | | |
| | | | | | Out of business | Out of scope | Duplicate of another establishment (Group III) | |

All Stages: 3 surveys conducted between April 1962 and September 1963

| | | | | | | | | |
|--|--------|--------|-------|-----|-------|-------|-------|-------|
| All establishments----- | 46,336 | 28,133 | 1,285 | 750 | 5,337 | 4,569 | 2,710 | 3,552 |
| Hospitals----- | 10,394 | 8,566 | 27 | 34 | 714 | 366 | 478 | 209 |
| Nursing homes and related facilities-- | 29,451 | 16,701 | 1,178 | 506 | 4,259 | 1,761 | 1,991 | 3,055 |
| Penal institutions-- | 2,839 | 391 | 3 | 75 | 97 | 2,196 | 56 | 21 |
| Other----- | 2,730 | 2,475 | 9 | 6 | 83 | 63 | 45 | 49 |
| Unknown----- | 922 | - | 68 | 129 | 184 | 183 | 140 | 218 |

Stage 1: Survey of establishments on the original Master Facility Inventory, April-June 1962

| | | | | | | | | |
|--|--------|--------|-------|-----|-------|-------|-------|-------|
| All establishments----- | 39,477 | 23,745 | 1,044 | 319 | 4,970 | 3,887 | 2,279 | 3,233 |
| Hospitals----- | 9,691 | 8,033 | 27 | 32 | 688 | 280 | 431 | 200 |
| Nursing homes and related facilities-- | 24,000 | 13,047 | 957 | 193 | 3,998 | 1,277 | 1,666 | 2,862 |
| Penal institutions-- | 2,812 | 382 | 3 | 75 | 97 | 2,178 | 56 | 21 |
| Other----- | 2,538 | 2,283 | 9 | 6 | 83 | 63 | 45 | 49 |
| Unknown----- | 436 | - | 48 | 13 | 104 | 89 | 81 | 101 |

Stage 2: Survey of establishments added to MFI from 1961 Nursing Home Inventory, September-October 1962

| | | | | | | | | |
|--|-------|-------|-----|-----|-----|-----|-----|-----|
| All establishments----- | 4,650 | 2,863 | 241 | 417 | 270 | 266 | 343 | 250 |
| Hospitals----- | 171 | 140 | - | 2 | - | 4 | 25 | - |
| Nursing homes and related facilities-- | 3,952 | 2,620 | 221 | 303 | 194 | 176 | 286 | 152 |
| Penal institutions-- | 20 | 7 | - | - | - | 13 | - | - |
| Other----- | 96 | 96 | - | - | - | - | - | - |
| Unknown----- | 411 | - | 20 | 112 | 76 | 73 | 32 | 98 |

Stage 3: Survey of establishments added to MFI from Social Security Administration, July-September 1963

| | | | | | | | | |
|--|-------|-------|---|----|----|-----|----|----|
| All establishments----- | 2,209 | 1,525 | - | 14 | 97 | 416 | 88 | 69 |
| Hospitals----- | 532 | 393 | - | - | 26 | 82 | 22 | 9 |
| Nursing homes and related facilities-- | 1,499 | 1,034 | - | 10 | 67 | 308 | 39 | 41 |
| Penal institutions-- | 7 | 2 | - | - | - | 5 | - | - |
| Other----- | 96 | 96 | - | - | - | - | - | - |
| Unknown----- | 75 | - | - | 4 | 4 | 21 | 27 | 19 |

and 6 sections. As shown in Appendix II, the first part of the questionnaire (Section A) pertains to type of ownership or control and description of establishment. Under the item "Description of Establishment" three major classes are shown: (1) hospitals, (2) establishments which provide nursing, personal, and domiciliary care, and (3) other establishments. Then, within these three groups, descriptive names of the various types of places are listed. The respondent was asked to read all the classes and to select the one which best described his establishment. Once the respondent had classified his establishment in one of the three groups, he was requested to complete one of four sections of the questionnaire. Section B pertains to general hospitals, Section C to specialty hospitals, Section D to nursing, personal, or domiciliary care homes, and Section E refers to other types of establishments.

Each of these sections was different in some respect, depending on the uses to be made of the MFI in the immediate future. For example, a survey of resident places which provided nursing, personal, and domiciliary care was being planned at the time that the questionnaire was being developed. The scope of the resident places survey was to include chronic disease wards of general hospitals and nursing home units maintained by hospitals. Thus these items were made part of the sections provided for hospitals.

The section of the questionnaire pertaining to nursing, personal, or domiciliary care establishments included information needed to classify the places on the basis of the primary or predominant type of service provided. *A priori* criteria had been developed which would allow a uniform procedure for classifying this heterogeneous group of places. The classification procedure is described in Appendix III-A. Other types of establishments were classified solely on the basis of the respondent's judgment. The latter procedure was adopted on the assumption that there is general agreement on what is a hospital, a home for the blind or the deaf, an orphan asylum, or a prison. As samples are selected from the Inventory for the various Health Record Surveys, more rigid classification rules will be adopted.

A secondary but important function of the questionnaire is to improve the coverage of the

Master Facility Inventory. In the last section, the respondent was asked, "Does the owner of this establishment own or operate any other related or similar establishments which are not included in the present report?" If the response was "yes," the names and addresses of the other establishments were obtained and later matched against the MFI to determine whether they were already listed. Each establishment not listed was mailed a questionnaire.

Basically, the questionnaires used for each of the 3 stages of developing the MFI were the same; however, there were some differences which should be pointed out. These changes were made in an attempt to correct problems identified in a previous survey. In the first survey (Stage I), if the facility was a specialty hospital the respondent was asked to "indicate the specialty by placing an 'X' in one of the boxes below." That is, he was to choose one specialty from among a number of listed special services. Some respondents checked several of the boxes. Thus, in editing the questionnaires it was necessary in some instances to judge which was the primary specialty.

In an attempt to correct this problem, the questionnaire for the next survey (Stage II) was revised to include an explanatory note: "If the hospital has more than one specialty and these units do not have their own staff and records, check the specialty unit which provides service to the most patients." Further, the respondent was requested to complete a Section C for each specialty unit which had its own staff and maintained its own records. Even with this change, multiple specialties were still reported, but very few additional Section C's were completed. Editing rules were set up to assign the specialty which seemed most logical to dominate.

For establishments completing Section D it was desired to know "how many persons had received nursing care during the past 7 days." In the first survey (Stage I) the question read, "Number of these persons (Item 2 above) who received one or more of the following services during the last 7 days." A list of nursing services followed the statement. On the basis of answers received in the survey it appeared that a number of the respondents had interpreted the question to ask for "number of services provided"

rather than "persons receiving services." In an attempt to correct this, the question was re-phrased as follows for the next survey (Stage II): "During the past 7 days, how many of the persons in Question 2 received 'Nursing care?' Consider that a person received 'Nursing Care' if he received any of the following services:" The services were then listed.

One other change was made for the survey conducted at Stage III. In Section E, the questions concerning number of employees and the main-

tenance of a hospital or infirmary were interchanged. That is, the questions were ordered (1) number of residents or inmates in the establishment, (2) number of paid employees, and (3) does this establishment maintain a hospital or infirmary? The purpose of this change was to make it clearer that the request was for number of employees working in the entire establishment, not just those working in the hospital or infirmary.

CONTENTS OF THE MASTER FACILITY INVENTORY

GENERAL

The Master Facility Inventory contains 28,133 establishments which were verified to be in business and in-scope in the three surveys conducted between April 1962 and September 1963. In addition, it also contains 2,035 establishments that "may" be in business and within the scope of the MFI, but which have not been verified. These two groups are referred to as Group I and Group II, respectively. Table B shows how these establishments are distributed according to broad-classification groupings. More

detailed distributions are shown in tables C-K.

The data presented in this report should be interpreted with caution for several reasons.

For one, even though considerable effort was devoted to developing a listing of establishments that was extensive and complete, some places were not included in the Inventory. This is indicated by the preliminary results of the Complement Survey, a quality check survey which is described in the next section of this report. On the other hand, some establishments may be counted more than once in the report because of duplications in the MFI. Much work has been directed

Table B. Number of establishments and beds in Groups I and II, by type of establishment: Master Facility Inventory, September 1963

| Type of establishment | Group I | | Group II |
|---|----------------|-------------------|----------------|
| | Establishments | Beds ¹ | Establishments |
| All types----- | 28,133 | 2,646,044 | 2,035 |
| Short-stay hospitals ² ----- | 6,953 | 788,758 | 61 |
| Institutional establishments, total---- | 21,180 | 1,857,286 | 1,974 |
| Long-stay hospitals ² ----- | 1,613 | 950,141 | - |
| Nursing, personal, or domiciliary care homes for the aged----- | 16,701 | 568,560 | 1,684 |
| Custodial care homes----- | 1,904 | 110,944 | 15 |
| Correctional institutions----- | 962 | 227,641 | 78 |
| Unknown----- | - | - | 197 |

¹For custodial care homes and correctional institutions the figures shown refer to inmates rather than beds.

²It is not known whether the "hospitals" in Group II are long-stay or short-stay.

toward removing duplicates; however, it is likely that some small proportion of the duplicates were not identified.

It should also be pointed out that the number of establishments that exist will vary, depending on how an establishment is defined. For the most part, the respondent not only classified the type of his facility on the basis of judgment, but also on the same basis decided whether he had only one establishment or more than one. For the vast majority of places, the desired reporting unit as defined in Appendix III was identified by its name. However, in some instances the respondent had difficulty in deciding what units of his establishment should be reported on a questionnaire. This problem occurred mostly among multi-purpose units or large hospital complexes which provided both general medical and surgical care as well as several specialty services. For example, a home operated for both dependent children and for the aged may have made a combined report, or may have reported itself as two establishments. A place may be composed of a geriatric hospital and a home for the aged; if the respondent completed a section of the questionnaire for each type of service and was able to report the number of employees for each unit, the establishment would be counted as two facilities in this report. Otherwise, it would be counted as a geriatric hospital which maintains a "nursing home unit."

A large hospital complex, such as those operated by the Veterans Administration, might have made a single report for all its units and classified itself as a general hospital. If the average length of stay of all of the hospital's

patients was reported as 30 days or more, the hospital would be considered a long-stay general hospital in this report. A number of other examples of problems of classifying establishments could be given. Even so, it is believed that all such places which pose a problem in classification represent a small proportion of all establishments in the MFI.

ESTABLISHMENTS IN GROUP I

The establishments which were verified to be in business and in the scope of the MFI are presented under two major headings: (1) short-stay hospitals, which compose the universe for the Hospital Discharge Survey, and (2) institutions, the universe for Institutional Population Surveys. Since the Institutional Population Surveys are conducted on an *ad hoc* basis in specific types of institutions, the institutional establishments are grouped into classes according to the type of care provided.

Short-Stay Hospitals

There are 6,953 hospitals in the Master Facility Inventory which reported an average patient stay during 1961 of less than 30 days. About 95 percent of the short-stay hospitals are classified as general hospitals. The remaining 5 percent comprise specialty hospitals, including those that specialize in pediatrics; maternity; or eye, ear, nose, and throat care. These hospitals maintained 788,758 beds and employed 1,469,639 persons 15 or more hours per week. Table C shows how these hospitals and the number of beds

Table C. Number of short-stay hospitals, beds, and employees, by primary type of service: Master Facility Inventory, September 1963

| Primary type of service | Hospitals | Beds | Employees |
|---------------------------------|-----------|---------|-----------|
| All types----- | 6,953 | 788,758 | 1,469,639 |
| General----- | 6,586 | 765,230 | 1,426,747 |
| Special----- | 367 | 23,528 | 42,892 |
| Maternity----- | 65 | 2,532 | 5,583 |
| Eye, ear, nose, and throat----- | 48 | 2,165 | 3,990 |
| Pediatric----- | 45 | 5,613 | 13,533 |
| Other----- | 209 | 13,218 | 19,786 |

and employees are distributed by type of service.

Hospital departments or infirmaries of institutions are excluded from these tabulations because they almost always restrict their services to inmates of the institutions. These facilities are discussed with resident institutions in the next section of the report. The figures also exclude beds in nursing home units of hospitals. These units are shown in table G.

Since the places represented in table C are classified as hospitals on the basis of the respondent's statement that the word "hospital" best described this facility, some of the places may not be hospitals. To obtain a lower limit to the proportion of these places which would be classified as hospitals if strict criteria were applied, a comparison is made with the number of hospitals listed by the American Hospital Association. About 85 percent of the hospitals in MFI were listed as hospitals by the American Hospital Association in its 1963 Guide Issue of *Hospitals*.⁴ The reference date for the AHA survey was 1962, a date similar to the MFI time reference. To be listed by AHA each facility must meet the requirements of a rigorous set of criteria which define a hospital.

The criteria are as follows:

1. The hospital shall have at least 6 beds for the care of patients who are nonrelated, who are sick, and whose average stay is in excess of 24 hours per admission.
2. In those States and Provinces having licensing laws, the hospital shall be licensed.
3. Doctors of medicine, doctors of osteopathy, and doctors of dentistry may admit patients to the hospital. (Patients admitted to the hospital by doctors of dentistry must have an admission history and physical examination by a doctor of medicine or doctor of osteopathy on the staff of the hospital, and the doctor of medicine or doctor of osteopathy shall be responsible for the patient's medical care throughout his stay.)
4. There shall be an organized medical staff (which may include doctors of osteopathy and of dentistry) governed by bylaws

adopted by said staff and approved by the governing body of the hospital.

5. The hospital shall submit evidence of regular care of the patient by a doctor of medicine, doctor of osteopathy, or doctor of dentistry and of general supervision of the clinical work by doctors of medicine.
6. Records of clinical work shall be maintained by the hospital on all patients and shall be available for reference.
7. Registered nurse supervision and such other nursing service as is necessary to provide patient care round the clock shall be available at the hospital.
8. The hospital shall offer services more intensive than those required merely for room, board, personal services, and general nursing care.
9. Minimal surgical or obstetrical facilities (including operating and delivery room) or relatively complete diagnostic facilities and treatment facilities for all patients shall be available at the hospital.
10. Diagnostic X-ray services shall be regularly and conveniently available.
11. Clinical laboratory services shall be regularly and conveniently available.

The facilities in the MFI that are not listed by AHA are on the average quite small, containing less than 5 percent of the total hospital beds. The vast majority of these facilities probably are hospitals. However, some of them may be determined out-of-scope eventually because they do not meet the requirements of the definition adopted for the Hospital Discharge Survey.

Resident Institutions

The establishments reported in this section include all types of long-stay facilities which provide either medical, nursing, personal, domiciliary, or custodial care. These establishments compose the various universes for institutional population surveys to be conducted as part of the National Health Survey program.

The establishment statistics reported in this section are presented in four groups in tables D-J according to the primary type of service provided. These groups are composed of (1)

1,613 long-stay hospitals; (2) 16,701 homes which provide nursing, personal, or domiciliary care, primarily to the aged; (3) 1,904 custodial care homes such as homes for the blind, the deaf, and for dependent children; and (4) 962 correctional institutions. Each of these groups is discussed separately in the following paragraphs.

Long-Stay Hospitals

The figures shown in table D refer to hospitals which indicated on the questionnaire that their average patient stay during 1961 was 30 days or more. The 1,613 long-stay hospitals maintained nearly 1 million beds and employed 470,832 persons who worked in the hospitals 15 or more hours per week.

The estimated average length of stay per admission to these hospitals, calculated on the basis of the ratio of the average daily census to the number of admissions during 1961, was about 525 days. The residents of homes for the mentally retarded had the longest stay, over 2,300 days, while patients admitted to orthopedic hospitals stayed an average of 80 days, the shortest stay of any type of long-stay hospital. Psychiatric hospitals, which maintained nearly two-thirds of all long-stay hospital beds, experienced an average patient stay of approximately 550 days per admission.

About half of the long-stay general hospitals and three-fourths of the beds were operated by the Federal Government, primarily by the Veterans Administration. State and local govern-

ments operated about 25 percent of the hospitals and 20 percent of the beds. The few long-stay hospitals operated by proprietary and voluntary organizations were relatively small, having on the average about 90 beds. In contrast, the Federal hospitals maintained about 600 beds per hospital; the average size for State and local long-stay general hospital was about 275 beds.

It should be pointed out that a number of these long-stay general hospitals are hospital complexes which are composed of several specialties, e.g., psychiatric, tuberculosis, and general medical and surgical services. Possibly such complexes would be more accurately classified as short-stay general hospitals in addition to several specialty hospitals. If this is true some of the beds and employees shown in table D for long-stay general hospitals would be classified as short-stay general and some would be classed with the several specialty services.

Also, in interpreting the figures shown for the various specialty hospitals the reader should be aware of how a classification problem was handled by the editing procedure.

In a number of instances the respondent indicated two or more special services instead of the principal one as requested on the questionnaire. The following editing rules were followed when more than one specialty was indicated:

1. If the hospital was listed by the American Hospital Association's Guide Issue of *Hospitals*, the type of service indicated by AHA was assigned.
2. If the hospital was not listed by AHA, the

Table D. Number of long-stay hospitals, beds, and employees, by primary type of service: Master Facility Inventory, September 1963

| Primary type of service | Hospitals | Beds | Employees |
|-------------------------|-----------|---------|-----------|
| All types----- | 1,613 | 950,141 | 470,832 |
| General----- | 124 | 46,646 | 61,273 |
| Psychiatric----- | 471 | 602,999 | 245,480 |
| Mental retardation----- | 383 | 188,947 | 66,323 |
| Geriatric----- | 76 | 13,295 | 10,825 |
| Orthopedic----- | 50 | 3,936 | 4,909 |
| Tuberculosis----- | 254 | 49,533 | 40,392 |
| Chronic disease----- | 106 | 24,118 | 24,634 |
| Other----- | 149 | 20,667 | 16,996 |

specialty was assigned according to the following rules:

- A. If the several specialties included "psychiatric," the facility was considered to be a psychiatric hospital.
- B. If "psychiatric" was not indicated but mental deficiency or retardation was, the establishment was considered to be a home for mentally retarded.
- C. If "tuberculosis" was one of several specialties checked but neither psychiatric nor mental deficiency nor retardation were indicated, the facility was considered to be a tuberculosis hospital.
- D. If neither of the above-mentioned specialties was indicated, the service was assigned to the first specialty checked on the questionnaire.

Nursing, Personal, or Domiciliary Care Establishments

There are 16,701 establishments in the MFI which were classified by the respondent as nursing, personal, or domiciliary care homes. These establishments maintained a total of 568,560 beds and employed 244,503 persons who worked 15 or more hours per week. A list of the types of places included in this category is shown on the questionnaire in Appendix II. Included with establishments providing primarily nursing care are 32 homes for crippled children and 39 homes for incurables. These homes maintained 3,800 beds and employed 2,014 persons. The nursing

and personal care homes are distributed according to the primary type of service provided as shown in table E.

Classification of these establishments by primary type of service is based upon the criteria shown in table I, Appendix III-A. The application of the criteria represents an attempt to apply uniformly the conceptual definitions of "nursing home," "personal care home," or "domiciliary care home." It is important to know how well the criteria satisfy the conceptual definitions. A "nursing care home" is defined as an establishment whose primary and predominant function is to provide nursing care. The criteria adopted to satisfy this definition were (1) nursing care must have been provided to 50 percent or more of the residents in the establishment during the 7 days prior to the day that the questionnaire was completed, and (2) the establishment must have employed one or more registered professional nurses or licensed practical nurses. On the average, in establishments classified as "nursing care homes," nursing care was provided to about 88 percent of the residents during the week prior to the survey. Homes classified as "personal care with nursing" provided nursing care to only 29 percent of their residents. Thus it appears that the criteria discriminate between those homes which provide nursing care as their primary function and those which provide nursing care only as an adjunct service.

Of the 4,958 homes that are classified as personal care homes with nursing, 1,009 provided nursing care to more than half of their residents but did not report a registered nurse

Table E. Number of nursing, personal, or domiciliary care homes, beds, and employees, by primary type of service: Master Facility Inventory, September 1963

| Primary type of service | Homes | Beds | Employees |
|------------------------------------|--------|---------|-----------|
| All types----- | 16,701 | 568,560 | 244,503 |
| Nursing care----- | 8,128 | 319,224 | 160,989 |
| Personal care with nursing----- | 4,958 | 188,306 | 66,400 |
| Personal care without nursing----- | 2,927 | 48,962 | 13,611 |
| Domiciliary care----- | 688 | 12,068 | 3,503 |

Table F. Number of nursing, personal, or domiciliary care homes, by primary type of service, proportion of residents receiving nursing care and by whether a nurse is employed: Master Facility Inventory, September 1963

| Primary type of service | Total | Nursing care provided to 50 percent or more of residents | | Nursing care provided to less than 50 percent of residents | | No nursing care provided |
|-------------------------------------|-------|--|----------------------------------|--|----------------------------------|--------------------------|
| | | Nurse employed | Nurse not employed or not stated | Nurse employed | Nurse not employed or not stated | |
| Nursing care ¹ ----- | 8,057 | 8,057 | - | - | - | - |
| Personal care with nursing----- | 4,958 | - | 1,009 | 2,785 | 1,164 | - |
| Personal care without nursing----- | 2,927 | - | - | - | - | 2,927 |
| Domiciliary care ¹ ----- | 688 | - | 21 | - | 54 | 613 |

¹Homes for crippled children and homes for incurables are not included with nursing care homes in this table. They are included in table E.

or a licensed practical nurse on their staff; that is, the homes either reported zero nurses or failed to report the number of nurses. Table F shows the distribution of nursing, personal, or domiciliary care homes by the proportion of persons receiving nursing care and by whether a nurse was employed 15 or more hours a week.

Seventy-five places were classified as "domiciliary care homes" which reported in the survey to provide nursing care to their residents. They were not classed with homes providing nursing care because they indicated that either no personal care or very little personal care was routinely provided to residents.

Nursing home units of hospitals.—In the survey each hospital respondent was asked if the hospital maintained a nursing home unit for patients requiring nursing care but not the full range of hospital services. Table G shows the number of such units reported in the survey by type of affiliated hospital and number of beds in these units. The beds in table G were not counted in the totals shown in tables C, D, or E.

Custodial Care Homes

The establishments classified in this category include homes for dependent children, unwed mothers, and the blind and the deaf, as well as other institutions which provide custodial care to special groups who are normally not ill or

aged. Also included is a variety of places which are not classified with hospitals, nursing or personal care homes, or correctional institutions. Table H shows the distribution of 1,904 places classed in the MFI as custodial-type institutions, by type of place and number of residents and employees. The number of residents was not reported for 119 institutions, of which 75 were "other" types and 28 were orphan asylums.

Table G. Number of nursing home units of hospitals and number of beds, by type of affiliated hospital: Master Facility Inventory, September 1963

| Type of hospital | Nursing home units | Nursing home unit beds |
|-----------------------|--------------------|------------------------|
| All types----- | 488 | 44,864 |
| Short-stay general--- | 356 | 19,020 |
| Short-stay special--- | 10 | 351 |
| Long-stay----- | 122 | 25,493 |
| General----- | 30 | 11,933 |
| Psychiatric----- | 15 | 1,600 |
| Mental retardation- | 14 | 2,399 |
| Tuberculosis----- | 18 | 922 |
| Geriatric----- | 20 | 3,410 |
| Chronic disease--- | 23 | 5,180 |
| Other----- | 2 | 49 |

Table H. Number of custodial-type institutions, residents, and employees, by type of institution: Master Facility Inventory, September 1963

| Type of institution | Institutions | Residents | Employees |
|------------------------------|--------------|-----------|-----------|
| All types----- | 1,904 | 110,944 | 47,293 |
| Homes for the deaf----- | 72 | 14,441 | 6,310 |
| Home for the blind----- | 72 | 5,057 | 3,017 |
| Homes for unwed mothers----- | 178 | 5,508 | 3,396 |
| Orphan asylums----- | 1,134 | 68,459 | 23,904 |
| Other----- | 448 | 17,479 | 10,666 |

Table I. Number of correctional institutions, inmates, and employees, by type of institution: Master Facility Inventory, September 1963

| Type of institution | Institutions | Inmates | Employees |
|---|--------------|---------|-----------|
| All types----- | 962 | 227,641 | 52,302 |
| Prisons and reformatories, Federal and State operated----- | 391 | 173,352 | 28,181 |
| Detention homes for juvenile delinquents----- | 571 | 54,289 | 24,121 |

Table J. Number of hospital departments and beds maintained by custodial or correctional institution, by type of institution: Master Facility Inventory, September 1963

| Type of institution | Hospital departments or infirmaries | Beds in hospital or infirmary units |
|---|-------------------------------------|-------------------------------------|
| All types----- | 979 | 23,273 |
| Homes for deaf----- | 49 | 1,124 |
| Homes for blind----- | 31 | 430 |
| Homes for unwed mothers----- | 69 | 1,247 |
| Orphan homes----- | 312 | 3,859 |
| Detention homes for juvenile delinquents----- | 161 | 2,229 |
| Prisons, reformatories, Federal and State operated----- | 196 | 10,078 |
| Other----- | 161 | 4,306 |

The establishments labeled "other" in table H include such places as adoption agencies which maintain residential units for the care of babies while awaiting adoption; infirmaries and dispensaries which maintain inpatient beds and which are part of establishments not in the scope of the MFI, such as colleges, universities, or convents; and homes for drug addicts and alcoholics.

Correctional Institutions

As shown in table I there are 962 correctional institutions on the MFI, in which 227,641 inmates are domiciled. About 76 percent of these inmates are in prisons, penitentiaries, or reformatories operated by the Federal or State governments. The remainder are juvenile delinquents in residential schools or detention homes of all ownerships. Thirteen prisons and 28 detention homes did not report the number of inmates.

City and county operated penal institutions are not within the scope of the MFI even though conceptually some of their residents are confined for long periods of time and have no usual place of residence elsewhere. This group represents a small proportion of the institutional population and an even smaller proportion of the total health problem among people in long-stay facilities. Thus, their omission from the universe for institutional population surveys will not seriously affect national statistics on the health of the institutional population.

Hospital Departments of Institutions

Each respondent who completed Section E of the questionnaire (establishments other than hospitals or places providing nursing, personal, or domiciliary care) was asked if the establishment maintained a hospital or infirmary. The purpose of the question was to identify the institutions which had facilities for providing short-term medical care to inmates. Table J shows the number of hospital departments maintained by the

various types of custodial and correctional institutions. The hospital departments are not considered as reporting units in the MFI. The institution is the reporting unit. Thus the 979 departments shown in table J are also counted in tables H and I.

These infirmary units tend to be quite small, having on the average about 24 beds. The larger units are maintained by penal institutions, as expected, since penal institutions tend to be much larger than the other types shown in table J. An infirmary or hospital department was maintained by 68 percent of the homes for the deaf, 50 percent of the Federal and State operated penal institutions, and by 43 percent of the homes for the blind. The smallest proportion (18 percent) was maintained by orphan homes and detention homes for juvenile delinquents.

ESTABLISHMENTS IN GROUP II

In any large survey undertaking it is not usually possible or feasible to obtain a response from all survey subjects or to verify each one's existence. In this survey 2,035 places either did not respond or the questionnaires were returned by the Postmaster, primarily because of insufficient addresses. These places have been included in the MFI since there was no evidence that they were out of business. Table K shows how these establishments are distributed on the basis of information provided from source lists used in assembling the MFI.

As indicated by table K, most of Group II is composed of small nursing and convalescent homes. According to preliminary results of a survey which was based on a sample of nursing and personal care homes selected from the MFI, only a small proportion of such establishments in Group II are in business. In a sample of 277 addresses chosen from Group II, 89 were found to be in business and in scope of the MFI after an intensive field investigation to determine their status of business. This figure, inflated by appropriate sampling weights, indicates that about 25 percent of the places classified in Group II as nursing and convalescent homes are in business.

Table K. Number and type of nonresponses, by type and size of establishment: Master Facility Inventory, September 1963

| Type and size of establishment | Type of nonresponse | | |
|--|---------------------|-------------|---|
| | Total | No response | Questionnaires returned by Post Office: insufficient address or refusal |
| All types----- | 2,035 | 750 | 1,285 |
| Under 25 beds----- | 1,437 | 443 | 994 |
| 25-99 beds----- | 200 | 98 | 102 |
| 100-299 beds----- | 7 | 4 | 3 |
| 300+ beds----- | 4 | 3 | 1 |
| Unknown----- | 387 | 202 | 185 |
| Hospitals----- | 61 | 34 | 27 |
| Under 25 beds----- | 22 | 10 | 12 |
| 25-99 beds----- | 19 | 12 | 7 |
| 100-299 beds----- | 1 | 1 | - |
| 300+ beds----- | 3 | 2 | 1 |
| Unknown----- | 16 | 9 | 7 |
| Nursing, convalescent, or domiciliary homes----- | 1,699 | 512 | 1,187 |
| Under 25 beds----- | 1,381 | 400 | 981 |
| 25-99 beds----- | 169 | 74 | 95 |
| 100-299 beds----- | 5 | 3 | 2 |
| 300+ beds----- | - | - | - |
| Unknown----- | 144 | 35 | 109 |
| Correctional institutions----- | 78 | 75 | 3 |
| Under 25 beds----- | 34 | 33 | 1 |
| 25-99 beds----- | 12 | 12 | - |
| 100-299 beds----- | 1 | - | 1 |
| 300+ beds----- | 1 | 1 | - |
| Unknown----- | 30 | 29 | 1 |
| Unknown types----- | 197 | 129 | 68 |
| Under 25 beds----- | - | - | - |
| 25-99 beds----- | - | - | - |
| 100-299 beds----- | - | - | - |
| 300+ beds----- | - | - | - |
| Unknown----- | 197 | 129 | 68 |

THE COMPLEMENT SURVEY

As described previously in this report, extensive effort has been devoted to making the MFI complete and comprehensive. A critical review of this effort, however, coupled especially with the fact that new facilities are coming into being every month, indicates that the MFI list is not entirely complete. The MFI must be representative of the hospitals and institutions in the United States if the objective of the Health Records Survey is to be accomplished. Consequently, it becomes necessary to discover the magnitude of the missing component. If it is large, further action would need to be taken to make the MFI more complete. But regardless of whether the error is large or small, it is important that the National Center for Health Statistics and consumers of data from the institutional and hospital surveys be aware of the scale of the omissions.

The device being used to discover the magnitude of undercoverage of the MFI is called the Complement Survey. It is an application of a general technique often called "multiframe survey." In this application there are two frames: (1) the Master Facility Inventory and (2) an area sample list. From a probability area sample, all institutions found in the sample areas are identified and the probability with which each comes into the sample is determined. This area sample would permit the making of an estimate of the total number of institutions, but the estimate would have high variance if the number of places located in the area sample represented only a very small proportion of total places in the universe. If, however, the sample places are further stratified by whether or not they are included on the Master Facility Inventory, which hopefully includes 90 percent or more of all places, the area sample can be used to estimate

the number of places in that subuniverse or stratum *not* included on the Master Facility Inventory.

It has been thought that circumstances do not justify the cost of an independent area survey for this purpose alone. The conclusion rests on three facts. First is the belief that the MFI covered a high proportion of all places in the universe. Second, a sufficiently large independent area survey would be quite expensive. Third, there exists an alternative vehicle, not ideal for the purpose, but perhaps adequate.

The alternative vehicle takes advantage of the design of the Health Interview Survey, which with suitable adjustments for periods of operation provides an area sample of institutions as a by-product of 6 years of continuous field interviewing.⁵ This sample was matched with the MFI and nonmatches were queried to collect accurate and current information on type or business and period of operation. This process yielded an estimate of MFI gross undercoverage. The estimate is considered conceptually sound, but has been termed "not ideal" because of its large sampling error and possible measurement error arising from imperfect field identification of institutions.

The direct evidence of the Complement Survey is that for a reference date of July 1962 the MFI gross undercoverage is of the order of 5 percent in terms of places and 2 percent in terms of beds. This evidence is interpreted to mean that actual gross undercoverage is less than 10 percent for places and less than 5 percent for beds.

Effort is being made to sharpen this instrument, as well as to reduce further the number of places missing from the list itself.

PLANS FOR MAINTAINING THE MASTER FACILITY INVENTORY

The Master Facility Inventory is composed of a large variety of types of establishments that are in an almost continuous state of change to meet the demand for their services. Many new ones are being built; additions are being made to existing structures. Some are going out of business

permanently while others only change ownership or management. Since the Master Facility Inventory is to be the sampling frame for a continuing hospital survey and *ad hoc* surveys of resident institutions, it must be kept current. Maintaining the MFI involves adding new establish-

ments which go into business each year, deleting those which go out of business, and obtaining certain information from those currently in business.

The plan is to survey all new establishments each year to obtain the data needed for classification purposes and to survey the entire MFI every 2 years to bring it up to date. The data to be collected will not only be useful for sample designs but will provide much needed establishment statistics for the Nation.

Before the plan for surveying the MFI is implemented, it will be necessary to establish a system for identifying the new places which begin business each year. There are a large number of possible sources of information, many of which overlap but none of which are sufficient alone. These sources include State licensure agencies, certain departments of the Federal Government, and private agencies and associations which maintain or publish establishment lists. A study will be made to identify all organizations which may contribute to the maintenance of the MFI and to determine which of these should be included in the reporting system.

There are many problems associated with keeping the MFI current. One of the outstanding ones is the creation of an unduplicated list of establishment names and addresses by merging several overlapping lists of newly reported establishments. Maximum use will be made of electronic data processing for collating the various lists of establishment names and addresses. Establishments which cannot be matched by mechanical means will be reviewed by clerks, and judgment will be made as to whether they are in fact non-matches.

Computers will also be used to select samples for establishment surveys, to make address labels

for forms and envelopes to be used in the surveys, and to control data collection operations such as nonresponse and fail-edit follow-up.

As with all other survey activities of the National Center for Health Statistics, much emphasis will be put on evaluating the completeness and accuracy of the Master Facility Inventory and on improving survey methodology. The Complement Survey will provide an estimate of under-coverage. Other studies will be made to evaluate the completeness of source lists which provide the names and addresses of new businesses each year.

The data collected in the biennial surveys will be published to provide statistics on the number of hospitals and institutions in the Nation, the type of service provided, number of beds, employees, etc., and information on the changes which occur from year to year.

REFERENCES

¹National Center for Health Statistics: Origin, program, and operation of the U.S. National Health Survey. *Vital and Health Statistics*. PHS Pub. No. 1000-Series 1-No. 1. Public Health Service. Washington, D.C., Aug. 1963.

²National Center for Health Statistics. Health survey procedure: concepts, questionnaire development, and definitions in the Health Interview Survey. *Vital and Health Statistics*. PHS Pub. No. 1000-Series 1-No. 2. Public Health Service. Washington, D.C., May 1964.

³U.S. National Health Survey. Plan and initial program of the Health Examination Survey. *Health Statistics*. PHS Pub. No. 584-A4. Public Health Service. Washington, D.C., May 1962.

⁴American Hospital Association, *Journal of the: Hospitals*, Guide Issue, Vol. 37, Part 2, Aug. 1963.

⁵U.S. National Health Survey. The statistical design of the Health Household-Interview Survey. *Health Statistics*. PHS Pub. No. 584-A2. Public Health Service. Washington, D.C., July 1958.

— o o o —

APPENDIX I

SOURCES USED IN ASSEMBLING THE MASTER FACILITY INVENTORY

As mentioned in the introduction, the Master Facility Inventory is the product of merging many listings and files from various sources. Four basic sources were used; namely a listing of hospitals, nursing homes, and other quasi-medical facilities developed by the National Vital Statistics Division of the Public Health Service in 1958, files of hospitals and nursing homes maintained by the Division of Hospital and Medical Facilities, Public Health Service, and a file of all types of hospitals and institutions which was developed by the Bureau of the Census in 1959 in preparation for taking the 1960 Decennial Census, and files maintained by the Social Security Administration.

The files of the Division of Vital Statistics, National Center for Health Statistics and the Bureau of the Census were developed by the respective agencies by merging a number of existing published and unpublished lists of varying degrees of comprehensiveness. The list of nursing homes and related facilities obtained from the Division of Hospital and Medical Facilities came from two sources: (1) an inventory of hospitals and "skilled nursing homes" listed in "State Plans" submitted by the States under the provisions of the Hill-Burton Hospital Construction Act, and (2) an inventory of nursing, personal, and domiciliary care homes assembled in 1961 from reports of the State licensing agencies. The file of the Social Security Administration is the result of applications for an Employer Identification Number, the employer's account number under the Old Age Survivors Insurance Act.

A more extensive list of components used in the construction of the Master Facility Inventory follows: Listing of Hospitals developed by the Division of Hospital and Medical Facilities, Public Health Service, 1959.

Listing of hospitals and institutions in which people were born or died during January and February 1958, as shown on birth and death certificates on file in the National Vital Statistics Division, Public Health Service.

Listings prepared by the National Institute of Mental Health:

Private Institutions for Mental Retarded
Public Hospitals for Mental Disease
Public Institutions for the Mentally Retarded
Private Hospitals for Mental Disease
General Hospitals which admit patients for the screening and treatment of mental disorder.
Guide issue of the Journal of the American Hospital Association-1960.
List of stations of the Veterans Administration.
Index of Hospitals and Sanatoria with Tuberculosis Beds in the United States as of April 1, 1959-United States Public Health Service Publication No. 801.
Listing of Public Health Service Indian Hospitals.
Listing of Federal Medical Facilities in Continental United States.
Listing of Chronic Disease hospitals and nursing homes in the State Plans submitted by the States to the Public Health Service under the provision of the Hill-Burton Hospital Construction Act.
Inventory of Nursing Homes-1954, Division of Hospital and Medical Facilities, Public Health Service.
Inventory of Nursing Homes-1961, Division of Hospital and Medical Facilities, Public Health Service.
Listing of selected institutions serving children-U.S. Children's Bureau.
Directory of Public Training Schools for Delinquent Children-U.S. Children's Bureau.
Directory of exceptional children; schools, services, other facilities.
Listings of State and Private Training Schools and Homes for the Retarded-
Directory of the American Association on Mental Deficiency.
Directory of Jewish health and welfare Agencies.
Directory of Maternity Homes-National Association on Service to Unmarried Parents.
Directory of Activities for the Blind in the United States and Canada-American Foundation for the Blind.
Directory of State and Federal Correctional Institutions of the United States, American Correctional Association.
Listing of hospitals and institutions maintained by the Social Security Administration.

APPENDIX II
QUESTIONNAIRE AND COVERING LETTER

OFFICE OF
THE DIRECTOR

FORM HRS-1 (a)
(9-8-62)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
WASHINGTON 25, D.C.

Dear Sir:

As a part of the program of the U.S. National Health Survey of the Public Health Service, authorized by Public Law 652, 84th Congress, a series of surveys is being conducted to produce statistics on people in hospitals, nursing homes, homes for the aged, children's homes, correctional institutions, and certain other types of establishments in the United States. This important project will eventually fill a gap in our knowledge of the health of the American people and the facilities for caring for them.

In connection with this program, the Bureau of the Census, acting as collecting agent for the U.S. National Health Survey, has been requested to assemble an up-to-date list of these various types of establishments together with some descriptive information about each.

For this purpose you are requested to answer on the enclosed form those questions which pertain to your particular type of establishment. If you have already completed and returned Form HRS-1 under a name other than that shown in the address block, please indicate that fact by returning the enclosed Form HRS-1 with a notation:

"Completed and returned under (enter new or changed name and address)"

Please mail your reply within 5 days to the Bureau of the Census. For your convenience, an addressed envelope requiring no postage is enclosed.

Your report will be accorded confidential treatment by the Bureau of the Census and the U.S. National Health Survey, and will be used for statistical purposes only. It cannot be used for any regulatory, licensing, or accreditation purposes.

Thank you.

Sincerely yours,



Richard M. Scammon
Director
Bureau of the Census

Enclosures

USCOMM-DC 11217 P-62

The National Health Survey of the U.S. Public Health Service is authorized by Public Law 652 of the 84th Congress (70 Stat. 489; 42 U.S.C. 305). All information which would permit identification of the individual establishment will be held strictly confidential, will be used only by persons engaged in and for the purposes of the Survey, and will not be disclosed or released to others for any other purposes (22 FR 1687).

BUDGET BUREAU NO. 68-R620-57
APPROVAL EXPIRES SEPTEMBER 30, 1962

FORM HRS-1
(8-13-62)

(Please correct if name or address has changed)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
ACTING AS COLLECTING AGENT FOR THE
U.S. NATIONAL HEALTH SURVEY

GENERAL INSTRUCTIONS

Section A - Complete all items.
Sections B, C, D, or E - Complete all items in the section appropriate to this establishment.
Section F - Complete all items.
Return the completed form within five days to the Bureau of the Census, Washington 25, D.C. A postage-paid envelope is provided:

Location of establishment, if different from mailing address

Section A - FOR ALL ESTABLISHMENTS

1. OWNERSHIP OR CONTROL OF THIS ESTABLISHMENT - Please indicate the control of this establishment by placing an "X" in one of the boxes below. (If ownership and control are divided, as when a county-owned home is leased to a church, place an "X" in the box opposite the term which indicates the greater degree of control in operating this establishment.)

- 1 Proprietary
- 2 Church
- 3 City or county government
- 4 State government
- 5 Federal government (Specify agency) _____
- 6 Other (Please describe) _____

2. DESCRIPTION OF ESTABLISHMENT - Please read all of the classes listed below, then place an "X" in the box opposite the class which best describes this establishment.

a. HOSPITALS

- 1 General hospital COMPLETE Section B on Page 2
- 2 Specialty hospital (Includes institutions or homes for the mentally retarded) COMPLETE Section C on Page 2

Note: If this is a hospital system composed of a general hospital and a specialty hospital, complete both Section B and Section C. If it is composed of more than one specialty hospital, complete Section C for one of them and furnish the same information for each of the others on a separate sheet of paper.

b. ESTABLISHMENTS WHICH PROVIDE NURSING, PERSONAL, OR DOMICILIARY CARE

- 3 Nursing Home
- 4 Convalescent Home
- 5 Rest Home
- 6 Home for the Aged
- 7 Boarding Home for the Aged
- 8 Home for Crippled Children
- 9 Home for Incurables
- 10 Home for the Needy (Includes County Homes, Almshouses, Poor Farms)
- 11 Boarding House
- 12 Other (Please describe) _____

COMPLETE Section D on Page 3

c. OTHER ESTABLISHMENTS

- 13 Home or School for the Deaf
- 14 Home or School for the Blind
- 15 Home for Unwed Mothers
- 16 Orphan Asylum or Home for Dependent Children
- 17 School or Detention Home for Juvenile Delinquents
- 18 Prison, Reformatory, Penitentiary, or Jail
- 19 Other (Please describe) _____

COMPLETE Section E on Page 3

(Record on Page 4 any comments you may have about the correct classification of this establishment)

Section D - ESTABLISHMENT WHICH PROVIDES NURSING, PERSONAL, OR DOMICILIARY CARE

NOTE: If the reporting establishment is a hospital which has a nursing home unit ("Yes" box checked in Question 9, Section B or in Question 8, Section C), the items in this section refer to that nursing home unit only.

1. Total number of beds regularly maintained for patients or residents. (Include any beds set up for use whether or not they are in use at the present time. Exclude beds used by staff or any beds used exclusively for emergency services.)

2. Total number of persons (patients or residents) who slept in this establishment last night (excluding employees and proprietors)

3. For the purpose of this survey, the following list of services define "Nursing Care":

| | | |
|------------------|-----------------------------------|--------------------------------------|
| Nasal feedings | Enemas | Application of dressings or bandages |
| Catheterizations | Hypodermic injections | Bowel and bladder retraining |
| Irigations | Intravenous injections | |
| Oxygen therapy | Temperature - pulse - respiration | |
| Full bed baths | Blood pressure | |

During the past seven days, how many of the PERSONS in Question 2 received "Nursing Care"?

4. Which of the following services are ROUTINELY provided? ("X" all that apply)

| | |
|--|---|
| 1 <input type="checkbox"/> Supervision is provided over medications which may be self-administered | 4 <input type="checkbox"/> Help with tub bath or shower |
| 2 <input type="checkbox"/> Medications and treatments are administered in accordance with physicians' orders | 5 <input type="checkbox"/> Help with dressing |
| 3 <input type="checkbox"/> Rub and massage | 6 <input type="checkbox"/> Help with correspondence or shopping |
| 9 <input type="checkbox"/> Not responsible for providing any services except room and board | 7 <input type="checkbox"/> Help with walking or getting about |
| | 8 <input type="checkbox"/> Help with feeding |

5. Number of paid employees. (Include proprietors, managers, and all paid employees who usually work 15 hours or more a week in this establishment.)
(The figure shown in Item 5d. should be the sum of the figures shown in Items 5a., 5b., and 5c.)

| | |
|--|---|
| a. Number of registered professional nurses. | |
| b. Number of licensed practical nurses. | + |
| c. Number of all other paid employees including physicians, proprietors, managers, nurse's aides, orderlies, clerical and office workers, attendants, and custodial workers. | + |
| d. Total number of employees. | = |

(Skip to Section F)

Section E - OTHER ESTABLISHMENT

1. Total number of persons (residents or inmates) who slept in this establishment last night (DO NOT INCLUDE employees and proprietors).

2. Does this establishment maintain a hospital or infirmary? 1 Yes (Complete 3, 4, and 5) 2 No (Skip to Question 6)

3. Total number of beds in this hospital or infirmary that are regularly maintained (set up and staffed for use) for inpatients. (Exclude beds used exclusively for emergency services or bassinets for newborn infants.)

4. Number of inpatient admissions to this hospital or infirmary during calendar year 1961.

5. Approximate average daily census in this hospital or infirmary during calendar year 1961

6. Number of paid employees. (Include proprietors, managers, and all paid employees who usually work 15 or more hours a week in this establishment.)
(The figure shown in Item 6c., should be the sum of the figures shown in Items 6a., and 6b.)

| | |
|---|---|
| a. Number of managerial, scientific, or professional personnel | |
| b. Number of all other paid employees including clerical and office workers, attendants, and custodial workers. | + |
| c. Total number of employees. | = |

(Go to Section F)

Section F - FOR ALL ESTABLISHMENTS

| | | | |
|---|--------------|--|---------------------------------|
| 1. Does the owner of this establishment own or operate any other related or similar establishments which are not included in the present report? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No | | 2. What is the Federal Social Security Employer Identification Number of this establishment? E.I. No. _____ or <input type="checkbox"/> None <small>(Enter all 9 digits)</small> | |
| Name _____ Kind _____ | | Signature of person completing this form _____ | |
| Address (Number and street) _____ | | Title or position _____ | |
| City _____ | County _____ | State _____ | |
| (If more than one, record the additional names and addresses on the back of this form.) | | Telephone number _____ | Ext. _____ Date completed _____ |

APPENDIX III

DEFINITIONS AND CLASSIFICATION PROCEDURES

A. Criteria for Classifying Nursing, Personal, or Domiciliary Care Homes

The criteria for classifying these types of institutions are based on several factors: (1) the number of persons receiving nursing care during the week prior to the day of the survey (Nursing care is defined in Appendix III-B), (2) administration of medications and treatments in accordance with physician's orders, (3) supervision over medications which may be self-administered, (4) the routine provision of the following criterion personal services: rub and massage, help with tub bath or shower, help with dressing, correspondence, shopping, walking or getting about, and help with feeding the patient, and (5) the employment of registered professional or licensed practical nurses. On the basis of these factors, four types of establishments were distinguished and are defined as follows:

Nursing care home.—An establishment is a nursing care home if nursing care is the primary and predominant function of the facility. Those meeting the following criteria are classified as nursing care homes in this report: One or more registered nurses or licensed practical nurses were employed, and 50 percent or more of the residents received nursing care during the week prior to the survey.

Personal care home with nursing.—An establishment is a personal care home with nursing if personal care is the primary and predominant function of the facility but some nursing care is also provided. If an establishment met either of the following criteria it was classified as a personal care home with nursing:

1. Some but less than 50 percent of the residents received nursing care during the week prior to the survey and there was one or more registered professional or licensed practical nurses on the staff.
2. Some of the residents received nursing care during the week prior to the survey, no registered nurses or licensed practical nurses were on the staff, but one or more of the following conditions were met:
 - A. Medications and treatments were admin-

istered in accordance with physicians' orders.

B. Supervision over self-administered medications was provided.

C. Three or more personal services were routinely provided.

Personal care home.—An establishment is a personal care home if the primary and predominant function of the facility is personal care, and no residents received nursing care during the week prior to the survey. Places in which one or more of the following criteria were met are classified as personal care homes in this report whether or not they employed registered nurses or licensed practical nurses.

1. Medications and treatments were administered in accordance with physician's orders, or supervision over medications which may be self-administered was provided.
2. Three or more of the criterion personal services were routinely provided.

Domiciliary care home.—A facility is a domiciliary care home if the primary and predominant function of the facility is domiciliary care but has a responsibility for providing some personal care. If the criteria for a nursing care home or personal care home are not met but one or two of the criterion personal services are routinely provided, the establishment is classified as a domiciliary care home in this report.

In the classification process, a criterion was considered as not having been met if the necessary information for that criterion was unknown. For instance, if the type of nursing staff was unknown for a particular place, it was considered as not having met the criteria of having one or more registered nurses or licensed practical nurses on the staff. Establishments indicating that some nursing care was provided, but not the number of persons to whom this care was provided, were considered as institutions providing nursing care to some but less than 50 percent of their patients or residents. Table I shows in detail the classification of the establishments.

Table I. Criteria for classification of establishments

| Classification variables | Classification criteria | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------|------|-----|-----|-----|-------------------------------|------|-----|-----|-----|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|
| | 50 percent or more | | | | | Some but less than 50 percent | | | | | None | | | | | | | | | | | |
| Percent of total residents who received nursing care during the week prior to day of study | | | | | | | | | | | | | | | | | | | | | | |
| Number of registered or licensed practical nurses | 1+ | None | | | | 1+ | None | | | | 1+ | None | | | | | | | | | | |
| Are medications or treatments administered in accordance with physician orders? | ... | Yes | No | | | ... | Yes | No | | | Yes | No | | | | Yes | No | | | | | |
| Is supervision over self-administered medications provided? | ... | ... | Yes | No | | ... | ... | Yes | No | | ... | Yes | No | | | ... | Yes | No | | | | |
| Are 3+ services offered? | ... | ... | ... | Yes | No | ... | ... | ... | Yes | No | ... | ... | Yes | No | | ... | ... | Yes | No | | | |
| Are one or two services offered? | ... | ... | ... | ... | Yes | No | ... | ... | ... | Yes | No | ... | ... | ... | Yes | No | ... | ... | ... | Yes | No | |
| Is room and/or board the only service offered? | ... | ... | ... | ... | ... | Yes | ... | ... | ... | ... | Yes | ... | ... | ... | No | Yes | ... | ... | ... | ... | Yes | |
| Classification | N | Pn | Pn | Pn | P | D | Pn | Pn | Pn | Pn | D | D | P | P | P | D | B | D | P | P | D | B |

Legend: Nursing care home-----N
 Personal care home with nursing-----Pn
 Personal care home-----P
 Domiciliary care home-----D
 Boarding or rooming house(out of scope)-B

NOTE: ... not applicable

B. Definitions of Other Terms

Reporting unit.—The term "reporting unit" refers to the individual units which make up the Master Facility Inventory. The primary objective is to be able to classify places in MFI for any type of hospital or institutional survey that might be undertaken. To accomplish this objective a reporting unit is defined as the smallest organizational unit of an enterprise which provides services to persons whether on a profit or nonprofit basis, which has a separately assigned staff or work force, and which maintains separate books or administrative records. The reporting unit is usually at a single physical location, but may be composed of several subunits at different locations. In some instances the service provided in a reporting unit will be mixed, as, for example, in large psychiatric hospitals, which often have special wards for geriatric and tuberculosis patients as well as a general medical and surgical facility for the treatment of patients within the institution. Here, however, as with all other types of units in the Master Facility Inventory, the primary consideration for classi-

fication is the predominant type of service provided if the reporting unit is composed of persons receiving several types of services.

Short-stay and long-stay hospitals.—Hospitals are classified in the Master Facility Inventory in accordance with the average length of stay of patients discharged during the calendar year prior to the survey. A *short-stay hospital* is one with an average stay of less than 30 days. A *long-stay hospital* is one with an average length of stay of 30 or more days.

Bed.—For hospitals, a bed is defined as one which is regularly maintained (set up and staffed for use). Those used exclusively for emergency services and bassinets for newborn infants are not considered to be beds for the purpose of the Master Facility Inventory.

A bed in a nursing home or related facility is defined as one set up and regularly maintained for patients or residents. This excludes many beds maintained for staff and those used exclusively for emergency services.

Resident or inmate.—For the purpose of the Master Facility Inventory a "resident" or "inmate" is defined as a person formally admitted to or con-

ined in an institution and who slept in the establishment "last night," i.e., the night prior to the day that the nature-of-business questionnaire was completed for the establishment.

Employee.—An employee is defined as a person paid by the establishment or a working member of a religious order who usually works 15 or more hours a week in the establishment. An owner is an employee if he usually works in the establishment at least 15 hours a week.

Nursing care.—For the purpose of classifying homes on the Master Facility Inventory which provide nursing care to residents, nursing care is defined as

the provision of one or more of the following services:

- Nasal feeding
- Catheterization
- Irrigation
- Oxygen therapy
- Full bed bath
- Enema
- Hypodermic injection
- Intravenous injection
- Temperature-pulse-respiration
- Blood pressure
- Application of dressings or bandages
- Bowel and bladder retraining

— o o o —

REPORTS FROM THE NATIONAL CENTER FOR HEALTH STATISTICS
Public Health Service Publication No. 1000

Series 1. Programs and collection procedures

- No. 1. Origin, Program, and Operation of the U.S. National Health Survey. 35 cents.
- No. 2. Health Survey Procedure: Concepts, Questionnaire Development, and Definitions in the Health Interview Survey. 45 cents.
- No. 3. Development and Maintenance of a National Inventory of Hospitals and Institutions.

Series 2. Data evaluation and methods research

- No. 1. Comparison of Two-Vision Testing Devices. 30 cents.
- No. 2. Measurement of Personal Health Expenditures. 45 cents.
- No. 3. The One-Hour Glucose Tolerance Test. 30 cents.
- No. 4. Comparison of Two Methods of Constructing Abridged Life Tables. 15 cents.

Series 3. Analytical studies

- No. 1. The Change in Mortality Trend in the United States. 35 cents.
- No. 2. Recent Mortality Trends in Chile. 30 cents.

Series 4. Documents and committee reports

No reports to date.

Series 10. Data From the Health Interview Survey

- No. 1. Acute Conditions, Incidence and Associated Disability, United States, July 1961-June 1962. 40 cents.
- No. 2. Family Income in Relation to Selected Health Characteristics, United States. 40 cents.
- No. 3. Length of Convalescence After Surgery, United States, July 1960-June 1961. 35 cents.
- No. 4. Disability Days, United States, July 1961-June 1962. 40 cents.
- No. 5. Current Estimates From the Health Interview Survey, United States, July 1962-June 1963. 35 cents.
- No. 6. Impairments Due to Injury, by Class and Type of Accident, United States, July 1959-June 1961. 25 cents.
- No. 7. Disability Among Persons in the Labor Force, by Employment Status, United States, July 1961-June 1962. 40 cents.
- No. 8. Types of Injuries, Incidence and Associated Disability, United States, July 1957-June 1961. 35 cents.
- No. 9. Medical Care, Health Status, and Family Income, United States. 55 cents.
- No. 10. Acute Conditions, Incidence and Associated Disability, United States, July 1962-June 1963. 45 cents.
- No. 11. Health Insurance Coverage, United States, July 1962-June 1963. 35 cents.
- No. 12. Bed Disability Among the Chronically Limited, United States, July 1957-June 1961. 45 cents.
- No. 13. Current Estimates From the Health Interview Survey, United States, July 1963-June 1964. 40 cents.

Series 11. Data From the Health Examination Survey

- No. 1. Cycle I of the Health Examination Survey: Sample and Response, United States, 1960-1962. 30 cents.
- No. 2. Glucose Tolerance of Adults, United States, 1960-1962. 25 cents.
- No. 3. Binocular Visual Acuity of Adults, United States, 1960-1962. 25 cents.
- No. 4. Blood Pressure of Adults, by Age and Sex, United States, 1960-1962. 35 cents.
- No. 5. Blood Pressure of Adults, by Race and Region, United States, 1960-1962. 25 cents.
- No. 6. Heart Disease in Adults, United States, 1960-1962. 35 cents.
- No. 7. Selected Dental Findings in Adults, by Age, Race, and Sex, United States, 1960-1962.

Series 12. Data From the Health Records Survey

No reports to date.

Series 20. Data on mortality

No reports to date.

Series 21. Data on natality

- No. 1. Natality Statistics Analysis, United States, 1962. 45 cents.

Series 22. Data on marriage and divorce

No reports to date.

Series 23. Data from the program of sample surveys related to vital records

No reports to date.