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NATIONAL CENTER Series 1 For HEALTH STATISTICS Number 6

VITAL and HEALTH STATISTICS PROGRAMS AND COLLECTION PROCEDURES

The Agency Reporting System

for Maintaining the National Inventory of Hospitals and Institutions

A study of the development, composition, implementation, and evaluation of the Agency Reporting System. This system was used to reconstruct and keep current the Master Facility Inventory.

Washington, D.C.

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April 1968

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE John W. Gardner Secretary

Public Health Service William H. Stewart Surgeon General



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PREFACE

The National Center for Health Statistics (NCHS) collects and publishes data on health and health-related topics. Data are collected on both the institutional population and the noninstitutional population. Comprehensive statistics on the health of the institutional population are provided by utilizing probability sample surveys. These 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 attributes as the numbers of employees and beds. The Master Facility Inventory (MFI) comprises this list.

It is imperative that the MFI be kept as current as possible if it is to serve as an efficient sampling frame. To aid in accomplishing this purpose, extensive time and preparation have been devoted to the development of a system of agencies, known as the Agency Reporting System (ARS), which will provide information on new institutions at regular intervals to be incorporated into the MFI. The origin and development of this system were the result of the extensive collaboration of the Surveys and Research Corporation, the Bureau of the Census, and NCHS.

The Surveys and Research Corporation canvassed prospective sources of facility listings, suggested agencies for inclusion in the ARS, and recommended steps to be taken in launching the ARS. The Bureau of the Census conducted visits to agencies maintaining the largest lists of facilities and/or agencies having a large turnover of facilities. Also most of the processing involved in assembling the updated MFI was handled by the Bureau of the Census. NCHS coordinated the projects undertaken by the Bureau of the Census and the Surveys and Research Corporation. In addition, NCHS conducted a survey by mail of all agencies included in the ARS that were not visited by the Bureau of the Census, and several members of the NCHS staff contributed in other ways to the research leading up to the establishment of the system.

This report was prepared by Darrel Eklund.

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| 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 | * |

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IN THIS REPORT the Agency Reporting System (ARS) is described. The ARS was chiefly conceived of as a means of updating the Master Facility Inventory. This system of agencies was developed by canvassing State and Federal agencies, national organizations, and commercial publishers believed to maintain files containing the names and addresses of in-scope facilities, such as hospitals and nursing homes.

The implementation of the ARS was initiated by visiting the agencies maintaining the largest lists of facilities and/or having the largest turnover of facilities. The remaining agencies in the ARS were contacted by mail. In this initial contact, the agencies' cooperation was enlisted in reporting new facilities at that time and at regular intervals in the future.

An evaluation was made of the undercoverage in the Master Facility Inveniory to determine the adequacy of the ARS as a means of providing a complete and current list of in-patient facilities. The evaluation revealed that the undercoverage in the Master Facility Inventory was quite small.

THE AGENCY REPORTING SYSTEM

FOR MAINTAINING THE NATIONAL INVENTORY OF HOSPITALS AND INSTITUTIONS

INTRODUCTION

Background

The National Center for Health Statistics (NCHS) maintains a system 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, NCHS conducts a variety of continuing and ad hoc sample surveys to collect information on the general health of all persons living in the United States.

The Health Interview Survey and the Health Examination Survey collect information on the noninstitutional population. The Institutional Population Survey provides health statistics on the institutional population and represents the most efficient medium for the collection of statistics on utilization of long-stay hospitals, resident institutions, and other types of health facilities. In addition, NCHS collects information about persons discharged from short-term hospitals. This information is collected in the Hospital Discharge Survey. In the latter two surveys information is obtained from the facility providing service and a major part of the data collected is based on existing records.

The universe or sampling frame for the Institutional Population Survey and the Hospital Discharge Survey is the Master Facility Inventory (MFI). This inventory includes all types of inpatient facilities, such as hospitals, nursing homes, homes for the mentally retarded, and homes for dependent children. 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, but also provides important national statistics about the availability of such facilities in the Nation.¹

Development of the First Master Facility Inventory

There were three basic operations in the development of the original MFI. First, an investigation was made to determine what files on facility names and addresses were available in the United States, and which of the files should be merged to produce the most complete list of facilities. Second, the selected files were matched to eliminate duplicate names. And third, a questionnaire was mailed to each address on the list to determine if the place was still in operation and to collect information for classifying the facilities by type of business, ownership, and size.

The mailing list was essentially the product of collating the files of four Federal agencies,

¹National Center for Health Statistics: Development and maintenance of a national inventory of hospitals and institutions. *Vital and Health Statistics*. PHS Pub. No. 1000-Series 1-No. 3. Public Health Service. Washington. U.S. Government Printing Office, Feb. 1965.

each containing between 20,000 and 30,000 names and addresses of facilities. Additional facilities were added to the list by matching places named in directories maintained by national associations and organizations and by State licensure files for nursing homes and related facilities.

The matching procedure was a simple one, primarily because little information was available on which to make comparisons. The principal factors were name and address, but, when available, the number of beds, type of ownership, and type of business were used to aid in the matching. The criteria for matching were not strict. If there was any doubt concerning the match, the case was considered a "nonmatch" and included in the mailing list. This procedure insured maximum coverage among establishments in the lists being collated, but it also resulted in duplication, an undesirable trait of a sampling frame.

Evaluation of Coverage of the Master Facility Inventory

The importance of knowing the completeness of the frame when conducting sample surveys cannot be overemphasized. Whether or not the survey results produce relatively precise national estimates is largely dependent upon the MFI's including *all* facilities in the Nation. There was some confidence that the newly developed MFI did indeed include all but a negligible number of hospitals and institutions in the United States. The confidence, however, reflected only subjective evaluations based primarily on the fact that the inventory was developed by merging several very large files and, consequently, was the most complete file of its kind. Such subjective evaluations unfortunately did not permit definitive statements about the MFI's completeness. It was apparent that some objective method of evaluation was needed.

The comprehensiveness and completeness of the MFI were evaluated with the aid of a multiframe method. The method involved the overlap between the MFI and a complete listing of inscope facilities in an area sample of the United States. Each facility in the area sample was matched against the facilities in the MFI. The measure of undercoverage in the MFI was based on the subsample of places which did not match.

The results of the study, referred to as the Complement Survey, indicated that the first attempt at developing a national inventory of hospitals and institutions had been relatively successful. It was found that at the time of its development, the MFI was about 90 percent complete in terms of facilities and about 95 percent complete in terms of number of beds. Although the sample was small, it provided some idea about coverage by type of establishment. The most complete coverage seemed to be for hospitals as all hospitals in the area sample were listed in the MFI. Nursing and personal-care-type homes were less complete (about 90 percent); for other types of institutions, the coverage was estimated to be about 80 percent complete.²

Maintaining the Master Facility Inventory

The MFI is composed of many types of facilities that are in an almost continuous state of change. Many new facilities are being built and additions are being made to existing structures. Some facilities are going out of business permanently while others only change ownership or management. Since the MFI is to be the sampling frame for surveys of hospitals and institutions, it must be kept current. Maintaining the MFI involves adding new facilities which go into business each year, deleting those which go out of business, and obtaining certain information from those currently in business. It was planned to survey all new facilities 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.¹

Before the plan for surveying the MFI was implemented, a decision was made to reconstruct the MFI. The decision was prompted largely because of the lack of adequate means for adding new facilities to the MFI. Supplementary deficiencies such as duplication of facilities and difficulty in identifying specific areas of undercoverage were also considered. Thus, in the reconstruction of the MFI a system of agencies

²Bryant, E. E., and DeLozier, J. E.: Methodology for Developing, Maintaining, and Evaluating a Sampling Frame of Hospitals and Institutions. Paper presented at the 94th Annual Meeting of the American Public Health Association, San Francisco, Calif., Oct. 31-Nov. 4, 1966.

was desired that would provide a reliable input system for the addition of new facilities, minimize the amount of duplication in the MFI, and enable NCHS to identify and eliminate undercoverage in the MFI. There were a large number of possible sources of facility information, many of which overlap but none of which were sufficient alone. These sources included State licensure agencies, certain departments of the Federal Government, and private agencies and organizations which maintain or publish facility lists. The development and maintenance of this system of agencies, known as the Agency Reporting System, are discussed in detail in this report.

DEVELOPMENT OF THE AGENCY REPORTING SYSTEM

The development of the Agency Reporting System (ARS) was initiated by the contract awarded to the Surveys and Research Corporation by NCHS on October 26, 1964. The objectives of the contract were to survey and identify agencies maintaining lists of hospitals and institutions providing long-term medical, nursing, personal, domiciliary, or custodial care; to obtain information on the scope and character of their name and address files; and to make recommendations to NCHS concerning the agencies to be included in the ARS. It was agreed that the goal would be pursued via the following steps:

- 1. To canvass all State and Federal agencies, national organizations, and commercial publishers believed to maintain files because they
 - a. License, approve, register, certify, supervise, or otherwise regulate hospitals or institutions,
 - b. Operate one or more hospitals or institutions,
 - c. Administer Federal grant programs affecting hospitals or institutions,
 - d. Conduct programs whose administration yields as a byproduct listings of facilities which include hospitals or institutions.
- 2. To solicit from them, via a mail schedule (or interview in the case of Federal agencies), information on the scope and char-

acter of their files, methods used to update the files, publication practices, and related information.

- 3. To ascertain the extent to which these files account for all hospitals and institutions deemed to be within the scope of the MFI, particularly with respect to facility "births."
- 4. To make recommendations concerning the agencies and organizations which would be invited to participate in the ARS and the operational characteristics of the ARS.
- 5. To prepare a report embodying survey findings and recommendations.

Survey Chronology and Procedures

The early months of the Surveys and Research Corporation's work were devoted to the development of schedules and instructions in close collaboration with NCHS staff. Field visits to test the schedules were made in the District of Columbia and Pennsylvania in December 1964. Successive redrafts of the schedules led to a pretest conducted during March and April 1965 in California, Illinois, Louisiana, New York, and Wyoming.

Two schedules and three procedures were used in the pretest. One schedule was addressed to State regulatory agencies, the second to all other types of respondents. The three procedures represented three different approaches to the problem of how to best identify and obtain the participation of all potential respondents in the States.

In the first procedure the director of the department was contacted and asked to distribute schedules to the persons named in his department. In the second procedure the schedules were mailed directly to the persons concerned along with a letter mailed to the director identifying persons contacted in his department. In the third procedure the director was requested to identify appropriate persons in his department who had lists of facilities. The persons identified were then sent schedules by the Surveys and Research Corporation. Field visits were subsequently made to all respondents, who were interviewed as a basis for assessing the relative merits of the procedures used.

Pretest results indicated that a direct approach to the person who had the lists of facilities.

| Oshokula response | | Type of schedule | | |
|--|------------|------------------|-----------|-----------|
| Schedule response | Total | A | В | С |
| Total schedules mailed | 560 | 151 | 142 | 267 |
| Schedules returned | 496 | 145 | 137 | 214 |
| With sufficient information to be punched Insufficient information, not punched | 334 162 | 135 10 | 113 24 | 86 128 |
| Schedules not returned | 64 | 6 | 5 | 53 |
| Requested information supplied via letter or phone No response, information obtained from other sources | 43 21 | 4 2 | 2 3 | 37 16 |

Table 1. Number of survey schedules mailed and response, by type of schedule

usually proved productive. Thus the final procedures incorporated this feature of the second procedure along with some minor characteristics of the other two procedures.

In November 1965 a second pretest, which was a trial run of the final schedules and procedures, was conducted in the States of Michigan, New Jersey, and South Carolina. This proved sufficiently successful to encourage NCHS and the Surveys and Research Corporation to plan for a general mail-out in January 1966. The general mail-out (excluding the pretest States) took place, as scheduled, in January 1966. It was preceded by telephone calls to the principal respondents in all States (except Alaska and Hawaii) to verify the correctness and completeness of the mailing list and to establish personal contacts useful in promoting survey cooperation. The mailing list required few substantive changes as a result of the telephone calls.

Three schedules were used in the general mail-out:

- A. addressed to State regulatory agencies and designed to obtain information not only on the number and types of establishments in their files but also on their regulatory coverage and practices and the availability of facility names and addresses in reproduced form;
- B. addressed to State agencies administering facilities within survey scope, requesting data

on the number and types of such facilities, and a listing by name and address;

C. addressed to other State agencies believed to have lists of facilities, to national voluntary agencies, and to commercial publishers; requesting data on the number and types of facilities in their files, and their practices with respect to listing requirements, information gathering methods, and publication.

Altogether, 560 schedules were mailed (including the schedules used in the two pretests), of which 496, or 89 percent. were returned. The response rate was actually better than the percentage of returns would indicate, since 43 of the 64 respondents with no schedules supplied the essential information requested, via correspondence or telephone. The effective response rate on the survey may therefore be put at 96 percent. Of the remaining 21 in the nonresponse group, only 2 were State regulatory agencies. Three were State administrative agencies, 3 were other State agencies, and the remaining 13 were national voluntary agencies. The basic information that was requested via schedule from the nonresponse regulatory and administrative agencies was obtained from other agencies in the State or from national directories. Table 1 summarizes the response obtained from the survey schedules which were mailed. Not all of the 496 returned schedules

| Table 2. | Number | of | State | admin | nistrative | |
|----------|-----------|----|---------|-------|------------|--|
| and | regulator | уа | gencies | , by | type | |

1

1

| Type of agency | Number |
|--|-----------|
| Total, unduplicated | 323 |
| Administrative agencies | 269 |
| Administrative only Administrative and regulatory | 211 58 |
| Regulatory agencies | 112 |
| Regulatory only Regulatory and administrative | 54 58 |

with sufficient information to warrant transfer to punchcards, One-third of the respondents had checked as a response the statement "No establishment files maintained" or had made a written declaration to that effect. Falling within the scope of the survey and supplying sufficient information to be edited, coded, and punched were 334 schedules, or 60 percent of the total mailed. The 334 schedules with information sufficient for coding and punching came from 234 agencies. In striving for comprehensive coverage a substantial number of State agencies were identified, but were not mailed schedules, either because they were onefacility agencies or for other valid reasons.

Between 500 and 600 State agencies were viewed as potential respondents in the course of the survey. The survey process (involving schedule entries, correspondence, telephone calls, and field visits) resulted in the identification of 269 State agencies³ which administer one or more facilities falling within the scope of the survey, and 112 agencies with statutory authority to regulate facilities. The survey also identified 49 agencies, including a number with regulatory responsibilities, which have occasion to maintain files based on neither administrative nor regulatory responsibilities. A summary of number and types of agencies responding is given in table 2.

COMPOSITION OF THE AGENCY REPORTING SYSTEM

A total of 323 State agencies were identified as producers of primary data on establishments and therefore as potential respondents for the ARS. They are referred to here as producers of

Table 3. Number of State and Federal administrative and regulatory agencies in the survey, by type

| Type of agency | Number |
|--|---|
| Total | 327 |
| State agencies, unduplicated- | 323 |
| Health department Mental health department Welfare department Health and welfare department Corrections department | 44 23 45 5 26 32 1 12 7 5 4 4 4 30 |
| facility Short-stay State hospital | 9 |
| facility | 2 14 13 8 2 6 31 |
| Federal agencies operating civilian hospitals or insti- tutions | 4 |

5

³As the term is used here, "State agency" refers to the most inclusive structure of State government responsible for the operation of the facility short of the Governor or the legislature. This is usually a department, but can be the board of trustees for a State school for the blind if the board is not under any department and reports directly to the Governor in the State legislature. A youth division of a corrections department is not considered a State agency, but an independent youth division or youth authority is.

primary data because name and address information originates in these agencies by reason of their administrative or regulatory functions. Some are responsible for lists containing more than 1,000 names. Others, by contrast, are one-facility agencies and can report only for themselves.

To those State agencies which produced primary data should be added four Federal agencies operating within-scope facilities (Public Health Service's Division of Indian Health, the Department of the Army, the Veterans Administration, and the Bureau of Prisons in the Department of Justice). The list provided by the Department of the Army includes the facilities of all the uniformed services. The number of State and Federal administrative and regulatory agencies in the survey are given by type in table 3. 1

State Administrative Agencies

States administer a wide range of medicalcare and resident-care facilities. They include examples of every type of in-scope facility, with the exception of homes for unwedmothers. Twen-

| Table 4. Number of State agencies administering facilities, by | lable 4. | e agencies administering facil | es, by type |
|--|----------|--------------------------------|-------------|
|--|----------|--------------------------------|-------------|

| | |
|--|---|
| Type of agency | Number |
| Total | 269 |
| Health department Mental health department Public welfare department | 22 |
| Mental health department | 23 18 |
| Combined department of health and public welfare | 5 |
| Education department | 25 32 |
| Combined department of mental health and corrections | 2 |
| Institutions department | 12 |
| Mental health department- Public welfare department- Combined department of health and public welfare- Education department- Corrections department- Combined department of mental health and corrections- Institutions department- Combined department of welfare and institutions- Rehabilitation department- Hospital department- Hospital department- Tuberculosis board or commission- State board of regents- Board of trustees for State training schools- Department of veterans' affairs- Board of trustees, State schools for deaf and blind- State juvenile court system- Crippled children's board- State eleemosynary board- Military affairs department- Board of control, State homes for the aged State university (operating general hospital)- One-facility independent agency: State provide control agency: State pro | |
| Hospital department | 1 1 7 5 4 4 3 1 2 1 1 1 1 |
| Youth authority | |
| State board of regents | 4 |
| Board of trustees for State training schools | 4 3 |
| Board of trustees, State schools for deaf and blind | 1 |
| State juvenile court system | 2 |
| State eleemosynary board | ĩ |
| Military affairs department | |
| State university (operating general hospital) | 30 |
| One-facility independent agency: | 13 |
| State training school | 14 |
| Long-stay hospital facility | 9 |
| State school for deaf and blind | |
| State facility for mentally retarded | 4 |
| One-facility independent agency: State training school | |
| | 9 8 6 4 3 2 2 2 2 2 2 1 |
| State general hospitalShort-stay hospital facility | |
| State facility for alcoholics | 1 |
| State home for dependent childrenState facility for crippled children | 1 |
| State facility for crippied children | L |

ty-two health departments, 23 mental health departments, 18 welfare departments, and 32 corrections departments are numbered among the 269 agencies reporting the operation of one or more facilities. Fully one-third of the agencies are one-facility organizations. For example, 30 State universities operate general hospitals in connection with the medical school; the hospitals are independent of operating controls other than those imposed by the university. The complete list of State agencies administering facilities is given in table 4.

All 50 States and the District of Columbia are represented among the 269 agencies. The range in number of agencies by State is from 2 in such States as Alaska, Iowa, Maine, and Montana to 13 in Connecticut. For the country as a whole, the average of administrative agencies is five per State.

The survey identified, in all, 1,244 State facilities in operation in the spring of 1966. The largest group was composed of 284 penal and correctional facilities for adults. State hospitals for the mentally ill constituted the second largest group, and training schools for juvenile offenders the third. Substantial numbers were also contributed by homes for the mentally retarded and long-stay hospitals other than for psychiatric care.

Differences in the number of facilities by type reflect in large measure the traditional responsibility of State governments for the care of major offenders, the mentally ill, the mentally retarded, and selected types of chronic illness. The lesser importance in the State institutional pattern of short-stay hospitals, childrens' homes, and nursing and personal care homes for the aged, infirm, and chronically ill persons may be attributed to the major role of voluntary agencies, local governments, and commercial enterprises in the development of facilities in these areas.

The range in the number of facilities by State was from 5 in Nevada to 85 in New York. Differences in this respect among States correspond roughly to differences in population.

Departments of correction accounted for the largest numbers of facilities (213) administered by the States. This represents about one-sixth of the total. The second largest group was made up of departments of mental health, and the third largest by welfare departments. A substantial number was also accounted for by the "departments of institutions" which exist in 12 States. Health, education, and youth authority agencies contributed smaller numbers. These differences among departments reflect in part the major responsibility, historically assumed by State governments, for providing care for selected types of patients, prisoners, and handicapped individuals, and the tendency of States to concentrate such facilities in a few departments, i.e., corrections, mental health, and welfare.

One of the questions asked in the survey concerned facilities added in 1964. The extent of the facility turnover in the Nation was of course a key consideration in the design of the survey because of its obvious implications for the maintenance by NCHS of an up-to-date inventory of institutions. But it was not expected that State-operated facilities would show a high turnover rate. The relative stability of the patient and resident population was verified by survey results which indicated that the annual changes in the number and composition of State-operated facilities were quite small. Among 112 agencies responding to this question, only 15, or 1 in 8, reported any facilities added in 1964. One agency listed four facilities opened, a second agency opened two facilities, and the remaining 13 opened one each. The 19 facilities added comprised 2 percent of the total number reported by the 112 agencies in operation at the time of the survey.

State Regulatory Agencies

The survey identified 112 State agencies with regulatory responsibilities for one or more types of facilities within the scope of the survey. These responsibilities assume different forms in different States and include such functions as approval, inspection, licensing, and certification. Licensing is the most common form of regulation. A byproduct of regulation in all States is the accumulation of names and addresses of facilities. These generally appear in the form of annual lists or directories and sometimes contain supplementary information such as bed capacity, types of care offered, type of control, and license number.

Health departments and welfare departments accounted for 75 percent of the 112 agencies reporting regulatory functions. A summary of State

| Table | | | | | agencies | regu- |
|-------|------|--------|-------|--------|----------|-------|
| | lati | ng fac | iliti | ies, b | y type | - |

| Type of agency | Number |
|---|-------------|
| Total | 112 |
| Health department | 43 11 |
| Public welfare department | 40 |
| welfare | 5 3 2 |
| Department of institutions Department of mental health and | 2 |
| corrections | 1 |
| tutions | 1 1 |
| State medical care commission | 1 |
| Commission on hospital care Commission for the blind | 1 |
| Youth authority Department of licenses and | Ī |
| inspections | 1 |
| ment , , , | |

agencies which regulate facilities is given in table 5.

The number of regulatory agencies varies by State from one to four. In Alaska, Kansas, Maine, Missouri, Nevada, New Hampshire, New Mexico, New Jersey, Pennsylvania, and Utah all regulatory functions for facilities are located in one department. At the other extreme are States such as California, Massachusetts, Michigan, New York, and North Carolina, each with four regulatory agencies—health, mental health, public welfare, and one other, which varies among the five States. The most common pattern is represented by the State with two regulatory agencies—health and public welfare.

Regulatory agencies participating in the survey reported approximately 30,000 facilities in their files. This figure does not represent the true number of facilities regulated in the country, since this number may actually be larger or smaller. Some agencies failed to report all their facilities. Others, on the contrary, included in the number they reported facilities which are not regulated by the respondent or are regulated by another agency. Respondents were asked to report the number of establishments in their files. They were not asked to report the number regulated. While the files are largely limited to regulated facilities, some contain, in addition, the names and addresses of facilities of the same type operated by the State or Federal Government that are not subject to regulation and some that are regulated by another agency. The extent of duplication in the regulated group and the size of the group not regulated but listed in the files are not known and could be determined only, perhaps, on the basis of a name and address match.

The number of facilities reported by State varied from fewer than 100 in Alaska, Delaware, Nevada, and Wyoming to close to 2,500 in California. Eight States reported more than 1,000.

Nursing and convalescent homes comprised about one-half of the establishments reported, short-stay hospitals almost one-fourth, and homes for the aged other than nursing homes, one-sixth. These were the three biggest blocks and accounted for 86 percent of the total. Another 5 percent was

Table 6. Percent distribution of facilities in files reported by regulatory agencies, by type

| Type of agency | Percent distri- bution |
|---|--|
| Tota1 | 100,0 |
| Short-stay hospitals Psychiatric hospitals Other long-stay hospitals Diagnostic and treatment centers | 23.1 1.6 1.4 1.2 1.4 0.7 0.3 45.9 17.3 0.1 0.1 0.1 0.1 4.5 0.6 0.4 0.5 |

Table 7. Percent distribution of 1964 additions to files of regulatory agencies, by type of establishment

| Type of establishment | Percent distri- bution |
|---|------------------------------|
| Tota1 | 100.0 |
| Nursing homes Other homes for the aged Short-stay hospitals All others | 61.7 23.7 7.0 7.6 |

contributed by homes for dependent and neglected children. All other types of facilities aggregated less than 10 percent of the total. The distribution of facilities by type is shown in table 6.

The paramount role of the State health department in the field of regulation clearly emerges when facilities are grouped by type of regulatory agency. Health departments accounted for 70 percent of the facilities reported in the files of regulatory agencies. Welfare departments supplied 17 percent and combined health and welfare another 5 percent. This concentration is consistent with the dominance of hospitals, nursing homes, and homes for the aged among the facilities reported, and with the usual role of the health department in the regulation of such facilities.

With 112 regulatory agencies reporting some 30,000 names and addresses in their files, the average number per file was about 268 establishments. By and large, however, files on particular types of facilities tended to contain fewer than 100 names. This was true of all psychiatric and other long-stay hospital files, of files on facilities for dependent children (with two exceptions), and on facilities for unwed mothers.

Respondents were requested to report the number of facilities added to their files in 1964, but about 40 percent left the item blank. Some undoubtedly meant this as a zero entry; others either overlooked the item or did not attempt an answer. From the 60 percent with an entry, a total of a little more than 1,200 facilities was added to the files in 1964; or about 4 percent of the 30,000 names and addresses in the files of all 112 agencies. It is reasonable to assume that, with more agencies reporting, the number of facilities added in 1964 could have been as high as 5 or 6 percent of the total in the files. In general, the larger the file, the larger the number added. California, Illinois, and Texas each added more than 100. In some of the smaller States, facilities added in 1964 numbered fewer than 10. For the same reason, the additions were concentrated in the nursing home files and, among agencies, in the health department as illustrated in tables 7 and 8.

Related to the question of currency of the name and address of the facility regulated is agency practice with respect to frequency of contact. Ninety-three percent reported that facilities are required to renew their license or permit annually or to be inspected or approved annually.

Nearly all regulatory agencies issue a printed or mimeographed list of the facilities they regulate. Publication is usually annual, but about one agency in five issues lists on a quarterly or semiannual basis, and about 3 percent on a biennial basis, another 28 percent use an entirely different approach such as issuing revised sheets as needed containing new names or changes in address or ownership.

Secondary Sources

The 323 State agencies and 4 Federal agencies compose both the vast majority and the most important respondents in the ARS. State agencies which neither administer nor regulate facilities are being evaluated and may be included in the

Table 8. Percent distribution of 1964 additions to files of regulatory agencies, by type of agency

| Type of agency | Percent distri- bution |
|--|------------------------------|
| Total | 100.0 |
| Health department Welfare department Combined bealth and welfare | 76.7 11.9 |
| department | 2.4 9.0 |

ARS if additional facilities can be picked up from them.

National voluntary agencies, mostly under denominational auspices, which issue lists or directories of hospitals and institutions operated by member organizations may also be considered, in a sense, primary data producers. Since all or nearly all of their establishments are included in the lists put out by State regulatory agencies, and since the latter agencies possess legal authority to collect the information thus endowing the State lists with an "official" status, it is best perhaps to restrict the term "primary data producers" to State and Federal agencies. There were 34 such national organizations to be included in the ARS that were identified in the survey, all of which furnished lists for examination and analysis.

With the inclusion of four commercial directories of hospitals and/or other facilities, 365agencies and organizations have been identified which produce lists of in-patient facilities. These 365 agencies and organizations compose the ARS.⁴

IMPLEMENTATION OF THE AGENCY REPORTING SYSTEM

Obtaining Agency Cooperation

The Surveys and Research Corporation (SRC) submitted the final report and recommendations for launching the ARS on October 31, 1966. It was decided that NCHS would initiate correspondence during January and February 1967 with all agencies that were recommended for inclusion in the ARS. An extensive review of the agencies recommended for inclusion in the ARS was made. Personal visits were recommended for all agencies maintaining a large number of facilities in their files and having a relatively high turnover of facilities. The remaining agencies were to be canvassed by a mail survey. There were approximately 80 State agencies located in 50 departments that were selected to be visited. These agencies were located in 40 States scattered throughout the country.

An agreement was made with the Bureau of the Census to conduct the visits to the State

agencies. The agencies were to be visited for the dual purpose of securing their cooperation in the ARS and to plan acceptable arrangements for submitting lists of all new facilities to the Center. There were two arrangements that needed to be worked out with each agency contacted. One was to update the list sent by the agency to SRC, that is, to arrange for the agency to submit the names and addresses of all the new facilities⁵ starting business between the publication date of the list received by SRC and December 31, 1966. The other was to arrange a continuing reporting system on either an annual basis or a more frequent interval, starting on January 1, 1967.

In preparation for these visits a pretest was held in November 1966 in the District of Columbia, Maryland, New Jersey, and Virginia. The pretest visits were conducted jointly by personnel from the Bureau of the Census and NCHS. Each visit was preceded by a letter explaining the ARS to the agency and announcing the forthcoming visit, the date and time of which would be arranged by telephone. The pretest showed that the agencies were quite willing to join the ARS on a continuing and regular reporting basis. If they did not periodically publish lists of new facilities as part of their regular duties, the agencies were somewhat reluctant to take the time to identify them in their files. Some agencies had no system of keeping track of new facilities and consequently were unable to identify them. Thus, arrangements were made for several agencies to send only a current list of facilities. The new lists sent by the State agencies have to be matched each time against the most current lists on file in NCHS to identify new facilities.

Personal visits were begun on a full-scale basis in the latter part of January 1967 and were completed in the latter part of February 1967. For a few of the visits, the Bureau of the Census interviewers were accompanied by members of the NCHS staff, so that a first-hand report might be

⁴Surveys and Research Corporation: Updating the National Inventory of Hospitals and Institutions, Vol. 1. Washington, D.C. Oct. 1966.

⁵New facilities include: (1) additions to buildings, if this new component has a function different from the function of the original building (nursing home added to a general hospital); (2) facilities that change their function from a nonhealth or custodial care facility into a health-oriented facility (hotels converting into homes for the aged); (3) facilities added due to a change in agency requirements; and (4) newly constructed facilities.

obtained concerning agencies maintaining some of the largest files. These visits were to agencies located in California, Illinois, New York, and Ohio. The visits were usually the first ones scheduled in their region and served to aid the interviewers in understanding the more intricate mechanisms of the ARS. Each visit was again preceded by a letter explaining the ARS to the agency and announcing the future visit, for which the date and time would be arranged by telephone. The letter is reproduced in Appendix I of this report. The results of the visits indicate that all agencies were willing to provide lists of facilities which they have available in their files. Many agencies publish monthly or quarterly lists of new facilities and were willing to furnish these. There were a number of agencies that do not identify new facilities and would agree only to provide a current list of facilities on a regular basis. Thus, as described above, the new lists sent by the State agencies have to be matched each time against the most current lists on file in NCHS to identify new facilities.

The agencies that were not visited maintained small files of in-scope facilities or had relatively little turnover of facilities. In early February 1967 a letter was sent to each of these agencies. explaining the ARS to the agency and asking it to cooperate with the Center. Each agency was asked to update the list sent by the agency to SRC and to participate in a continuing reporting system on an annual basis. Almost 70 percent of the agencies had responded by the middle of March. At this time a followup letter was sent to the agencies which had not responded. Within the next month the response climbed to 85 percent and in mid-April the remaining agencies were contacted by means of a telephone followup. By July 1967 participation was virtually 100 percent with only one list not received.

Reconstructing the MFI

The new MFI was assembled in three basic stages. In the spring of 1966, SRC supplied to the Center the State lists that were collected in its survey of State agencies. These lists were duplicated to maintain a file at NCHS and out-of-scope places were deleted from the lists. The lists, from State agencies that were slated to participate in the ARS, were then sent to the Bureau of the Census. The Bureau of the Census standardized the names and addresses of the facilities; eliminated duplicates by matching; punched names, addresses, and some supplementary information such as number of beds and telephone numbers on cards; put the information on tape; and printed comprehensive lists containing all the in-scope facilities that were found in the lists obtained by SRC. Thus, the first stage of the updated MFI was completed.

The second stage involved lists supplied by national voluntary organizations, Federal agencies, State agencies that were not scheduled to participate in the ARS, and the list of facilities in the old MFI. Facilities appearing in these lists were matched against each other and matched against the listing obtained in the first-stage compilation of the updated MFI. All names and addresses of facilities that were on these lists and not on the "stage one" list were standardized, punched on cards, and added to the "stage one" listing of facilities along with additional information such as telephone number, number of beds, etc.

The third and final stage dealt primarily with adding to the list new facilities reported by the ARS and a separate group of homes for the aged in California. Homes for the aged maintaining fewer than 16 beds were not included in the report from California because they are county regulated. Since there were a large number of these facilities (over 3,000), each county was asked to send lists of these facilities to NCHS. The same procedure was then followed in this stage as in "stage two." The completion of this stage resulted in the printing of the updated MFI.

The Agency Reporting System Information Files

The Agency Reporting System is subdivided into two information files. A Basic Information File is maintained to record information about each type of facility within each State and a Reporting Information File is maintained to assist in mailing letters and recording responses from each of the agencies in the Agency Reporting System.

Basic Information File

The Basic Information File provides information from each State and the District of Columbia concerning each type of facility listed in the Master Facility Inventory and also about the lists from which each type of facility is enumerated. The information recorded for each type of facility includes control (State, local, voluntary, or proprietary), type of regulation (licensure, administrative, etc.), and coverage by number of beds. The information recorded concerning the list for each type of facility includes source of list (name and address), title, and/or description of the list; date of the list; frequency of publication; number of facilities on the list; and number of facilities added in 1964. The file may be used to determine if a list of facilities from a source not in the Agency Reporting System is superior to the list which is being used, provided that sufficient information can be obtained about the new proposed list.

The Basic Information File is set up in the following manner: The States are listed alphabetically; then the types of facilities within each State are listed in order on separate index cards containing the desired information about each type of facility and its list or lists. The system described above is available for a quick reference in contrast to the situation which might exist if the information were stored on computer tape. Thus if new information is found for some type of facility the appropriate card may be pulled from the file and changed.

Reporting Information File

A Reporting Information File is needed to insure that NCHS can promptly and efficiently contact and record the responses of all agencies or organizations participating in the Agency Reporting System.

The information needed about each agency is recorded on individual index cards. Three operational systems are used. All three systems record the State and department in which the agency is located, the name of the list, the source code (a 3-digit code that identifies a specific list), and the name and address of the contact person in the agency. The first system is used for recording information about agencies that have chosen to report annually. Two types of information are collected: (1) information necessary to provide a record of agency contacts, such as the date of the mail request for listings, the first mail followup, the second mail followup, the telephone followup, and the date of response from the agency (recorded each year); (2) information concerning the list which the agency returns, such as publication date of the returned list and number of new facilities added since the last report. This card is reproduced in Appendix II.

The second system is used for recording information about agencies that have chosen to report quarterly or semiannually. It differs from the first system in having only one mail followup and having a check list on the back of the cards for recording the number of new facilities, the date the list is received, and the reporting interval of the agency.

The third system is used for recording information about agencies that have chosen to report every month. The information collected with this system is the number of new facilities added during the year. Also on the back of the cards in this system is a check list for recording the number of new facilities, the date the list is received, and the reporting interval of the agency.

The first card in this file contains the suggested dates for requesting annual listings and suggested dates for all followup correspondence. The date that the mail request for listings is sent and the dates of any followup correspondence deemed necessary will be recorded as well as the individual agency's date of response. These cards are placed in alphabetical order by State and by department within State.

For those agencies reporting annually the date of response will be recorded and the corresponding card will be pulled and placed in the back of the file. Before each followup correspondence it is necessary to look at the front of the file to see which agencies have not responded and hence must be sent a followup. Thus the cards will be alternated from front to back on a yearto-year basis, so that agencies which have not responded may be readily identified.

All agencies that choose to report more than once during the year will have a card made out and placed in alphabetical order by State and by department within the State. On the back of each card is a check list to record the date of response and the number of new facilities. After each agency responds, the information requested on the check list is transcribed and once a year (preferably during January or February) the number of new facilities added during the previous year is totaled on the check list and transcribed on the front of the card. Periodic review of the check lists will indicate if the agencies are responding as expected. If they are not, followup correspondence will be initiated if necessary.

After the appropriate information has been recorded on the cards, all lists of new facilities are placed in envelopes labeled by State to await their addition to the Master Facility Inventory.

EVALUATION OF THE AGENCY REPORTING SYSTEM

Investigation of Coverage Gaps

The success of the ARS depends largely on the extent to which a coverage gap of facilities can be minimized, both now and in the future. The question arises, how complete is the coverage of institutions throughout the Nation in the updated MFI?

To evaluate the coverage, the questionnaires collected in the ARS survey of State agencies and the report submitted by the Surveys and Research Corporation were reviewed. The coverage was analyzed along two problem dimensions: (1) inadequate coverage due to larger bed-size minimums established by the various State licensing agencies than specified by the MFI, and (2) insufficient information because of no regulation of the type of facility in question.

Coverage gaps with regard to bed-size minimums were established using the requirements for inclusion in the MFI—that is, one or more beds for all hospitals and three or more beds for nursing homes and other institutions included in the MFI. The problem arising from the minimum requirements for licensure based on the number of beds was approached through a one-to-one match of the national lists with the lists of existing facilities supplied by the individual States. In the questionnaire used by SRC, the State agencies were asked to report the number of those facilities in the State which were not regulated by the Department and not included in their files. Not all State agencies responded but for those that did, the estimate was used as a baseline in estimating the total number of facilities contributing to the coverage gap due to lack of regulation.

Once the possible problem areas were identified it was necessary to determine if the type of facility was, in fact, a coverage gap and if so, approximately how many facilities were missed in compiling the MFI. The initial screening was intended to identify all possible problem areas. Many of the areas first identified as having coverage gaps later proved to have complete, or nearly complete, coverage.

The result of the investigation was the indication that only two types of facilities contribute sufficient undercoverage to warrant examination in this report. These types are homes for the aged and homes for dependent children, which will be discussed next.

Homes for the Aged

The major problem in the ARS lies in the area of homes for the aged providing personal care. This area is difficult to evaluate since the State licensure requirements vary considerably when differentiating between homes providing some kind of nursing skill and other facilities considered to be "boarding homes." The definition of an institution as used in the MFI requires that the facility provide something more than just room and board. This discrepancy between the national and State definitions leaves several facilities in a borderline area. To insure that the coverage of the MFI is complete, these borderline cases have been included, at least until they are proved to be out of scope through the MFI questionnaire.

Idaho, South Carolina, and West Virginia do not license personal care homes and have no regulatory program for those facilities defined as less than "skilled" nursing homes. With the exception of Idaho which lists seven so-called boarding homes in their files, these States exclude those facilities which provide personal and/or custodial care from their lists. The coverage gap in this type of facility is estimated as quite large. West Virginia estimates the number of such facilities in the State at approximately 500 to 600. This estimate may be too large, however, since it may include boarding homes providing nothing more than room and board. South Carolina and Idaho (with the exception of the seven facilities listed on their schedules) did not provide estimates of the number of facilities which may be in the State.

The literature of the national voluntary organizations in the area of homes for the aged is limited in that most of the lists are published by various denominations and include only facilities which are under those particular religious auspices. If the required information about homes for the aged in these three problem States is to be obtained from these sources, a time-consuming search of these numerous publications would be involved. Even if this were done, the list would not be complete because many proprietary facilities would be missed since facilities under religious auspices are usually nonprofit.

The national listing used to evaluate the undercoverage of homes for the aged was the "Directory of Nonprofit Homes for the Aged, 1962." This source is not complete in listing facilities of this type. An example of the undercoverage can be seen in West Virginia. The schedule received from this State reports an estimate of 500 to 600 personal care homes. Excluding those facilities classified as nursing homes, the directory reports only two nonprofit homes for the aged in West Virginia. This discrepancy between the State estimate and the directory is large enough to throw doubt on both the estimate and the completeness of the directory. Likewise, the directory reports three establishments each for Idaho and South Carolina. It seems unreasonable that States of this size could have as few as three facilities providing personal care for the aged, even considering that the directory lists only nonprofit homes.

Included in the report submitted by SRC is the recommendation that a one-time census in these States be made to identify the personal care homes. Because of the large cost of such an undertaking, it could be justified only if there were a large number of facilities in these States. However, West Virginia is the only State providing an estimate of facilities. Since there is no complete national listing it is impossible to give a meaningful estimate of the number of facilities in Idaho and South Carolina. Therefore action on this recommendation has been deferred until more information is available.

California posed a unique problem with regard to homes for the aged. The licensure program at the State level includes only those facilities of 16 beds or more. The control of all smaller facilities is relegated to the counties. A special survey letter was sent to each county requesting a listing of homes for the aged with fewer than 16 beds. The survey resulted in the addition of more than 3,000 facilities to the MFI and the elimination of this particular coverage gap in California.

Three additional States posed problems of a lesser nature. Kansas does not license either church-owned nursing homes or personal care homes. The State estimates that approximately 17 facilities of this type exist in the State. When the "Directory of Nonprofit Homes for the Aged" was checked, no facilities falling into this category were identified. To discover these 17 facilities it may be necessary to check the many listings of religious organizations. However, these facilities might also be found in the State Board of Health files and a followup inquiry to the State could be fruitful.

Nebraska reported that its licensing program excludes fraternal homes and estimates that two facilities fall into this gap. Connecticut does not license municipal homes for the aged. Neither the two facilities estimated by Nebraska nor the three municipal facilities estimated by Connecticut were identified in the directory. For total estimations in this area it will be necessary to accept those made by the States.

Homes for Dependent Children

At first glance this segment of the MFI seemed to be the greatest problem area, since 14 States were found to have either large bed-size minimums or no licensure requirements of such facilities. However, the number of facilities resulting in this coverage gap proved to be less than the homes for the aged. Table 9. State estimates of the number of facilities not included in the Agency Reporting System and specific area of undercoverage

| Type of facility | State | Specific area of undercoverage | Estimate |
|-------------------------------|---|---|---|
| Total | | | 610 |
| Psychiatric hospital | Massachusetts | Private hospitals, voluntary admission | 4 |
| Homes for mentally retarded | | Voluntary and proprietary Private homes | 2 2 |
| Homes for the aged | Connecticut Idaho Kansas Nebraska South Carolina West Virginia | Municipal homes All personal care homes Church_owned homes Fraternal homes All homes for aged All personal care homes | 3 (¹) 17 2 (¹) 500 |
| Homes for dependent children- | California Louisiana Missouri Nevada New Jersey South Carolina Utah | Facilities under 16 beds Facilities under 10 beds Religious facilities Proprietary facilities Facilities not receiving public funds No specific area No information | (1) (1) 40 8 27 5 (1) |

¹The State made no estimate.

With regard to the minimum bed-size standards, there are only two States which remain as problems. California licenses only those facilities with 16 beds or more. There is no record of smaller facilities, except perhaps at the local level.

Louisiana is the second State where bed-size requirements for licensure may omit several facilities. In Louisiana, only facilities with 10 or more beds are regulated. The only national listings available in this area are inadequate in their coverage. The "Directory of Member Agencies" of the Child Welfare League lists governing agencies rather than individual facilities. "Child Welfare Statistics, 1965," published by the Children's Bureau of the U.S. Welfare Administration, reports fewer facilities for all States than have been reported by the States themselves. Because some States failed to report all facilities to the Children's Bureau this source is not adequate for use in a match of State and national lists. This source, in addition, includes some of the special children's units of mental hospitals and hence the figures are incorrect for the area of homes for dependent children because these larger hospitals are tabulated separately in the MFI. Louisiana also has no regulation for those homes not receiving public funds. However, there are only three such facilities in Louisiana and these are known to the State.

The problems resulting from no licensure of facilities are unresolved since there is no adequate national list against which a check can be made. Problems of this nature exist in Missouri, New Jersey, South Carolina, and Utah.

A complete listing of undercoverage by type of facility and by State is given in table 9. Table 10 shows the estimated amount of undercoverage for all the types of facilities included in the MFI on the national level. Both the overall undercoverage and the undercoverage by type of facility are given. These estimates have been determined through one-to-one matches of State lists with available national lists of the facilities in question. When a nonmatch occurred, the facility was added as an estimate of the amount of undercoverage. When no national lists were available for a particular type of facility, the number of facilities

| | | | | | | Dem | |
|---|------------|------------|------------------------------------|-------------------------|------------------|---|--|
| Type of facility | Total | ARS | Federal | Esti- mated total | Number missed | Per- cent- age of each type of facil- ity missed | Over- all per- cent- age missed |
| Tota1 | 35,179 | 34,654 | 525 | 35,789 | 610 | * * * | 1.7 |
| | 7 /10 | 7 000 | 1000 | 7 /10 | | | |
| Short-stay hospitals Psychiatric hospitals | 7,418 | 7,030 | ¹ 388 | 7,418 | - 4 | 0.7 | 0.0 |
| Long-stay hospitals | 559 | 538 | ¹ 44 ² 21 | 559 | + | 0.7 | 0.0 |
| Diagnostic-treatment | | | | | | | |
| center | 44 | 44 | - | 44 | - | - | - |
| Homes for mentally | 600 | 600 | | (10 | , | 0.7 | |
| retarded Other facilities for | 608 | 608 | - | 612 | 4 | 0.7 | 0.0 |
| mentally ill | 119 | 119 | _ | 119 | - | _ | - |
| Other medical facilities | 18 | 18 | - | 18 | - | - | - |
| Nursing homes | 14,043 | 14,043 | - | 14,043 | - | , - | - , . |
| Homes for the aged | 8,765 | 8,738 | ² 27 | 9,287 | 522 | ⁴ 5.6 | ⁴ 1.5 |
| Homes for crippled children | 57 | 57 | | 57 | | | |
| Other resident facilities | 103 | 103 | - | 103 | | | |
| Homes for blind | 55 | 55 | _ | 55 | _ | - | |
| Homes for deaf | 65 | 65 | - | 65 | - | - | - |
| Homes for dependent | | | • | | | 5- / | 500 |
| children | 1,397 | 1,397 | - | 1,477 | 80 | ⁵ 5.4 | 50.2 |
| Homes for unwed mothers Training schools | 223 281 | 223 281 | - | 223 281 | - | - | - |
| Detention homes | 320 | 320 | | 320 | | - | - |
| Penal institutions | 350 | 305 | ³ 45 | 350 | - | - | _ |
| Other | 174 | 174 | - | 174 | - | - | - |
| | L | | | | | l | |

Table 10. Percentage of facilities missed in the Master Facility Inventory at the national level according to State agency estimates

¹American Hospital Association: Hospitals, Guide Issue.

²Master Facility Inventory.

³1960 U.S. Census.

 $^4\mathrm{No}$ estimates for South Carolina and Idaho. Percentage missed will be greater than reported.

⁵No estimates for California, Louisiana, and Utah. Percentage missed will be greater than reported.

reported by the State as falling outside the scope of their licensure laws was the estimate used. In some States there was no way to estimate the number of facilities affected and these are noted in table 10. The total amount of undercoverage for the new MFI as found from the tables is approximately 2 percent.

Although the tables do not indicate other problem areas, it should be noted that two other areas might result in undercoverage in the ARS. These are homes for unwed mothers and detention homes. Although information is available on these two types of facilities, it is obtained, for the most part, from lists supplied by the national voluntary organizations rather than from the files of the State agencies. The accuracy of the lists, therefore, is dependent on the completeness of these organizational listings. A discrepancy in the number of reported State penal institutions should also be noted. The number of prisons reported by the States under the ARS totals a little over 300. However, in 1960, the Bureau of the Census enumerated 1,027 State prisons. The reason for this discrepancy cannot be readily seen. All States report at least one State prison on their lists. It might be necessary to check closely the reported penal institutions for each State and prove worthwhile to use the Census data to identify missing facilities.

Future Maintenance of the ARS and MFI

The ARS consists primarily of State agencies, Federal agencies, and national voluntary organizations. During the three stages of compilation of the updated MFI a detailed count was made of the contribution which each individual list made to the updated MFI. From this information future composition of the ARS may be determined. For instance, suppose a list from a State agency that is not slated to participate in the ARS is examined. If this list makes a meaningful contribution, then the agency submitting the list will be included in the ARS for future reporting.

The MFI is now being updated, with three major goals. First, to identify in-scope facilities,

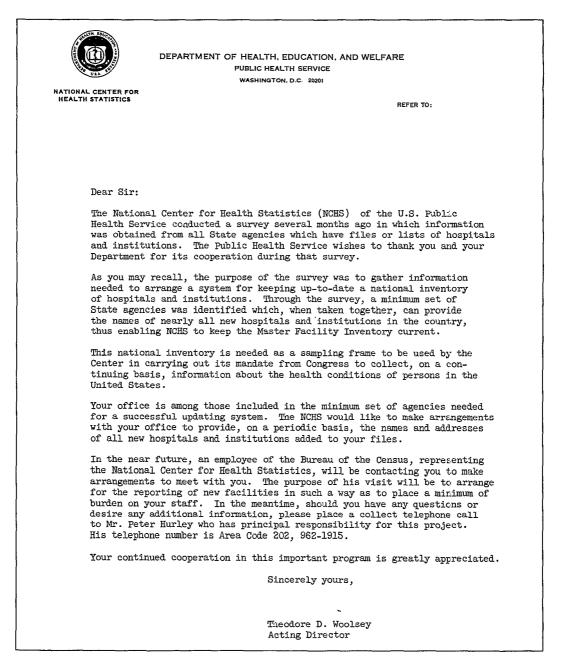
second, to classify the facilities by type, and, finally, to weed out facilities that have gone out of business. A number of facilities were listed on the old MFI that were not on any of the lists supplied from the ARS. It is thought that these facilities will be found to be out of business when the survey of the updated MFI is completed. If these facilities are still functioning, steps will have to be taken to seek sources for the names of the missing facilities. These sources, of course, would then be included in the ARS for future reporting.

Other methods of evaluating coverage in the MFI will be used. The Complement Survey, discussed earlier, will be conducted each time the entire MFI is surveyed. However, if it turns out that the ARS provides adequate coverage, the Complement Survey can be conducted at less frequent intervals. Tentative plans also call for using professional journals and lists for spot checking to see if all new facilities are being picked up by the ARS.

After the ARS is established, it is planned to survey the entire MFI biennially. The biennial surveys will provide not only current information needed for sample design and estimation purposes, but also national statistics on the number and types of hospitals and institutions in the country and changes that occur between survey dates.

APPENDIX I

SURVEY LETTER ANNOUNCING VISITS CONDUCTED BY THE BUREAU OF THE CENSUS



APPENDIX II

ANNUAL REPORT CARD USED IN THE REPORTING INFORMATION FILE

| | Annual F | Report Card | | | |
|--|----------|---------------------------|------|------|------|
| State Department | | Name of Contact Ferson | | | |
| | | Address of Contact Person | | | |
| Name of list | | 1 | | | |
| Source code | | | | | |
| Mail request for listing | 1966 | 1967 | 1968 | 1969 | 1970 |
| First mail follow-up | | | | | |
| Second mail follow-up | | | | | |
| Telephone follow-up | | | | | |
| Date of response | | | | | |
| Pub. date of returned list | | | | | |
| No. of new facilities added since last year | | | | | |

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