

Public-use Linked NCHS-CMS Medicaid Feasibility Study Files

(Updated 1/2019)

INTRODUCTION

The National Center for Health Statistics (NCHS) has linked data collected from several NCHS population surveys with Medicaid administrative data from the Centers for Medicare & Medicaid Services (CMS).

Medicaid and Children's Health Insurance Program (CHIP) enrollment and claims data covering service from 1999-2014 are available for participants that linked from the following NCHS surveys:

- 1994-2013 National Health Interview Survey (NHIS)
- 1999-2012 National Health and Nutrition Examination Survey (NHANES)
- NHANES I Epidemiologic Follow-up Study (NHEFS)
- Third National Health and Nutrition Examination Survey (NHANES III)
- The Second Longitudinal Study of Aging (LSOA II)
- 2004 National Nursing Home Survey (NNHS)
- 2007 National Home and Hospice Care Survey (NHHCS)

Survey data collected from eligible survey participants for each of these NCHS surveys were linked to CMS Medicaid Analytic eXtract (MAX) data. The MAX data contain individual-level information on demographics, monthly enrollment status, eligibility group, and use and costs of services during the year. For each survey participant linked to the MAX data, information may be available on any of five separate MAX files. The MAX files include: the Person Summary (PS) file, the Inpatient Hospital (IP), the Long Term Care (LT) file, the Other Services (OT) file, and the Prescription Drug (RX) file. More information about the types of data on each of these files can be found at the NCHS-CMS Medicaid Linked Data website: <https://www.cdc.gov/nchs/data-linkage/medicaid.htm>

PUBLIC-USE LINKED NCHS-CMS MEDICAID FEASIBILITY STUDY FILES

Due to confidentiality requirements, the Linked NCHS-CMS Medicaid files are currently restricted for research use and the data are only accessible through the NCHS Research Data Center (RDC). Instructions for submitting an RDC proposal to access the data can be found on the NCHS RDC website: <https://www.cdc.gov/rdc/index.htm>

To maximize the utilization of these data sets, NCHS has created and released public-use NCHS-CMS Medicaid Feasibility Study data files. These files provide information about survey participant eligibility for CMS linkage (*linkage-eligibility* – described below), final match status

(whether the participant linked to the MAX data), and which specific MAX data files are available for each successfully linked survey participant. These files can be merged with the public-use survey data and used to determine the maximum available sample size so that the feasibility of conducting analyses utilizing the Linked NCHS-CMS Medicaid files can be assessed. This should be especially useful to researchers considering whether to initiate a RDC proposal to analyze the restricted-use Linked NCHS-CMS Medicaid files.

Each feasibility file is NCHS survey and survey year/cycle specific. A Linked NCHS-CMS Medicaid Feasibility Study file has been created for all surveys listed above. Each file contains a match status variable: `CMS_MEDICAID_MATCH` -- to indicate whether the NCHS survey participant was eligible for CMS Medicaid linkage and if eligible, whether successfully matched to MAX data. The feasibility file also includes a variable to indicate if a survey participant has a linked data record on each of the five MAX files for each year of Medicaid/CHIP benefits coverage. It is important to note that the variables in this data file do not contain any information about benefits or payments; they are simply designed to give researchers a way to gauge whether their analytic samples will have sufficient numbers of sample persons with linked MAX data to warrant an application to the RDC.

LINKAGE ELIGIBILITY

Approval for the linkage of data for NCHS survey participants to CMS administrative records was provided by the NCHS Research Ethics Review Board (ERB). The NCHS ERB, also known as an Institutional Review Board or IRB, is an appointed ethics review committee established to protect the rights and welfare of human research subjects. The linkage was performed only for participants who are “linkage-eligible”. The criteria for determining linkage eligibility vary by survey and year due to the variability of questions across NCHS surveys, changes over time in the procedures for collecting personally identifiable information (PII) time, and changes in who are administered specific questions. Only NCHS survey participants who have provided consent as well as the necessary PII, such as date of birth, SSN or Medicare Health Insurance Claim (HIC) number, are considered linkage-eligible. Linkage-eligibility refers to the potential ability to link data for a NCHS survey participant to MAX data. It is distinct from program-eligibility, which defines whether an individual meets Federal and State-specific Medicaid eligibility criteria.

NCHS survey participants who were under age 18 at the time of the survey are considered linkage-eligible, if the listed linkage eligibility criteria are met and consent is provided by their parent or guardian. However, in accordance with NCHS ERB guidelines, NCHS can only provide linked administrative data generated for program participation, claims, and other events that occurred prior to the participant’s 18th birthday.

SAMPLE PROGRAMS

There are three sample programs provided to assist researchers when reading in the Public-use Linked NCHS-CMS Medicaid Feasibility Study ASCII files. Please note that all surveys use the same file layout. Researchers should select the public-use ID variable that corresponds with the survey data that will be used in their analysis. Information on constructing the public-use ID can be found in “The Linkage of National Center for Health Statistics Survey Data to Medicaid Enrollment and Claims Data - Methodology and Analytic Considerations” (<https://www.cdc.gov/nchs/data/datalinkage/nchs-medicaid-linkage-methodology-and-analytic-considerations.pdf>).

The first sample program provides researchers using SAS with code to read in the data file and run their analyses using the SAS software. By using the ASCII data file (.DAT file) as input to the program, other types of data files (e.g. SAS, SPSS) can be created.

The second program provides researchers using STATA with code to read in the data file and run their analyses using the STATA software.

The third program provides researchers using R with a program to read in the data file and run their analyses using R software.

Please contact the NCHS Data Linkage Staff at datalinkage@cdc.gov should you identify any potential errors in the Public-use Linked NCHS-CMS Medicaid Feasibility Study data or documentation.

STATEMENT OF AUTHENTICITY

This material has been cleared for public distribution by Centers for Disease Control and Prevention (CDC) and will be authentic if obtained directly from the following location: ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/datalinkage/feasibility_study_data/CMS/medicaid/ CDC takes all effort to assure the authenticity of electronically distributed documents. However, in all instances where the electronic and official agency record differ, the authenticity of the official agency record is controlling.

DATA USE RESTRICTIONS

The Public Health Service Act (Section 308 (d)) provides that the data collected by the NCHS, CDC, may be used only for the purpose of health statistical reporting and analysis.

Any effort to determine the identity of any reported case is prohibited by this law.

NCHS does all it can to assure that the identity of data subjects cannot be disclosed. All direct identifiers, as well as any characteristics that might lead to identification, are omitted

from the data file. Any intentional identification or disclosure of a person or establishment violates the assurances of confidentiality given to the providers of the information. Therefore, users will:

1. Use the data in these data files for statistical reporting and analysis only.
2. Make no use of the identity of any person or establishment discovered inadvertently and advise the Director, NCHS, of any such discovery (301-458-4500).
3. Not link these data files with individually identifiable data from other NCHS or non-NCHS data files.

By using these data, you signify your agreement to comply with the above-stated statutorily based requirements.