

Chronic Condition Data Warehouse

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Applying CCW Chronic Conditions to Medicaid Data

Purpose: This document provides information for CCW Conditions file users who would like additional details regarding how the CCW Chronic Condition algorithms are applied to Medicaid data (i.e., MAX or Alpha-MAX) in the CCW Medicaid Enrollee Supplemental File (MESF).

Background: The condition algorithms specify a number and type of claims that are queried for the presence of the diagnoses/procedures for the conditions. When using MAX data, additional precision is needed to identify the appropriate claims, since Medicaid claims may include many different types of services, including para-professional or community services (e.g., transportation, home health aides). The intent of the algorithm is to exclude claims where the services do not require a licensed health care professional.

CCW uses the type of service code (TOS code; the variable in the MAX claims called MAX_TOS) to limit Medicaid claims so they more closely align with Medicare settings. The table below depicts the TOS used to associate the MAX claims with the Medicare claim types. Note: This TOS restriction does not apply to any of the “Other Chronic and Potentially Disabling” conditions, which were specified by the CMS Medicare-Medicaid Coordination Office (MMCO).

Claim Type	MAX_TOS
Inpatient	01 (Inpatient hospital)
Skilled Nursing Facility (SNF)	07 (Nursing facility)
Home Health Agency (HHA)	13 (Home health)
Hospital Outpatient (HOP)	11 (OP hospital), 12 (Clinic)
Carrier	8 (Physician), 10 (Other provider), 15 (Lab and x-ray)

The algorithms also include a particular reference period (or look-back period), which varies from one to three years for the CCW condition algorithms. The condition variables have a value that indicates whether the beneficiary was able to be observed in the fee-for-service (FFS) claims data for the full reference period – or until the date of death (i.e., based on Medicare coverage criteria – full Part A and Part B coverage, and no HMO).

In the CCW MESF, each condition has three “end of the year” variables that show whether the condition criteria were met using only Medicare data, only Medicaid data, or both payers combined (i.e., person was dually enrolled in Medicare/Medicaid). For example, for chronic kidney disease, there are the following three payer perspectives for the yearly condition variables: CKD_MEDICARE, CKD_MEDICAID, and CKD_COMBINED. For each of these variables, there are 4 mutually exclusive values to describe whether the clinical (claims) criteria were met, and whether the FFS enrollment (coverage) criteria were met:

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Value	Value Description	Met algorithm claims requirement?	Had FFS coverage during reference period?
0	Beneficiary did not meet claims criteria or have sufficient FFS coverage	No	No
1	Beneficiary met claims criteria but did not have sufficient FFS coverage	Yes	No
2	Beneficiary did not meet claims criteria but had sufficient FFS coverage	No	Yes
3	Beneficiary met claims criteria and had sufficient FFS coverage	Yes	Yes

The values 0 and 2 indicate that the person did not have a pattern of claims to indicate treatment for the condition of interest; values 1 and 3 indicate the person had claims which indicated treatment for the condition.

The values 2 and 3 indicate the person had FFS coverage for the entire look-back period (e.g., for two year conditions this means the beneficiary had 24 months of FFS coverage). When looking at the Combined (Medicare/Medicaid) series of variables (e.g., CKD_COMBINED), the values 2 or 3 mean the beneficiary had FFS coverage for BOTH Medicare and Medicaid for the entire 2-year look-back period.

The CCW [“Technical Guidance: Calculating Medicare Population Statistics”](#) document, located on the “Analytic Guidance” page of the ccwdata.org website presents examples for how to use the condition variables for examining condition prevalence.