

Mississippi Medicaid DRG Grouper Settings

Introduction

The Mississippi Division of Medicaid (the Division) uses the 3M™ APR-DRG mainframe grouper to assign APR-DRGs to inpatient acute care claims. Providers are not required to purchase the APR-DRG grouping software. However, many providers choose to use the 3M desktop grouping software to verify APR-DRG assignments as grouped and disseminated by the Division. This document describes the desktop Core Grouping Software (CGS) schedule settings providers should use to replicate the Division's grouping results.

Technical operation of the grouping software is outside the scope of this document. This document assumes the reader is versed in the technical operation of the 3M™ desktop CGS. 3M provides training on the technical operation of its products to licensed users.

The terminology and screen print illustrations throughout this document were obtained from the 3M CGS desktop user interface and from the 3M customer support website using the documentation library.

Key Terms

Envision	The Mississippi Medicaid Management Information System (MMIS)
APR-DRG	All Patient Refined Diagnosis Related Groups
Grouping	The act of determining the APR-DRG assignment for a claim using the 3M CGS grouping algorithm
The Division	The Mississippi Division of Medicaid
POA	Present on admission indicators
Schedule	A collection of settings that provide processing details for a specified set of records, including: <ul style="list-style-type: none">• Grouper and reimbursement scheme to use• Date range when the schedule applies• Values (standard and hospital-specific) to use for calculating reimbursement• Settings specific to the grouper or reimbursement scheme, such as options for determining birth weight and computing discharge DRG
3M	3M Health Information Systems (HIS). APR-DRGs, a proprietary software program, is owned and licensed by 3M HIS. All copyrights in and to the 3M software are owned by 3M. All rights reserved.

Overview

This section provides an overview of available grouper setting options. The descriptions correspond to the grouper screen prints in Figures 1-13 below (grouper settings are not shown for state fiscal year (SFY) 21 stays with discharge dates on or after October 1, 2020, because the HAC settings are not yet available).

- **User Key 1** – The primary key the software uses to identify the schedule to use for processing.
 - A schedule must be set up and available for processing in the Schedule Setup Module.
 - The software matches the user keys on the record to the user keys in schedules and compares the claim dates on the record with the schedule's effective date range when determining which schedule to use for processing.
- **User Key 2** – The primary key the software uses to identify the schedule to use for processing.
 - User Key 2 is required if using the software to determine reimbursement. If using the software to determine the APR-DRG assignment only, this option can be left blank. Using the software to calculate

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reimbursement is outside the scope of this document. Licensed users should refer to 3M for instructions relative to how to use the desktop CGS to calculate reimbursement.

- **Begin date** – The effective begin date of the schedule to use for processing.
- **End date** – The effective end date of the schedule to use for processing.
- **Description** – A user defined description of the schedule.
- **Reimbursement scheme** – The inpatient reimbursement scheme which the hospital or agency applies during the effective time period. This setting is not required for DRG assignment and is out-of-scope for this document. Please refer to 3M documentation for how to use this setting if you are using the software to calculate reimbursement.
- **Keyed by** – This setting indicates whether claims should be processed based on the first or last dates of service (admit date or discharge date). Effective October 1, 2012, DRG payment was based on the first date of service (keyed by = admit date). Effective October 1, 2013, the Division updated the DRG payment logic to be driven by the last date of service (keyed by = discharge date). The screen shots below indicate when to select a keyed by option of admit or discharge date.
- **Grouper version** – New APR-DRG versions are issued on October 1 of each year, to coincide with the release of the new ICD diagnosis and procedure codes upon which the DRG logic relies. The most recently released grouper version is APR-DRG Version 37, which was released on October 1, 2019. However, for SFY 2021 (July 1, 2020, to June 30, 2021), the Division will continue to use Version 35 of the APR-DRG grouper, which was released on October 1, 2017.
- **Interpretation of Undetermined POA indicators** – Select the default of option 0 - W treated as N, U treated as N.
- **PPC version** – Potentially Preventable Complications (PPC) do not apply to Mississippi Medicaid at this time. The indicator should be set to the default of none.
- **HAC** – Hospital Acquired Conditions. The Deficit Reduction Act of 2005 requires the Centers for Medicare and Medicaid Services (CMS) to adjust Medicare DRG payment for certain preventable Hospital Acquired Conditions (HACs). Most hospitals must include POA indicators on inpatient Medicare claims so that HACs can be identified. When a diagnosis satisfies the HAC criteria, that diagnosis is not considered a Complication or Comorbidity (CC) or a Major Complication or Comorbidity (MCC), and it is not considered in the grouping and estimated reimbursement calculation for the stay. Points to consider include the following:
 - Beginning October 1, 2007, CMS requires POA reporting.
 - Beginning October 1, 2008, CMS does not pay hospitals for HACs that CMS considers preventable.
 - For Medicaid programs, payment is adjusted for healthcare acquired conditions (HCACs), which are very similar to HACs. The Division, with CMS approval, manually adjusted HCACs from October 1, 2011, through June 30, 2014. Because Medicaid will no longer reimburse hospitals for costs associated with HCACs, and many states base their Medicaid grouping results on the 3M APR-DRG Classification system, 3M has added functionality to the APR-DRG grouper to accommodate the HCAC regulations and provide HCAC-adjusted reimbursement; this tool is referred to as the HAC Utility. Effective July 1, 2014, the Division began using the 3M HAC utility to identify HCACs.
 - The HAC utility version is Mississippi and SFY specific beginning July 1, 2014, forward. The Mississippi specific HAC utility version recognizes the pediatric age break as less than 21. Other, non-state specific, indicators recognize the pediatric age break as less than 18.
- **Payer logic** – This indicator applies to Ohio Medicaid only and should be defaulted to none.
- **Birth weight** – Assignment of some newborn/neonatal DRGs require the patient's birth weight in order to determine the correct DRG assignment. The birth weight option, (the fifth selection option) for Mississippi Medicaid is coded weight with default. Coded birth weight means that the weight is coded by the diagnosis codes listed on the claim. The software considers coded birth weight invalid in these instances:

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- If there is more than one diagnosis code-defined birth weight on the claim and the codes indicate different birth weights.
- If the only diagnosis code defining a birth weight is a Not Otherwise Specified (NOS) code.

The coded weight with default option tells the software that if the birth weight determined from the diagnoses on the claim is invalid, the birth weight is set to a default of 2,500 grams.

- **Discharge DRG Option** – This option tells the grouper how to handle Complication of Care (COC) codes when computing the discharge DRG, discharge Severity of Illness (SOI) and discharge Risk of Mortality (ROM). Prior to July 1, 2015, the discharge DRG option on the desktop grouper was option 1, “Compute excluding all Complication of Care Codes.” Beginning July 1, 2015, the Division changed the Discharge DRG option to “Compute excluding only non-POA Complication of Care Codes.” This is option 0 on the desktop grouper. Excluding only non-POA COC codes is the grouper’s default option. The primary difference between these two options is the ability to compute the discharge DRG, SOI, and ROM with or without COC codes that were indicated as POA on the record.
- **Entered Code Mapping** – New ICD-10 diagnosis and procedure codes are released by CMS each October 1. At the same time, old ICD-10 diagnosis and procedure codes are retired if they are no longer applicable or are superseded by a new code. Each version of the APR-DRG grouping software is designed to use the current release of ICD-10 diagnosis and procedure codes as of the date of the APR-DRG grouping software release. If a user is processing inpatient records that contain diagnosis or procedure codes that are not present in the selected version of the APR-DRG grouping software, code mapping is required. Mapping translates expired or new codes on the claim to valid ICD-10 codes as required by the grouper version. Although historically this field has been set based on the ICD/PCS code version used on the claim records to be processed, current releases of the 3M CGS contain an option to “Automatically Determine Code Mapping.” This option automatically determines the appropriate version of the code mapper to apply based on the discharge date on the claim record.
- **Mapping Type** – Code mapping is defined in two ways, historical or logical.
 - Historical mapping is used to backward map from a newer version to an older version and to convert older codes to a newer code set version. For example, you can use the historical mapping option to map ICD-10-CM/PCS that became available on 10/1/2019 codes to ICD-10-CM/PCS codes that were current for V.35 of the APR-DRG grouper, which was released 10/1/2017.
 - Logical mapping is only used with ICD-9-CM codes. It is not used with ICD-10-CM/PCS.

Note: This field is set to none when the grouper version is from the same fiscal year as the claims to be processed.

Table 1 provides an overview of the key grouper, mapper, and HAC Utility versions since the beginning of the APR-DRG program in Mississippi.

Table 1 APR-DRG Grouper Versions History							
State Fiscal Year	From Date	Through Date	DRG Grouper	HAC	Mapper	Segment	ICD-Code Version
SFY 13	10/1/2012	6/30/2013	V.29	NA	V.30	Complete	ICD-9-CM
SFY 14	7/1/2013	9/30/2013	V.29	NA	V.30	Part I	ICD-9-CM
	10/1/2013	6/30/2014	V.30	NA	V.31	Part II	ICD-9-CM
SFY 15	7/1/2014	9/30/2014	V.31	V.31	NA	Part I	ICD-9-CM
	10/1/2014	6/30/2015			V.32	Part II	ICD-9-CM
SFY 16	7/1/2015	9/30/2015	V.32	V.32	NA	Part I	ICD-9-CM
	10/1/2015	6/30/2016			V.33	Part II	ICD-10-CM/PCS
SFY 17	7/1/2016	9/30/2016	V.33	V.33	NA	Part I	ICD-10-CM/PCS

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Table 1 APR-DRG Grouper Versions History							
State Fiscal Year	From Date	Through Date	DRG Grouper	HAC	Mapper	Segment	ICD-Code Version
	10/1/2016	6/30/2017			V.34	Part II	ICD-10-CM/PCS
SFY 18	7/1/2017	9/30/2017	V.33	V.33	V.34	Part I	ICD-10-CM/PCS
	10/1/2017	6/30/2018		V.35	V.35	Part II	ICD-10-CM/PCS
SFY 19	7/1/2018	9/30/2018	V.35	V.35	NA	Part I	ICD-10-CM/PCS
	10/1/2018	6/30/2019		V.36	V.36	Part II	ICD-10-CM/PCS
SFY 20	7/1/2019	9/30/2019	V.35	V.36	V.36	Part I	ICD-10-CM/PCS
	10/1/2019	6/30/2020		V.37	V.37	Part II	ICD-10-CM/PCS
SFY 21	7/1/2020	9/30/2020	V.35	V.37	V.37	Part I	ICD-10-CM/PCS
	10/1/2020	6/30/2021		V.38	V.38	Part II	ICD-10-CM/PCS

Notes:

1. In SFY 13, the DRG algorithm was implemented after the state fiscal year began.
2. In SFY 14, the update to V.30 of the APR-DRG algorithm was made after the state fiscal year began.
3. For SFY 18, V. 34 of the grouper and HAC was not installed.
4. For SFYs 20 and 21, V.35 of the grouper remains in place.

The grouper settings for each year of the APR-DRG program are shown in the screen captures below. The grouper setting screen captures use the “Automatically Determine Code Mapping” setting to reduce the number of CGS schedules that a hospital needs to create to group claims from any year of the program. These schedules should use the “Historical” mapping type. Existing schedules that explicitly identify the relevant mapper (as shown in Table 1) will still group appropriately, and do not need to be replaced.

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Figure 1: Grouper Settings, SFY 13

The screenshot shows a software window titled "Schedule - Copy" with a yellow background. The window contains several input fields and dropdown menus for configuring grouper settings. On the right side, there is a vertical column of buttons: "What's This?", "Print", "Clear", "Cancel", "Save", and "Save as...".

User key1:	MS SFY 13	User key2:	
Begin date:	10/01/2012	End date:	06/30/2013
Description:	Mississippi SFY 13		
Modified date:	07/18/2019		
Reimbursement scheme:	None		
<input type="checkbox"/> Automatically Determine Reimbursement Settings			
<input type="checkbox"/> Automatically Determine Grouper Settings			
Keyed by:	Admit date		
Grouper version:	APR DRG Grouper version 29.0 (10/01/2011)		
Interpretation of Undetermined POA Indicators:	0 - W treated as N, U treated as N		
PPC version:	None		
HAC version:	None		
Payer Logic Indicator:	None (Standard 3M APR DRG)		
Birth weight option:	Coded weight with default		
Discharge DRG option:	Compute excluding all Complication of Care codes		
Entered code mapping:	Automatically Determine Code Mapping		
Mapping type:	Historical		

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Figure 2: Grouper Settings, SFY 14A

The screenshot shows a software window titled "Schedule - Copy" with a yellow background. The window contains the following settings:

- User key1:** MS SFY 14A
- User key2:** (empty)
- Begin date:** 07/01/2013
- End date:** 09/30/2013
- Description:** Mississippi SFY 14A
- Modified date:** 07/18/2019
- Reimbursement scheme:** None (dropdown)
- Automatically Determine Reimbursement Settings
- Automatically Determine Grouper Settings
- Keyed by:** Admit date (dropdown)
- Grouper version:** APR DRG Grouper version 29.0 (10/01/2011) (dropdown)
- Interpretation of Undetermined POA Indicators:** 0 - W treated as N, U treated as N (dropdown)
- PPC version:** None (dropdown)
- HAC version:** None (dropdown)
- Payer Logic Indicator:** None (Standard 3M APR DRG) (dropdown)
- Birth weight option:** Coded weight with default (dropdown)
- Discharge DRG option:** Compute excluding all Complication of Care codes (dropdown)
- Entered code mapping:** Automatically Determine Code Mapping (dropdown)
- Mapping type:** Historical (dropdown)

On the right side of the window, there is a vertical column of buttons: "What's This?", "Print", "Clear", "Cancel", "Save", and "Save as...".

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Figure 3: Grouper Settings, SFY 14B

The screenshot shows a software window titled "Schedule - Copy" with a yellow background. The window contains the following settings:

- User key1:** MS SFY 14B
- User key2:** (empty)
- Begin date:** 10/01/2013
- End date:** 06/30/2014
- Description:** Mississippi SFY 14B
- Modified date:** 07/18/2019
- Reimbursement scheme:** None
- Automatically Determine Reimbursement Settings
- Automatically Determine Grouper Settings
- Keyed by:** Discharge date
- Grouper version:** APR DRG Grouper version 30.0 (10/01/2012)
- Interpretation of Undetermined POA Indicators:** 0 - W treated as N, U treated as N
- PPC version:** None
- HAC version:** None
- Payer Logic Indicator:** None (Standard 3M APR DRG)
- Birth weight option:** Coded weight with default
- Discharge DRG option:** Compute excluding all Complication of Care codes
- Entered code mapping:** Automatically Determine Code Mapping
- Mapping type:** Historical

On the right side of the window, there is a vertical column of buttons: "What's This?", "Print", "Clear", "Cancel", "Save", and "Save as...".

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Figure 4: Grouper Settings, SFY 15

Schedule - Copy

User key1: MS SFY 15 User key2:

Begin date: 07/01/2014 End date: 06/30/2015

Description: Mississippi SFY 15

Modified date: 07/18/2019

Reimbursement scheme: None

Automatically Determine Reimbursement Settings

Automatically Determine Grouper Settings

Keyed by: Discharge date

Grouper version: APR DRG Grouper version 31.0 (10/01/2013)

Interpretation of Undetermined POA Indicators: 0 - W treated as N, U treated as N

Grouper ICD version qualifier: ICD-10

PPC version: None

HAC version: HAC Version 31.0 for Mississippi Medicaid (10/01/2013)

Payer Logic Indicator: None (Standard 3M APR DRG)

Birth weight option: Coded weight with default

Discharge DRG option: Compute excluding all Complication of Care codes

Entered code mapping: Automatically Determine Code Mapping

Mapping type: Historical

HAC Settings

Additional HAC categories to be suppressed during HAC-adjusted grouping

All HACs

HAC Categories to Suppress

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Figure 5: Grouper Settings, SFY 16

The screenshot shows a software window titled "Schedule - Copy" with a yellow background. The window contains the following settings:

- User key1:** MS SFY 16
- User key2:** (empty)
- Begin date:** 07/01/2015
- End date:** 06/30/2016
- Description:** Mississippi SFY 16
- Modified date:** 07/18/2019

On the right side of the window, there is a vertical stack of buttons: "What's This?", "Print", "Clear", "Cancel", "Save", and "Save as...".

The main settings area includes:

- Reimbursement scheme:** None
- Automatically Determine Reimbursement Settings
- Automatically Determine Grouper Settings
- Keyed by:** Discharge date
- Grouper version:** APR DRG Grouper version 32.0 (10/01/2014)
- Interpretation of Undetermined POA Indicators:** 0 - W treated as N, U treated as N
- Grouper ICD version qualifier:** ICD-10
- PPC version:** None
- HAC version:** HAC Version 32.0 for Mississippi Medicaid (07/01/2015)
- Payer Logic Indicator:** None (Standard 3M APR DRG)
- Birth weight option:** Coded weight with default
- Discharge DRG option:** Compute excluding only non-POA Complication of Care codes
- Entered code mapping:** Automatically Determine Code Mapping
- Mapping type:** Historical

Below these settings is a section titled "HAC Settings" with a sub-section "Additional HAC categories to be suppressed during HAC-adjusted grouping". It contains:

- All HACs
- A table titled "HAC Categories to Suppress" which is currently empty.

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Figure 7: Grouper Settings, SFY 18A

The screenshot shows a software window titled "Schedule - Copy" with a yellow background. The window contains the following settings:

- User key1:** MS SFY 18A
- User key2:** (empty)
- Begin date:** 07/01/2017
- End date:** 09/30/2017
- Description:** Mississippi SFY 18A
- Modified date:** 07/18/2019
- Reimbursement scheme:** None
- Automatically Determine Reimbursement Settings
- Automatically Determine Grouper Settings
- Keyed by:** Discharge date
- Grouper version:** APR DRG Grouper version 33.0 (10/01/2015)
- Interpretation of Undetermined POA Indicators:** 0 - W treated as N, U treated as N
- PPC version:** None
- HAC version:** HAC Version 33.0 for Mississippi Medicaid (07/01/2016)
- Payer Logic Indicator:** None (Standard 3M APR DRG)
- Birth weight option:** Coded weight with default
- Discharge DRG option:** Compute excluding only non-POA Complication of Care codes
- Entered code mapping:** Automatically Determine Code Mapping
- Mapping type:** Historical

On the right side of the window, there are buttons: What's This?, Print, Clear, Cancel, Save, and Save as... The "Save" button is highlighted.

HAC Settings

Additional HAC categories to be suppressed during HAC-adjusted grouping

- All HACs
- HAC Categories to Suppress**
- (Empty list box)

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Figure 8: Grouper Settings, SFY 18B

Schedule - Copy

User key1: MS SFY 18B User key2:

Begin date: 10/01/2017 End date: 06/30/2018

Description: Mississippi SFY 18B

Modified date: 07/18/2019

Reimbursement scheme: None

Automatically Determine Reimbursement Settings

Automatically Determine Grouper Settings

Keyed by: Discharge date

Grouper version: APR DRG Grouper version 33.0 (10/01/2015)

Interpretation of Undetermined POA Indicators: 0 - W treated as N, U treated as N

PPC version: None

HAC version: HAC Version 35.0 for Mississippi Medicaid (10/01/2017)

Payer Logic Indicator: None (Standard 3M APR DRG)

Birth weight option: Coded weight with default

Discharge DRG option: Compute excluding only non-POA Complication of Care codes

Entered code mapping: Automatically Determine Code Mapping

Mapping type: Historical

HAC Settings

Additional HAC categories to be suppressed during HAC-adjusted grouping

All HACs

HAC Categories to Suppress

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Figure 9: Grouper Settings, SFY 19A

Schedule - Copy

User key1: MS SFY 19A User key2:

Begin date: 07/01/2018 End date: 09/30/2018

Description: Mississippi SFY 19A

Modified date: 07/18/2019

Reimbursement scheme: None

Automatically Determine Reimbursement Settings

Automatically Determine Grouper Settings

Keyed by: Discharge date

Grouper version: APR DRG Grouper version 35.0 (10/01/2017)

Interpretation of Undetermined POA Indicators: 0 - W treated as N, U treated as N

PPC version: None

HAC version: HAC Version 35.0 for Mississippi Medicaid (10/01/2017)

Payer Logic Indicator: None (Standard 3M APR DRG)

Birth weight option: Coded weight with default

Discharge DRG option: Compute excluding only non-POA Complication of Care codes

Entered code mapping: Automatically Determine Code Mapping

Mapping type: Historical

HAC Settings

Additional HAC categories to be suppressed during HAC-adjusted grouping

All HACs

HAC Categories to Suppress

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Figure 11: Grouper Settings, SFY 20A

Schedule - Copy

User key1: MS SFY 20A User key2:

Begin date: 07/01/2019 End date: 09/30/2019

Description: Mississippi SFY 20A

Modified date: 07/18/2019

Reimbursement scheme: None

Automatically Determine Reimbursement Settings

Automatically Determine Grouper Settings

Keyed by: Discharge date

Grouper version: APR DRG Grouper version 35.0 (10/01/2017)

Interpretation of Undetermined POA Indicators: 0 - W treated as N, U treated as N

PPC version: None

HAC version: HAC Version 36.0 for Mississippi Medicaid (10/01/2018)

Payer Logic Indicator: None (Standard 3M APR DRG)

Birth weight option: Coded weight with default

Discharge DRG option: Compute excluding only non-POA Complication of Care codes

Entered code mapping: Automatically Determine Code Mapping

Mapping type: Historical

HAC Settings

Additional HAC categories to be suppressed during HAC-adjusted grouping

All HACs

HAC Categories to Suppress

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Figure 12: Grouper Settings, SFY 20B

Schedule - Copy

User key1: MS SFY 20B User key2:

Begin date: 10/01/2019 End date: 06/30/2020

Description: Mississippi SFY 20B

Modified date: 07/18/2019

Reimbursement scheme: None

Automatically Determine Reimbursement Settings

Automatically Determine Grouper Settings

Keyed by: Discharge date

Grouper version: APR DRG Grouper version 35.0 (10/01/2017)

Interpretation of Undetermined POA Indicators: 0 - W treated as N, U treated as N

PPC version: None

HAC version: HAC Version 37.0 for Mississippi Medicaid (10/01/2019)

Payer Logic Indicator: None (Standard 3M APR DRG)

Birth weight option: Coded weight with default

Discharge DRG option: Compute excluding only non-POA Complication of Care codes

Entered code mapping: Automatically Determine Code Mapping

Mapping type: Historical

HAC Settings

Additional HAC categories to be suppressed during HAC-adjusted grouping

All HACs

HAC Categories to Suppress

