

# Mississippi Medicaid Grouper Settings, Comprehensive Guide

## 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 closes the gap between the settings used by the mainframe grouper which is installed in Medicaid Management Information System (MMIS) and the settings providers would need to replicate grouping results when they use the 3M desktop version of the mainframe grouper.

The terminology and screen print illustrations throughout this document were obtained from the 3M desktop grouper, Core Grouping Software (CGS), and from the 3M customer support website using the documentation library.<sup>1</sup>

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<sup>1</sup> <https://support.3mhis.com/app/answers/list/kw/documentation%20library/search/1>

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## Key Terms

1. Envision – The Mississippi Medicaid Management Information System or MMIS
2. APR-DRG – All Patient Refined Diagnosis Related Groups
3. Settings – The required indicators that are used to set the foundation for how the APR-DRG assignments are determined within the grouping software
4. Grouping – The act of determining the APR-DRG assignment for a claim using the 3M grouping algorithm
5. The Division – The Mississippi Division of Medicaid
6. POA – Present on admission indicators
7. 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.

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An overview of each grouper indicator/setting:

1. **Grouper version** – Although there are various DRG algorithms, some even with different developers, a convention of the industry is that all versions are numbered in parallel starting from October 1, 1983. For example, the first version of Medicare Severity or MS-DRGs was V.25, effective October 1, 2007. New DRG versions including APR-DRGs (All Patient Refined Diagnosis Related Groups), which the Division uses, 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 current grouper version is APR-DRG version 33 which was released on October 1, 2015.
2. **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.
3. **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 Hospital Acquired Conditions (HACs) that are preventable. Most hospitals must include Present on Admission (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.
  - The Division, with CMS approval, manually adjusted HACs from October 1, 2011, through June 30, 2014. Effective July 1, 2014, the Division began using the 3M HAC utility to identify HACs. Because Medicaid will no longer reimburse hospitals for costs associated with Hospital Acquired Conditions (HACs), 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 HAC regulations and provide HAC-adjusted reimbursement.
  - The HAC version is Mississippi and SFY specific beginning July 1, 2014 forward. The Mississippi specific HAC version recognizes the pediatric age break as less than 21. Other, non-state specific, indicators recognize the pediatric age break as less than 18.
4. **Payer logic** – This indicator applies to Ohio Medicaid only and should be defaulted to none.
5. **Birth weight** – Assignment of some DRGs require the patient's birth weight in order to determine the correct DRG assignment. The birth weight option, (option 5 on the desktop grouper) for Mississippi Medicaid is coded weight with default. Coded birth weight means that the weight is coded among the diagnosis codes listed on the claim. The software considers coded birth weight invalid in these instances:
  - 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 entered birth weights are ignored or invalid, the birth weight should be set to a default of 2,500 grams.

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6. **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 the discharge Risk of Mortality (ROM). Prior to 7/1/2015, the discharge DRG option, on the desktop grouper, was option 1, Exclude all Complication of Care Codes. Beginning 7/1/2015, the Division changed the Discharge DRG option to “Exclude 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 the Compilation of Care codes that were indicated as Present on Admission on the record.
7. **Keyed by** – Effective October 1, 2012, DRG payment was based on the first date of service. Effective October 1, 2013, the Division updated the DRG payment logic to be driven by the last date of service. The screen shots below indicate when to select a keyed by option of admit date or discharge date.
8. **Entered Code Mapping** – If a user is processing inpatient records that contain a diagnosis and procedure code version that is different from the code version required by the grouper, code mapping is required. Mapping translates the codes on the claim records to the code version used by the grouper version. This field is set based on the ICD/PCS code version used on the claim record.
9. **Mapping Type** – Code mapping is defined in two ways, historical or logical.
  - Historical mapping is the most common mapping type. This code mapping type is used when the ICD code version, at the national level, changes, but the grouping algorithm remains the same for a period of time before an upgrade occurs. The historical logic maps the input ICD code to an ICD code that would cause the patient to be assigned to the APR-DRG that would have been assigned if the ICD code version had not changed.
  - Logical mapping maps the input ICD code to an ICD code that would produce the most clinically appropriate APR-DRG assignment.

Note: This field is left blank when the grouper and mapper are within the same fiscal year.
10. **Relative Weights** – Prior to October 1, 2013, charge-based APR-DRG relative weights were used. Beginning October 1, 2013, Hospital-specific Relative Weights (HSRV) were used.

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**Figure 1 DRG Rate Years**

DRG Year	State Fiscal Year	Segment	ICD-Code Version	From Date	Through Date
DRG Year 1	NA <sup>1</sup>	Complete	ICD-9-CM	October 1, 2012	September 30, 2013
DRG Year 2	NA <sup>1</sup>	Complete	ICD-9-CM	October 1, 2013	June 30, 2014
DRG Year 3	SFY 2015 <sup>2</sup>	Part I	ICD-9-CM	July 1, 2014	September 30, 2014
		Part II	ICD-9-CM	October 1, 2014	June 30, 2015
DRG Year 4	SFY 2016	Part I	ICD-9-CM	July 1, 2015	September 30, 2015
		Part II	ICD-10-CM/PCS	October 1, 2015	June 30, 2016
DRG Year 5	SFY 2017	Part I	ICD-10-CM/PCS	July 1, 2016	September 30, 2016
		Part II	ICD-10-CM/PCS	October 1, 2016	June 30, 2017

**Notes**

1. The DRG algorithm was implemented after the state fiscal year began.
2. The DRG algorithm was brought into alignment with the state fiscal year.

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Figure 2 Grouper Settings Year 1

The screenshot shows a software dialog box titled "Schedule - Open" with a close button (X) in the top right corner. The dialog is divided into two main sections. The top section contains input fields for "User key1" (MSY1), "User key2" (empty), "Begin date" (10/01/2012), "End date" (09/30/2013), "Description" (Mississippi Year 1), and "Modified date" (07/28/2016). The bottom section contains a series of dropdown menus for "Grouper version" (APR DRG Grouper version 29.0 (10/01/2011)), "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), "Keyed by" (Admit date), "Entered code mapping" (ICD-9-CM Version 30.0 effective 10/01/2012), "Mapping type" (Historical), and "Reimbursement scheme" (None). On the right side of the dialog, there is a vertical column of buttons: "What's This?", "Print", "Clear", "Cancel", "Save", and "Save as...".

User key1:	MSY1	User key2:	
Begin date:	10/01/2012	End date:	09/30/2013
Description:	Mississippi Year 1		
Modified date:	07/28/2016		
Grouper version:	APR DRG Grouper version 29.0 (10/01/2011)		
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		
Keyed by:	Admit date		
Entered code mapping:	ICD-9-CM Version 30.0 effective 10/01/2012		
Mapping type:	Historical		
Reimbursement scheme:	None		

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Figure 3 Grouper Settings Year 2

The screenshot shows a software window titled "Schedule - Open" with a close button (X) in the top right corner. The window contains a form with the following fields and values:

User key1:	MSY2	User key2:	
Begin date:	10/01/2013	End date:	06/30/2014
Description:	Mississippi Year 2		
Modified date:	07/18/2016		

  

Grouper version:	APR DRG Grouper version 30.0 (10/01/2012)
PPC version:	None
HAC version:	None
Payer Logic Indicator:	None (Standard 3M APR DRG)
Birth weight option:	Entered or coded weight with default
Discharge DRG option:	Compute excluding all Complication of Care codes
Keyed by:	Discharge date
Entered code mapping:	ICD-9-CM Version 31.0 effective 10/01/2013
Mapping type:	Historical

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

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Figure 4 Grouper Settings Year 3 Part I

The screenshot shows the 'Schedule - Open' dialog box with the following fields and values:

User key1:	MSY3	User key2:	
Begin date:	07/01/2014	End date:	09/30/2014
Description:	Mississippi Year 3 Part I		
Modified date:	07/18/2016		
Grouper version:	APR DRG Grouper version 31.0 (10/01/2013)		
Grouper ICD version qualifier:	ICD-9		
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		
Keyed by:	Discharge date		
Entered code mapping:	None		

Buttons on the right side: What's This?, Print, Clear, Cancel, Save, Save as...

Figure 5 Grouper Settings Year 3 Part II

The screenshot shows the 'Schedule - Open' dialog box with the following fields and values:

User key1:	MSY3A	User key2:	
Begin date:	10/01/2014	End date:	08/30/2015
Description:	Mississippi Year 3 Part II		
Modified date:	07/18/2016		
Grouper version:	APR DRG Grouper version 31.0 (10/01/2013)		
Grouper ICD version qualifier:	ICD-9		
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		
Keyed by:	Discharge date		
Entered code mapping:	ICD-9-CM Version 32.0 effective 10/01/2014		
Mapping type:	Historical		

Buttons on the right side: What's This?, Print, Clear, Cancel, Save, Save as...

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Figure 6 Grouper Settings Year 4 Part I

The screenshot shows the 'Schedule - Open' dialog box with the following settings:

User key1:	MSY4	User key2:	
Begin date:	07/01/2015	End date:	09/30/2015
Description:	Mississippi Year 4 Part I		
Modified date:	07/20/2016		
Grouper version:	APR DRG Grouper version 32.0 (10/01/2014)		
Grouper ICD version qualifier:	ICD-9		
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		
Keyed by:	Discharge date		
Entered code mapping:	None		
Mapping type:			

Buttons on the right side: What's This?, Print, Clear, Cancel, Save, Save as...

Figure 7 Grouper Settings Year 4 Part II

The screenshot shows the 'Schedule - Open' dialog box with the following settings:

User key1:	MSY4	User key2:	
Begin date:	10/01/2015	End date:	06/30/2016
Description:	Mississippi Year 4 Part II, I-10		
Modified date:	07/18/2016		
Grouper version:	APR DRG Grouper version 32.0 (10/01/2014)		
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		
Keyed by:	Discharge date		
Entered code mapping:	ICD-10-CM/PCS Version 33.0 effective 10/01/2015		
Mapping type:	Historical		

Buttons on the right side: What's This?, Print, Clear, Cancel, Save, Save as...

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Figure 8 Grouper Settings Year 5 Part I

The screenshot shows a software dialog box titled "Schedule - Open". It contains several input fields and dropdown menus for configuring grouper settings. The fields are arranged in two main sections. The top section includes "User key1" (MSYS), "User key2" (empty), "Begin date" (07/01/2018), "End date" (09/30/2018), "Description" (Mississippi Year 5 Part I), and "Modified date" (07/20/2016). The bottom section includes "Grouper version" (APR DRG Grouper version 33.0 (10/01/2015)), "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), "Keyed by" (Discharge date), "Entered code mapping" (None), and "Mapping type" (empty). On the right side of the dialog, there are buttons for "What's This?", "Print", "Clear", "Cancel", "Save", and "Save as...".

User key1:	MSYS	User key2:	
Begin date:	07/01/2018	End date:	09/30/2018
Description:	Mississippi Year 5 Part I		
Modified date:	07/20/2018		
Grouper version:	APR DRG Grouper version 33.0 (10/01/2015)		
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		
Keyed by:	Discharge date		
Entered code mapping:	None		
Mapping type:			

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Figure 9 Grouper Settings Year 5 Part II

The screenshot shows a software dialog box titled "Schedule - New" with a close button (X) in the top right corner. The dialog is divided into two main sections: a top section with text input fields and a bottom section with dropdown menus. On the right side, there is a vertical column of buttons.

**Top Section (Text Fields):**

- User key1: MSY5A
- User key2: (empty)
- Begin date: 10/01/2016
- End date: 06/30/2017
- Description: Mississippi Year 5 Part II
- Modified date: (empty)

**Bottom Section (Dropdown Menus):**

- Grouper version: APR DRG Grouper version 33.0 (10/01/2015)
- PPC version: None
- HAC version: HAC Version 33.0 for Medicaid (10/01/2015)
- 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
- Keyed by: Discharge date
- Entered code mapping: ICD-10-CM/PCS Version 34.0 effective 10/01/2016
- Mapping type: Historical

**Right Side Buttons:**

- What's This?
- Print
- Clear
- Cancel
- Save
- Save as...