



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 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 Core Grouping Software (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.¹



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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:
 - 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.



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The following section provides an overview of available grouper setting options. The descriptions correspond to the grouper screen prints in Figures 1-12 below.

- 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 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 current grouper version is APR-DRG version 35 and 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.



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- 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.
- 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:
 - 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 weight 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. If a user is processing inpatient records that contain diagnosis or procedure codes that are not present in the current release, code mapping is required. Mapping translates expired or new codes on the claim to valid ICD-10 codes as required by the grouper version. This field must be set based on the ICD/PCS code version used on the claim records to be processed.
- Mapping Type – Code mapping is defined in two ways, historical or logical.
 - Historical mapping is not only used to backward map from a newer version to an older version. Historical mapping, for ICD-10, is used to convert older codes to a newer code set version. For example, you can use the historical mapping option to map version 33 ICD-10-CM/PCS codes to version 34 ICD-10-CM/PCS codes.



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- 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.

- Relative Weights – Prior to October 1, 2013, charge-based APR-DRG relative weights were used. Beginning October 1, 2013, Hospital-specific Relative Weights (HSRV) are used to price a claim.

Note: The relative weights are embedded into the grouping software. The version of relative weights used in the DRG assignment process is associated with the Grouper Version option.



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Figure 1 DRG Rate Years

DRG Year	From Date	Through Date	State Fiscal Year	DRG Grouper	HAC	Mapper	Map Type	Segment	ICD-Code Version
DRG Year 1	10/1/2012	9/30/2013	NA ¹	V.29	NA	V.30	Historical	Complete	ICD-9-CM
DRG Year 2	10/1/2013	6/30/2014	NA ¹	V.30	NA	V.31	Historical	Complete	ICD-9-CM
DRG Year 3	7/1/2014	9/30/2014	SFY 2015 ²	V.31	V.31	NA	NA	Part I	ICD-9-CM
	10/1/2014	6/30/2015				V.32	Historical	Part II	ICD-9-CM
DRG Year 4	7/1/2015	9/30/2015	SFY 2016	V.32	V.32	NA	NA	Part I	ICD-9-CM
	10/1/2015	6/30/2016				V.33	Historical	Part II	ICD-10-CM/PCS
DRG Year 5	7/1/2016	9/30/2016	SFY 2017	V.33	V.33	NA	NA	Part I	ICD-10-CM/PCS
	10/1/2016	6/30/2017				V.34	Historical	Part II	ICD-10-CM/PCS
DRG Year 6	7/1/2017	9/30/2017	SFY 2018	V.33	V.33	V.34	Historical	Part I	ICD-10-CM/PCS
	10/1/2017	6/30/2018				V.35	Historical	Part II	ICD-10-CM/PCS
DRG Year 7	7/1/2018	9/30/2018	SFY 2019	V.35	V.35	NA	NA	Part I	ICD-10-CM/PCS

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.
3. For specific grouper, mapper and HAC versions see the screen shots below.



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Figure 2 Grouper Settings Year 1

Schedule - Open

User key1:	MSY1	User key2:	
Begin date:	10/01/2012	End date:	09/30/2013
Description:	Mississippi Year 1		
Modified date:	05/24/2017		

Reimbursement scheme: **None**

Automatically Determine Reimbursement Settings

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: **ICD-9-CM Version 30.0 effective 10/01/2012**

Mapping type: **Historical**

Buttons: What's This?, Print, Clear, Cancel, Save, Save as...



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Figure 3 Grouper Settings Year 2

Schedule - Open

User key1:	MSY2	User key2:	
Begin date:	10/01/2013	End date:	06/30/2014
Description:	Mississippi Year 2		
Modified date:	05/31/2018		

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: **ICD-9-CM Version 31.0 effective 10/01/2013**

Mapping type: **Historical**

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



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Figure 4 Grouper Settings Year 3 Part I

Schedule - Open

User key1:	MSY3	User key2:	
Begin date:	07/01/2014	End date:	09/30/2014
Description:	Mississippi Year 3 Part I		
Modified date:	09/18/2017		

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-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**

Entered code mapping: **None**

Mapping type:

Buttons: What's This?, Print, Clear, Cancel, Save, Save as...



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Figure 5 Grouper Settings Year 3 Part II

Schedule - Open

User key1:	MSY3A	User key2:	
Begin date:	10/01/2014	End date:	06/30/2015
Description:	Mississippi Year 3 Part II		
Modified date:	09/21/2017		

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-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 all Complication of Care codes**

Entered code mapping: **ICD-9-CM Version 32.0 effective 10/01/2014**

Mapping type: **Historical**

Buttons: What's This?, Print, Clear, Cancel, Save, Save as...



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Figure 6 Grouper Settings Year 4 Part I

Schedule - Open

User key1:	MSY4	User key2:	
Begin date:	07/01/2015	End date:	09/30/2015
Description:	Mississippi Year 4 Part I		
Modified date:	05/31/2018		

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-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**

Entered code mapping: **None**

Mapping type:

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



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Figure 7 Grouper Settings Year 4 Part II

Schedule - Open

User key1:	MSY4A	User key2:	
Begin date:	10/01/2015	End date:	06/30/2016
Description:	Mississippi Year 4 Part 2		
Modified date:	09/22/2017		

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: **ICD-10-CM/PCS Version 33.0 effective 10/01/2015**

Mapping type: **Historical**

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



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Figure 8 Grouper Settings Year 5 Part I

Schedule - Open

User key1:	MSY5	User key2:	
Begin date:	07/01/2016	End date:	09/30/2016
Description:	Mississippi Year 5 Part I		
Modified date:	09/18/2017		

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: **None**

Mapping type:

Buttons: What's This?, Print, Clear, Cancel, Save, Save as...



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Figure 9 Grouper Settings Year 5 Part II

Schedule - Open

User key1:	<input type="text" value="MSY5A"/>	User key2:	<input type="text"/>
Begin date:	<input type="text" value="10/01/2016"/>	End date:	<input type="text" value="06/30/2017"/>
Description:	<input type="text" value="Mississippi 5A"/>		
Modified date:	<input type="text" value="05/31/2018"/>		

Reimbursement scheme:

Automatically Determine Reimbursement Settings

Automatically Determine Grouper Settings

Keyed by:

Grouper version:

Interpretation of Undetermined POA Indicators:

PPC version:

HAC version:

Payer Logic Indicator:

Birth weight option:

Discharge DRG option:

Entered code mapping:

Mapping type:

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



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Figure 10 Grouper Settings, Year 6 Part I

Schedule - Open

User key1:	MSY6	User key2:	
Begin date:	07/01/2017	End date:	09/30/2017
Description:	Mississippi Year 6 Part I		
Modified date:	05/31/2018		

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: **ICD-10-CM/PCS Version 34.0 effective 10/01/2016**

Mapping type: **Historical**

Buttons: What's This?, Print, Clear, Cancel, Save, Save as...



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Figure 11 Grouper Settings, Year 6 Part II

Schedule - Open

User key1:	<input type="text" value="MSY6A"/>	User key2:	<input type="text"/>
Begin date:	<input type="text" value="10/01/2017"/>	End date:	<input type="text" value="06/30/2018"/>
Description:	<input type="text" value="Mississippi Year 6 Part II"/>		
Modified date:	<input type="text" value="05/31/2018"/>		

Reimbursement scheme:

Automatically Determine Reimbursement Settings

Automatically Determine Grouper Settings

Keyed by:

Grouper version:

Interpretation of Undetermined POA Indicators:

PPC version:

HAC version:

Payer Logic Indicator:

Birth weight option:

Discharge DRG option:

Entered code mapping:

Mapping type:

Buttons: What's This?, Print, Clear, Cancel, Save, Save as...



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Figure 12 Grouper Settings, Year 7 Part I

Schedule - Open

User key1:	MSY7	User key2:	
Begin date:	07/01/2018	End date:	09/30/2018
Description:	Mississippi Year 7		
Modified date:	05/29/2018		

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: **None**

Mapping type:

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



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Notes

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