Mississippi Medicaid DRG Grouper Settings

Introduction

The Mississippi Division of Medicaid (the Division) uses the Solventum 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 Solventum 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 Solventum desktop CGS. Solventum 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 Solventum CGS desktop user interface and from the Solventum customer support website using the documentation library.

Key Terms

MESA	Medicaid Enterprise System Assistance is 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 Solventum 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
Solventum	Formerly 3M Health Information Systems (HIS). APR-DRGs, a proprietary software program, is owned and licensed by Solventum. All copyrights in and to the Solventum software are owned by Solventum. All rights reserved.

Overview

This section provides an overview of available grouper setting options. The descriptions correspond to the grouper screen prints in Figures 1-19 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 Solventum 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 Solventum 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.
- **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 Solventum APR-DRG Classification system, Solventum 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 Solventum 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 for Mississippi Medicaid is coded weight with default (the fifth selection option). 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 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 Solventum 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 codes that become available on 10/1/2026 to ICD-10-CM/PCS codes that were current for V.43 of the APR-DRG grouper, which was released 10/1/2025.
    - 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

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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
	10/1/2013	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
	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	12/31/2020		V.38	V.38	Part II	ICD-10-CM/PCS
	1/1/2021	6/30/2021		V.38	V.38.1	Part II	ICD-10-CM/PCS
SFY 22	7/1/2021	9/30/2021	V.38	V.38	N/A	Part I	ICD-10-CM/PCS
	10/1/2021	3/31/2022		V.39	V.39	Part II	ICD-10-CM/PCS
	4/1/2022	6/30/2022		V.39	V.39.1	Part II	ICD-10-CM/PCS
SFY 23	7/1/2022	9/30/2022	V.38	V.39	V.39.1	Part I	ICD-10-CM/PCS
	10/1/2022	6/30/2023		V.40	V.40	Part II	ICD-10-CM/PCS
SFY 24	7/1/2023	9/30/2023	V.40	V.40	N/A	Part I	ICD-10-CM/PCS
	10/1/2023	6/30/2024		V.40	V.41	Part II	ICD-10-CM/PCS
SFY 25	7/1/2024	9/30/2024	V.40	V.40	V.41	Part I	ICD-10-CM/PCS
	10/1/2024	6/30/2025		V.40	V.42	Part II	ICD-10-CM/PCS
SFY 26	7/1/2025	9/30/2025	V.40	V.40	V.42	Part I	ICD-10-CM/PCS
	10/1/2025	3/31/2026		V.40	V.43	Part II	ICD-10-CM/PCS
	4/1/2026	6/30/2026		V.40.1	V43.1	Part II	ICD-10-CM/PCS
SFY 27	7/1/2026	9/30/2026	V.43	V.43	V.43.1	Part I	ICD-10-CM/PCS
	10/1/2026	6/30/2027		V.43	V.44	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.
5. For SFY 21, V38.1 of the mapper was implemented 1/1/2021 to accommodate new COVID-19 related codes.
6. For SFYs 22 and 23, V.38 of the grouper remains in place.
7. For SFY 22, V39.1 of the mapper was implemented 4/1/2022 to accommodate new COVID-19 related codes.
8. For SFY 26, V43.1 of the mapper was released on 4/1/2026.

Mississippi Medicaid DRG Grouper Settings

The grouper settings for each year of the APR-DRG program are shown in the screen captures below. The grouper setting screen captures 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.

Figure 1: Grouper Settings, SFY 13

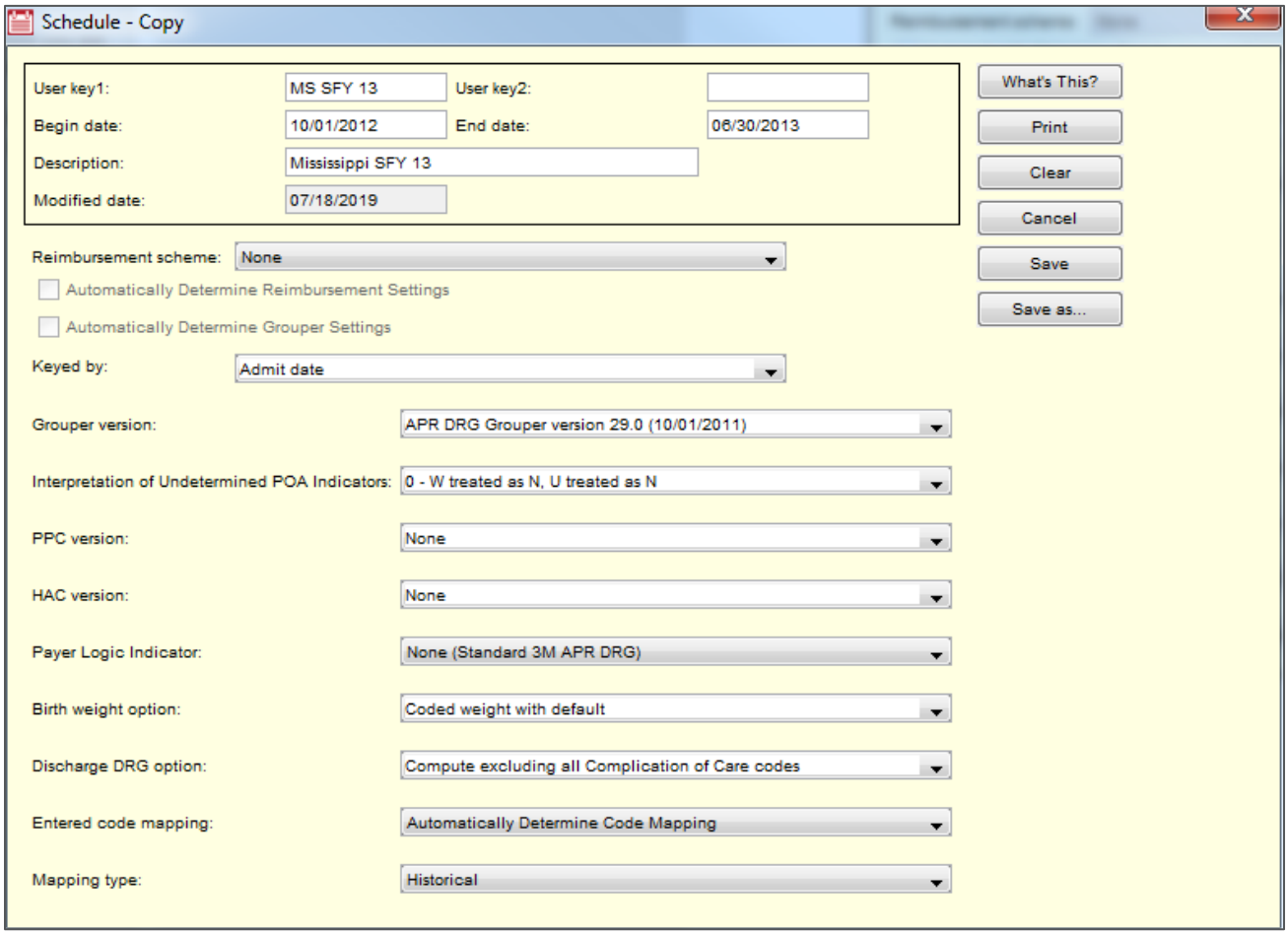


Figure 2: Grouper Settings, SFY 14A

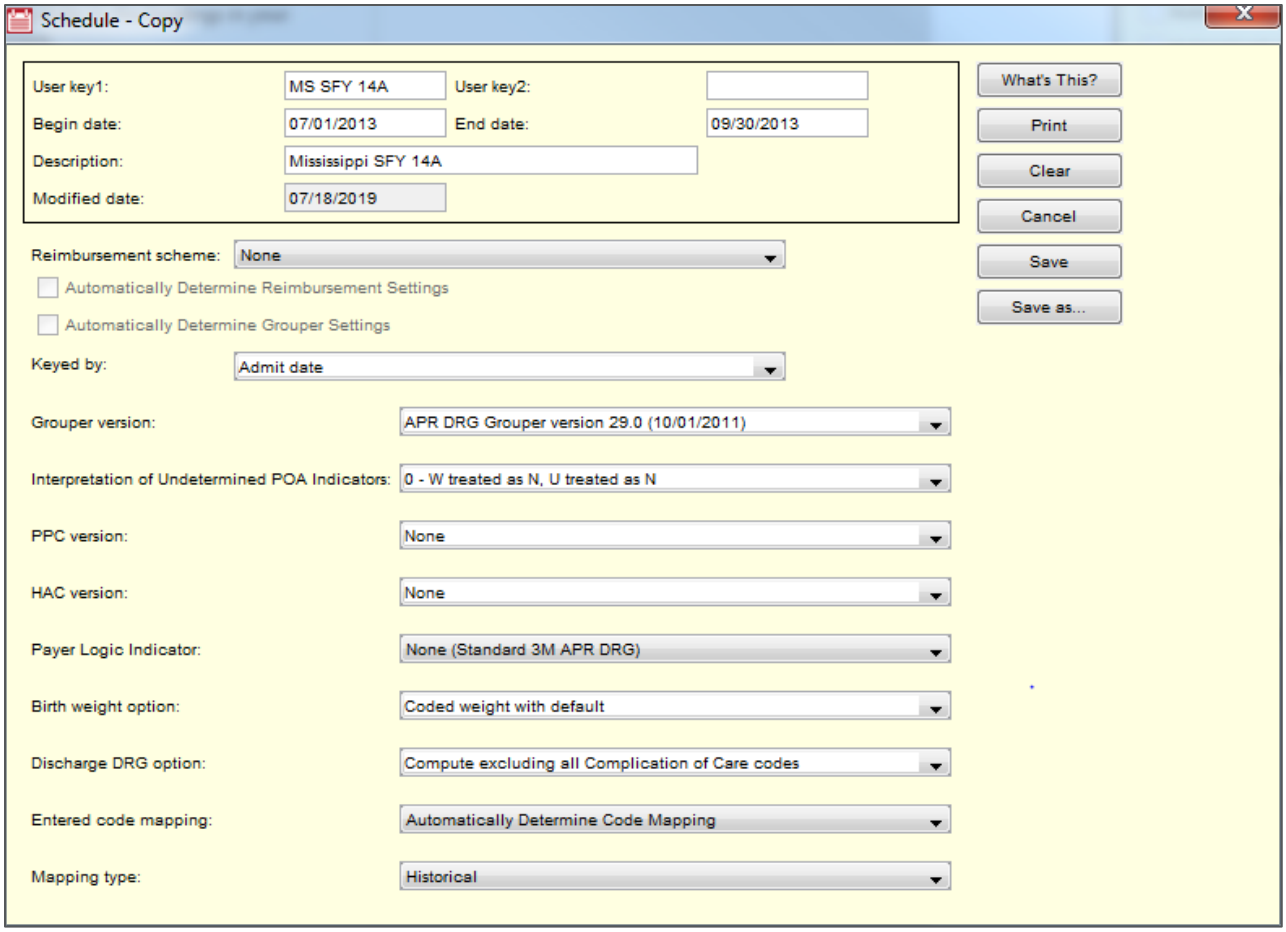


Figure 3: Grouper Settings, SFY 14B

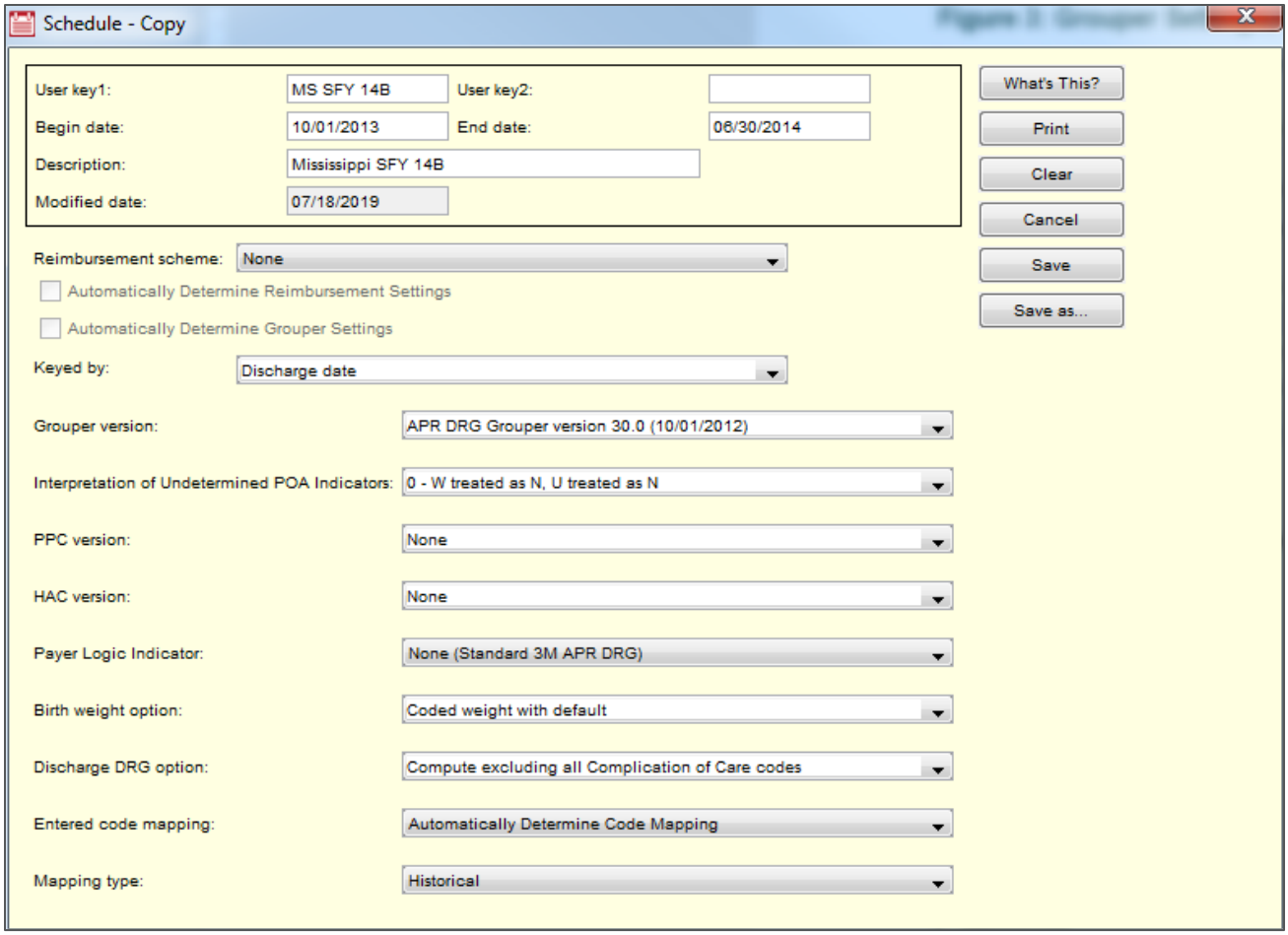


Figure 4: Grouper Settings, SFY 15

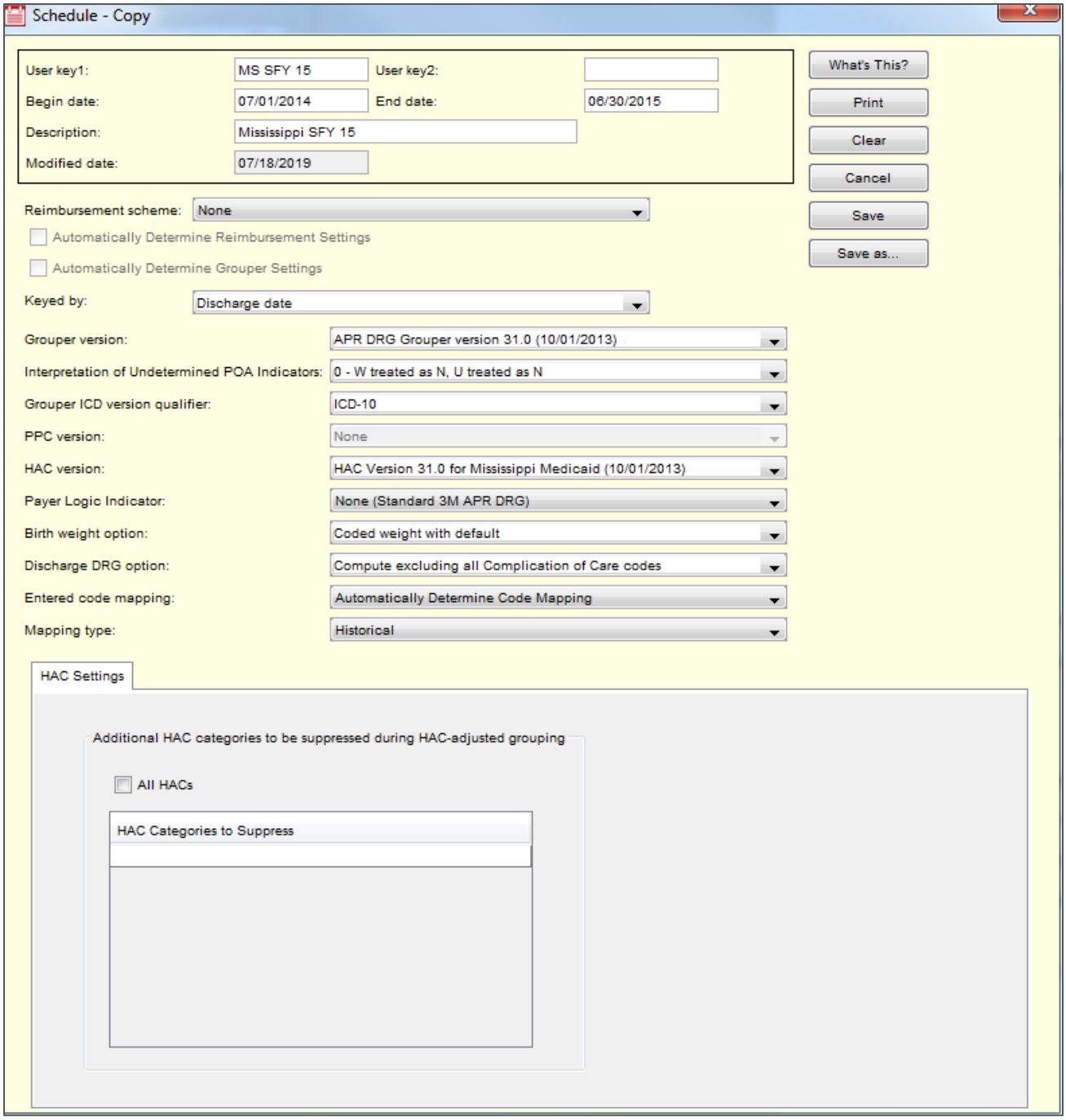


Figure 5: Grouper Settings, SFY 16

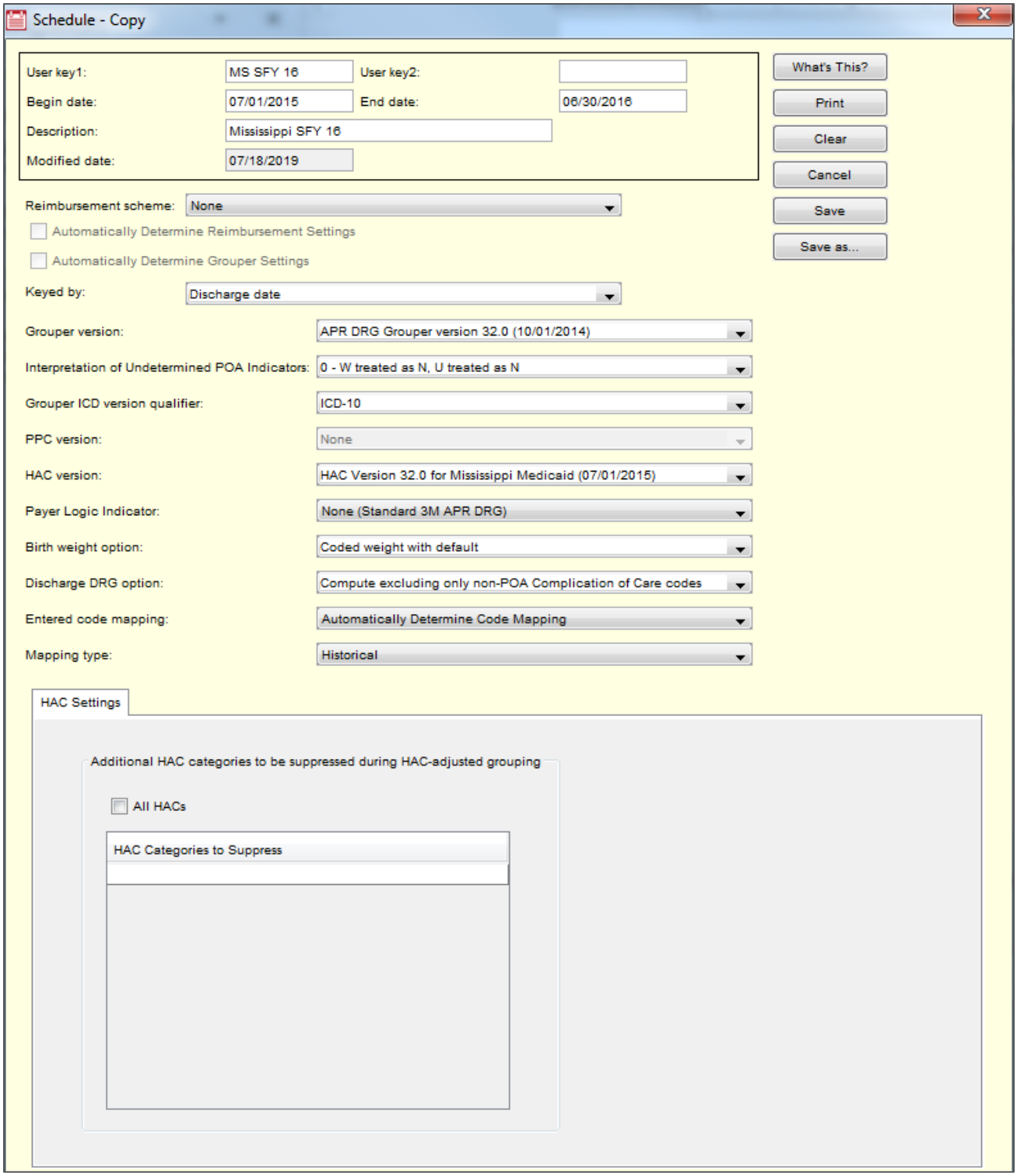


Figure 6: Grouper Settings, SFY 17

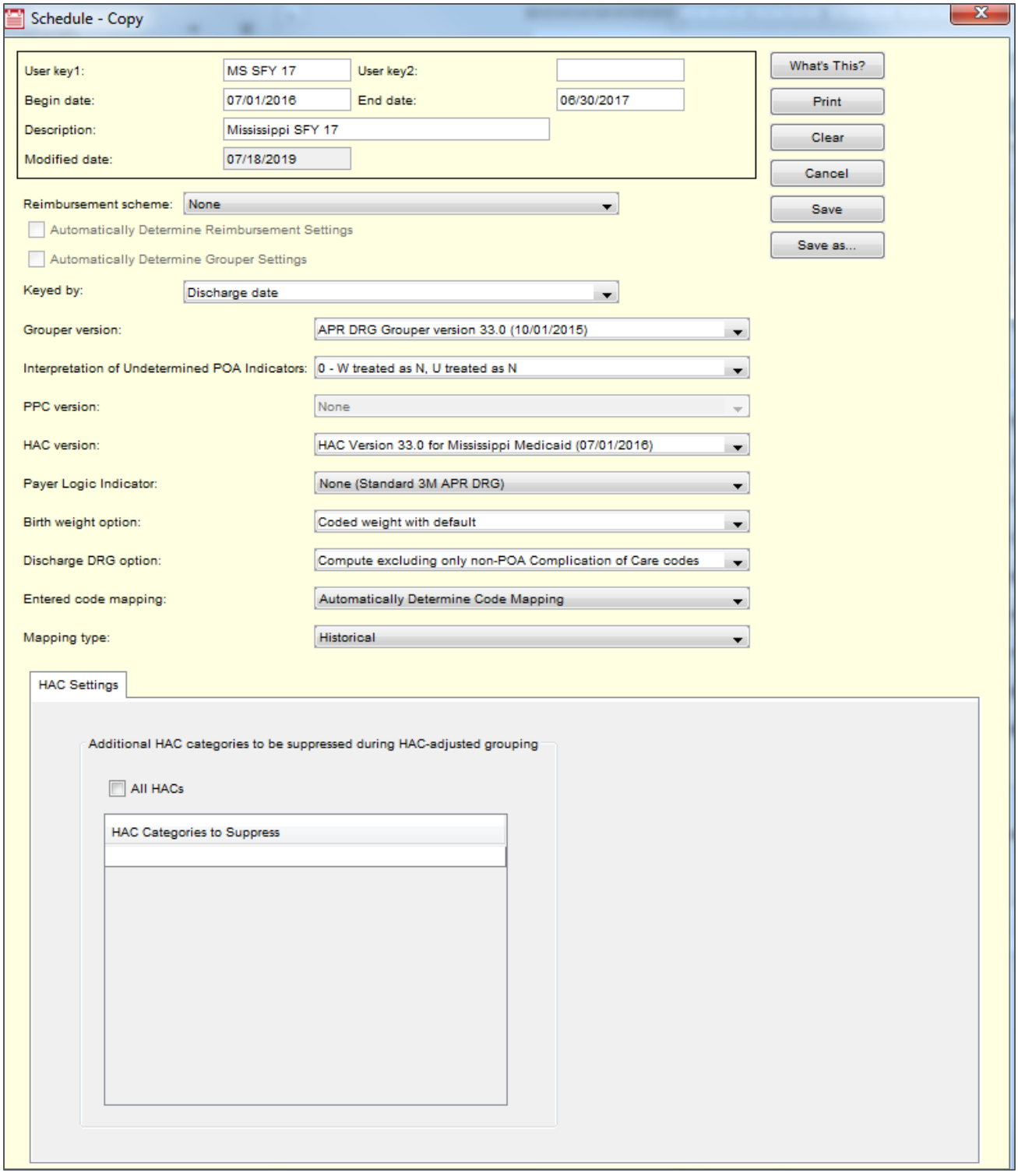


Figure 7: Grouper Settings, SFY 18A

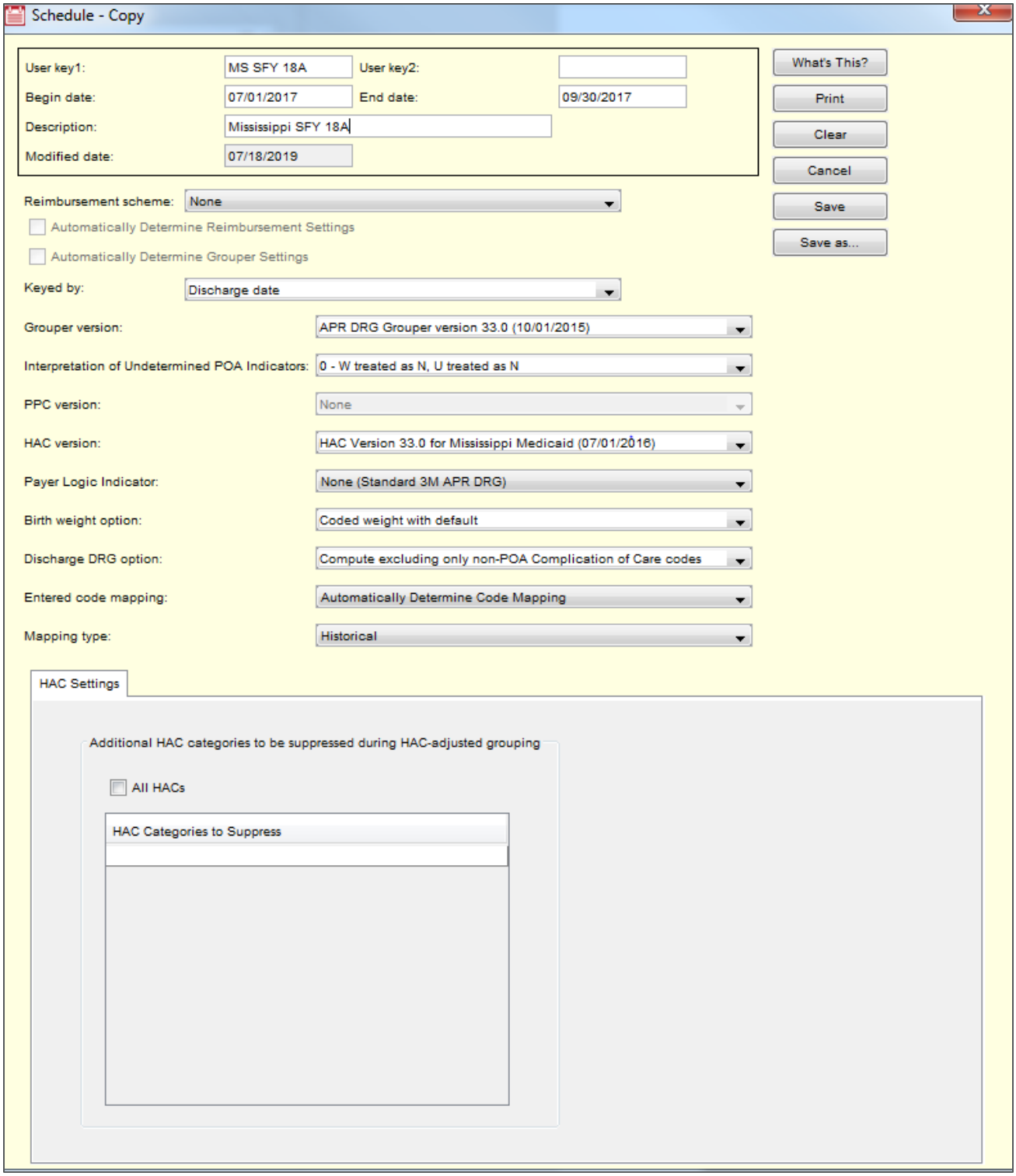


Figure 8: Grouper Settings, SFY 18B

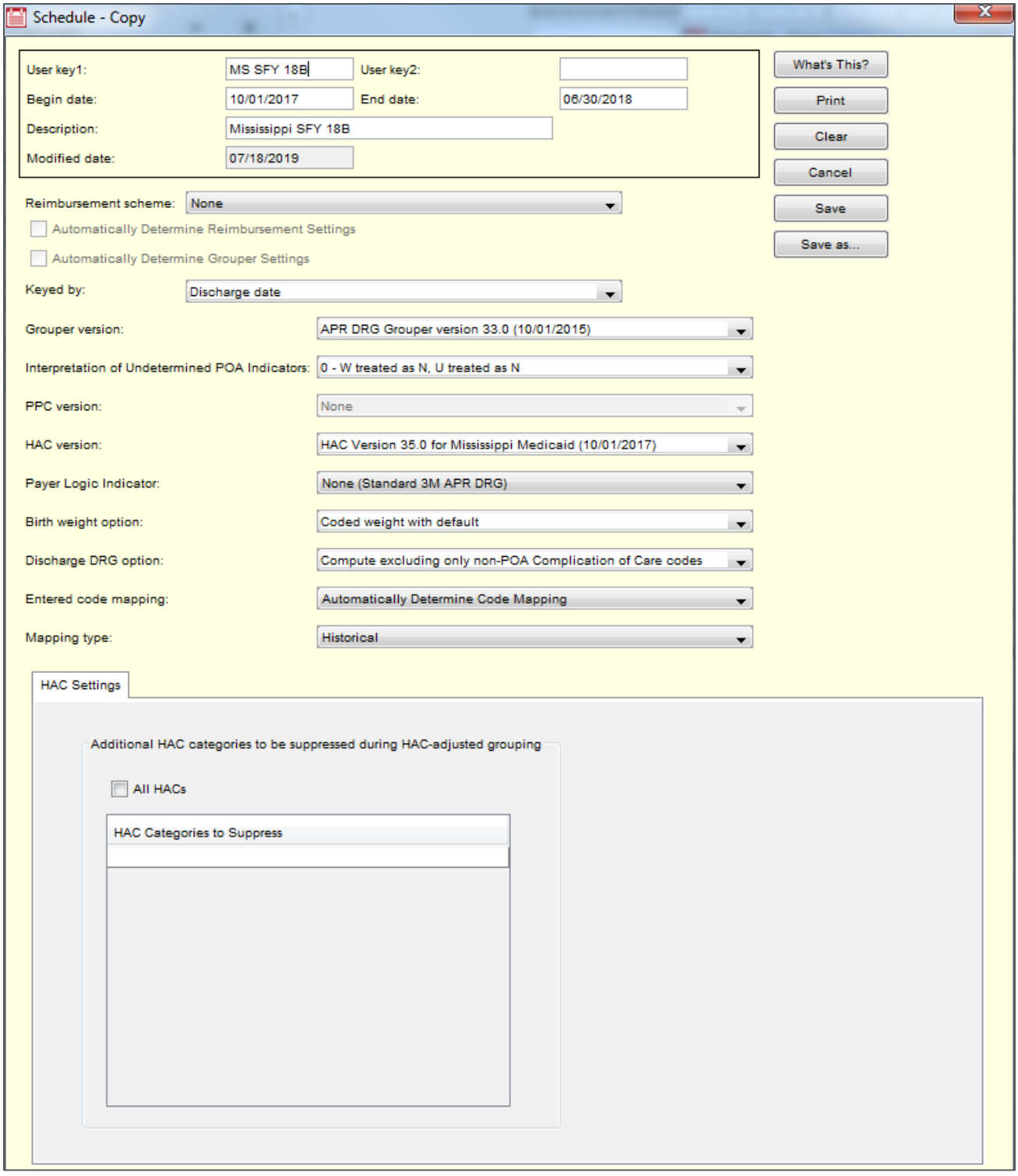


Figure 9: Grouper Settings, SFY 19A

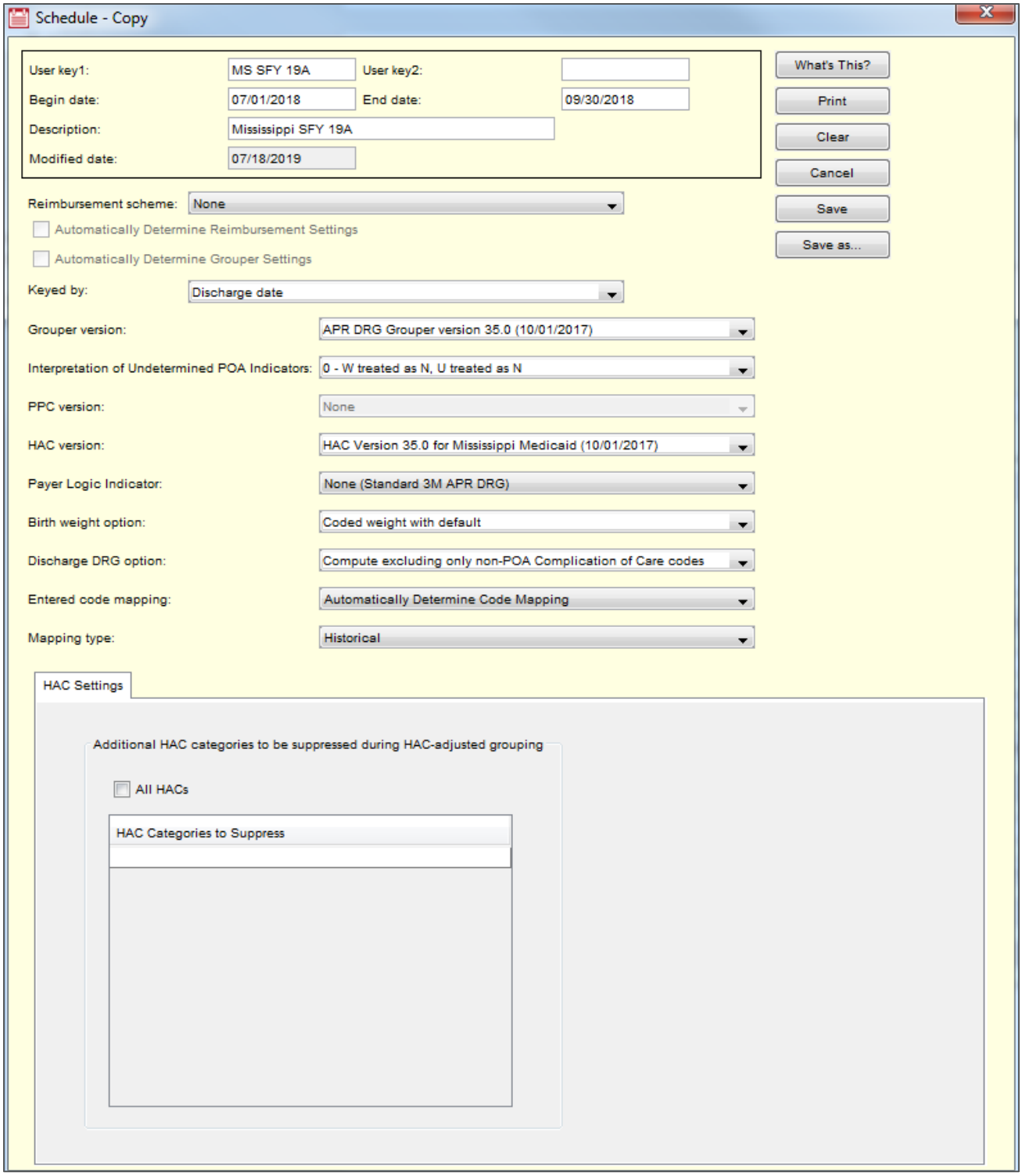


Figure 10: Grouper Settings, SFY 19B

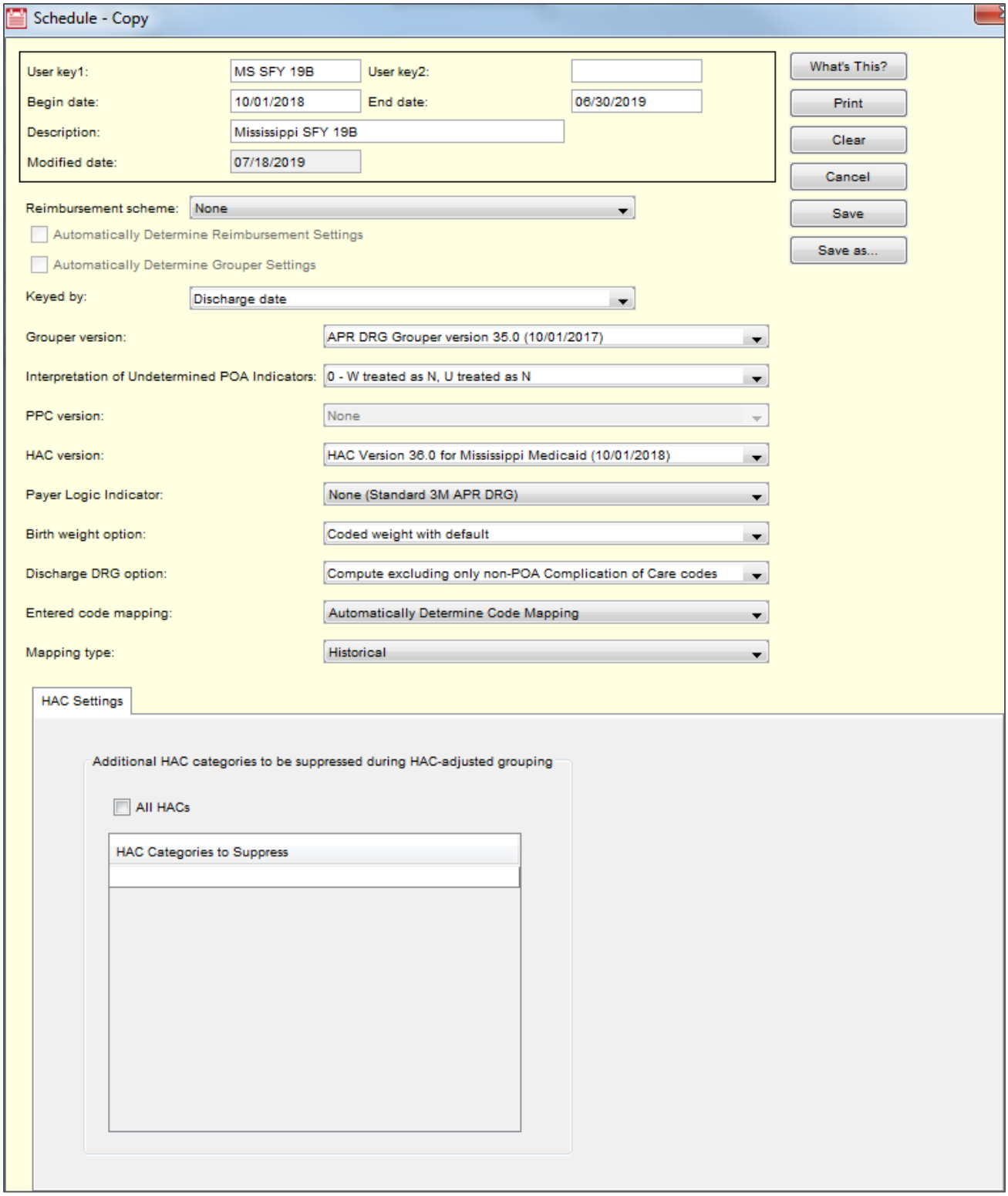


Figure 11: Grouper Settings, SFY 20A

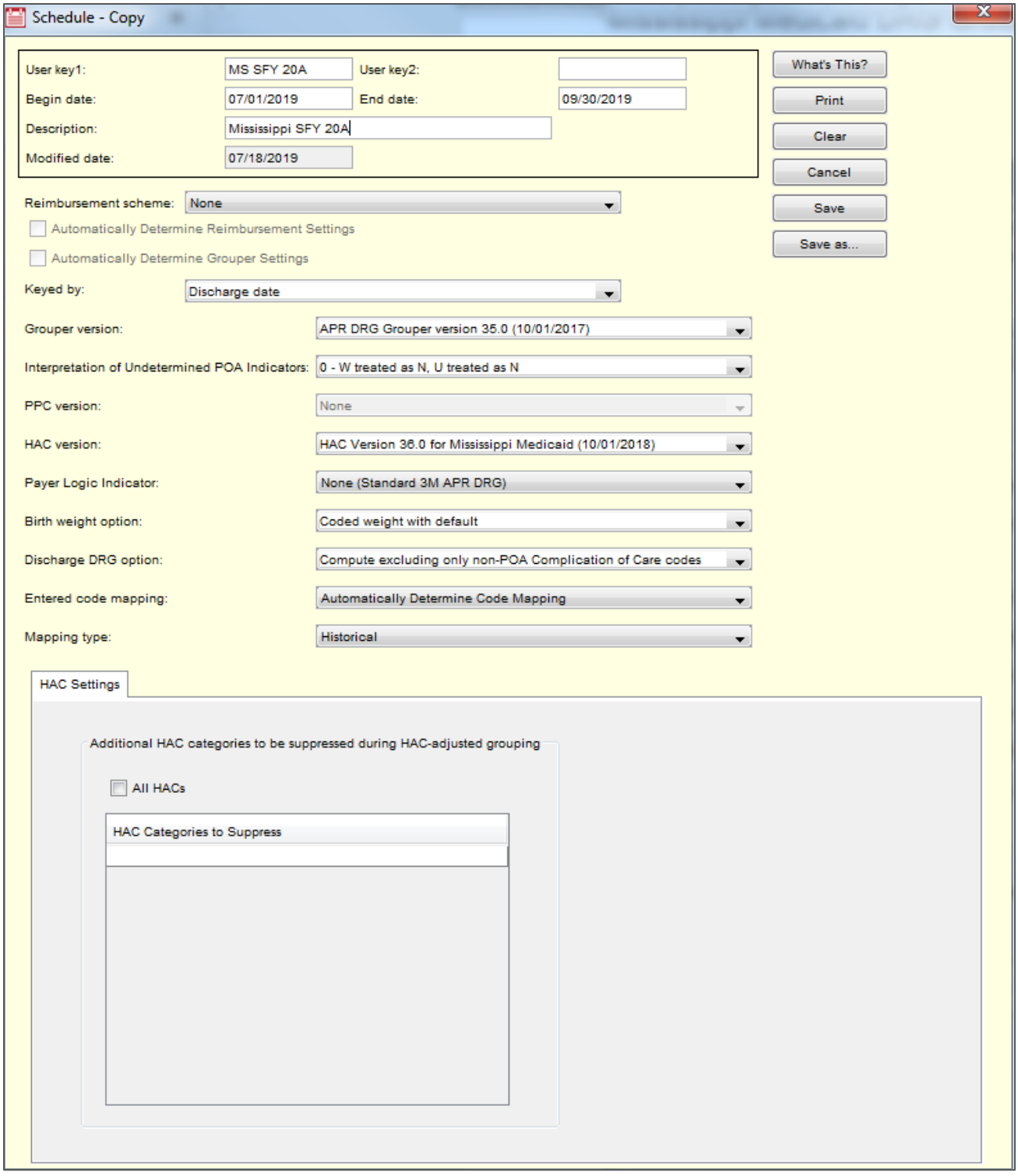


Figure 12: Grouper Settings, SFY 20B

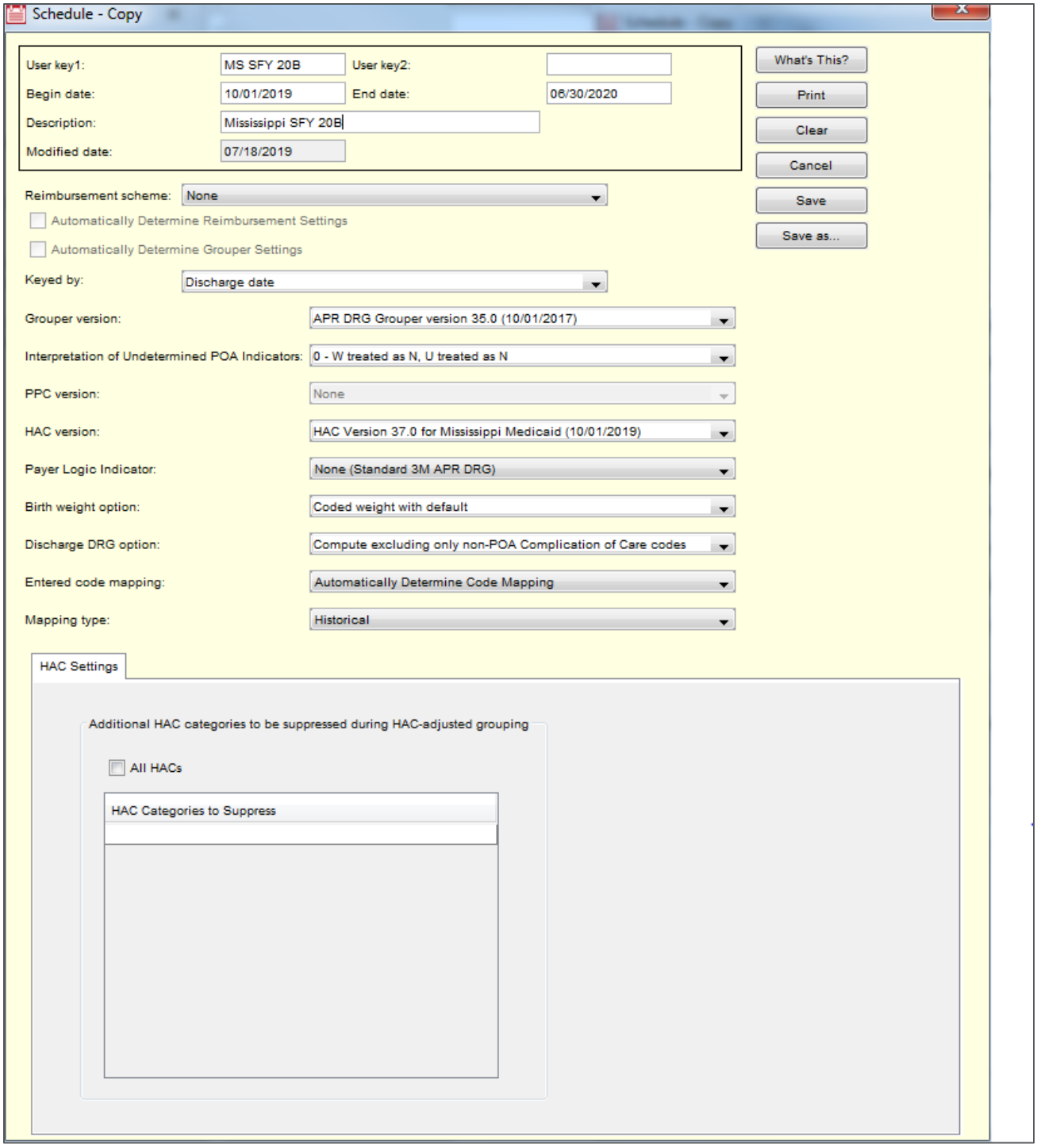


Figure 13: Grouper Settings, SFY 21A

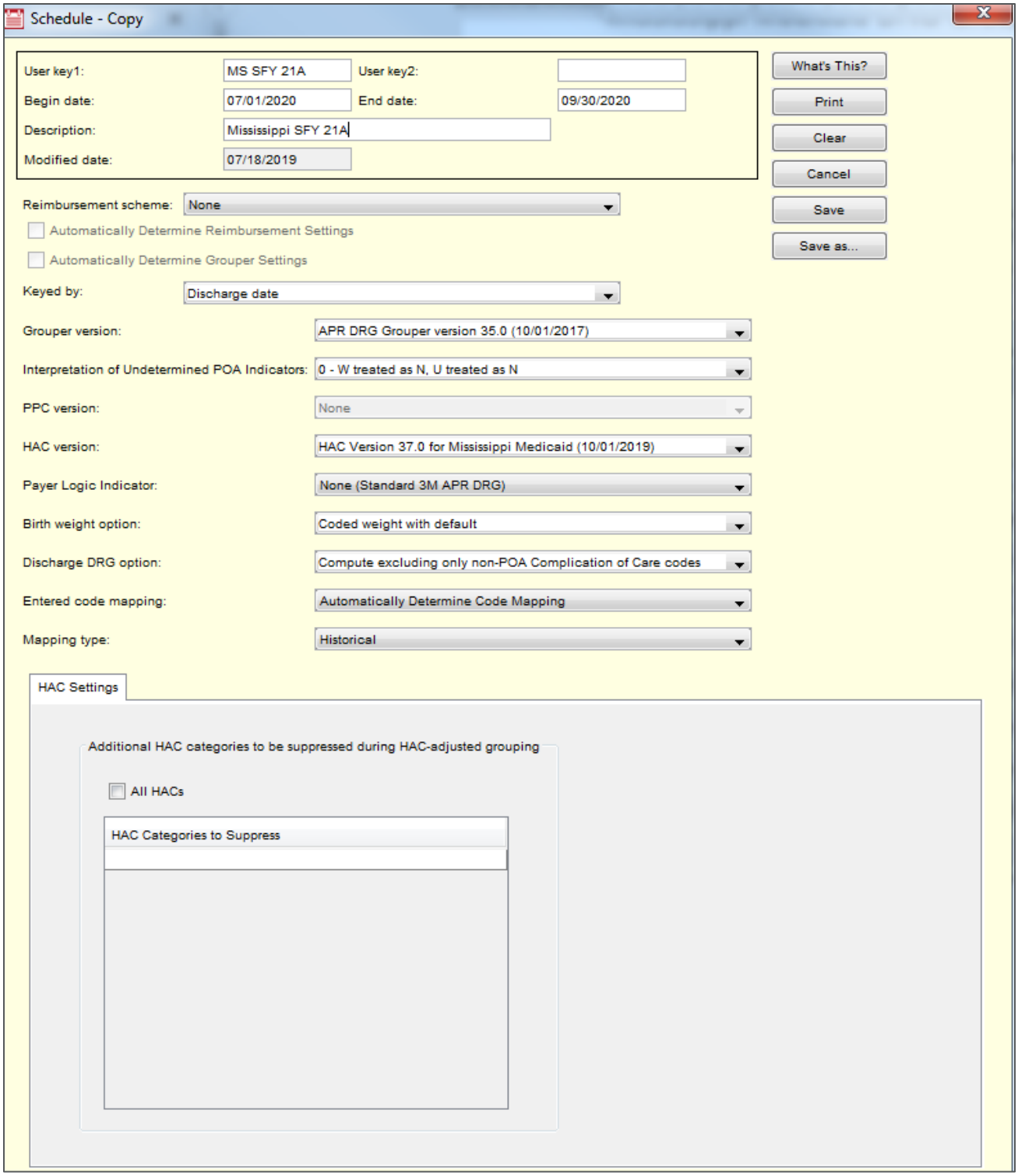


Figure 14: Grouper Settings, SFY 21B

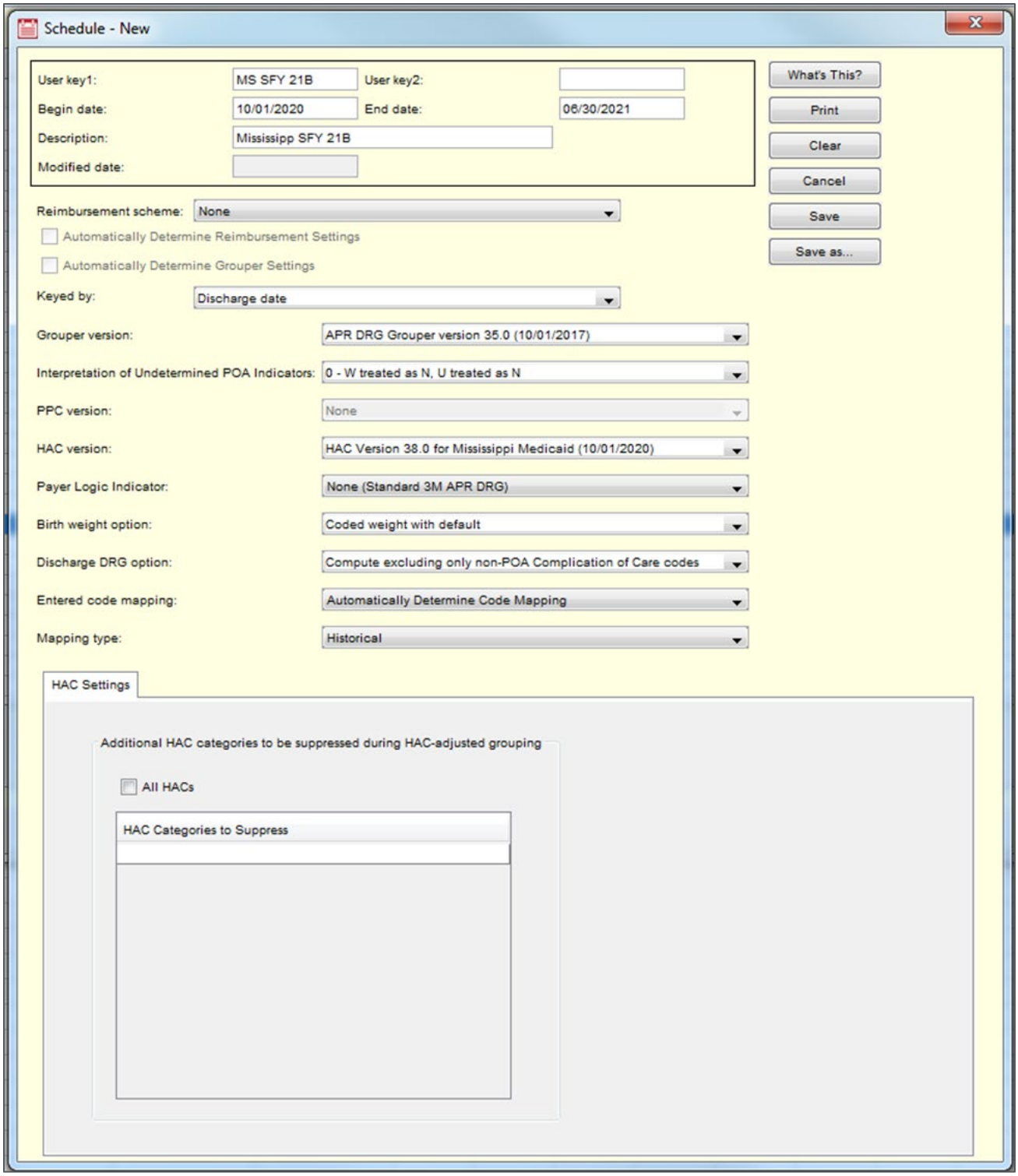


Figure 15: Grouper Settings, SFY 22A

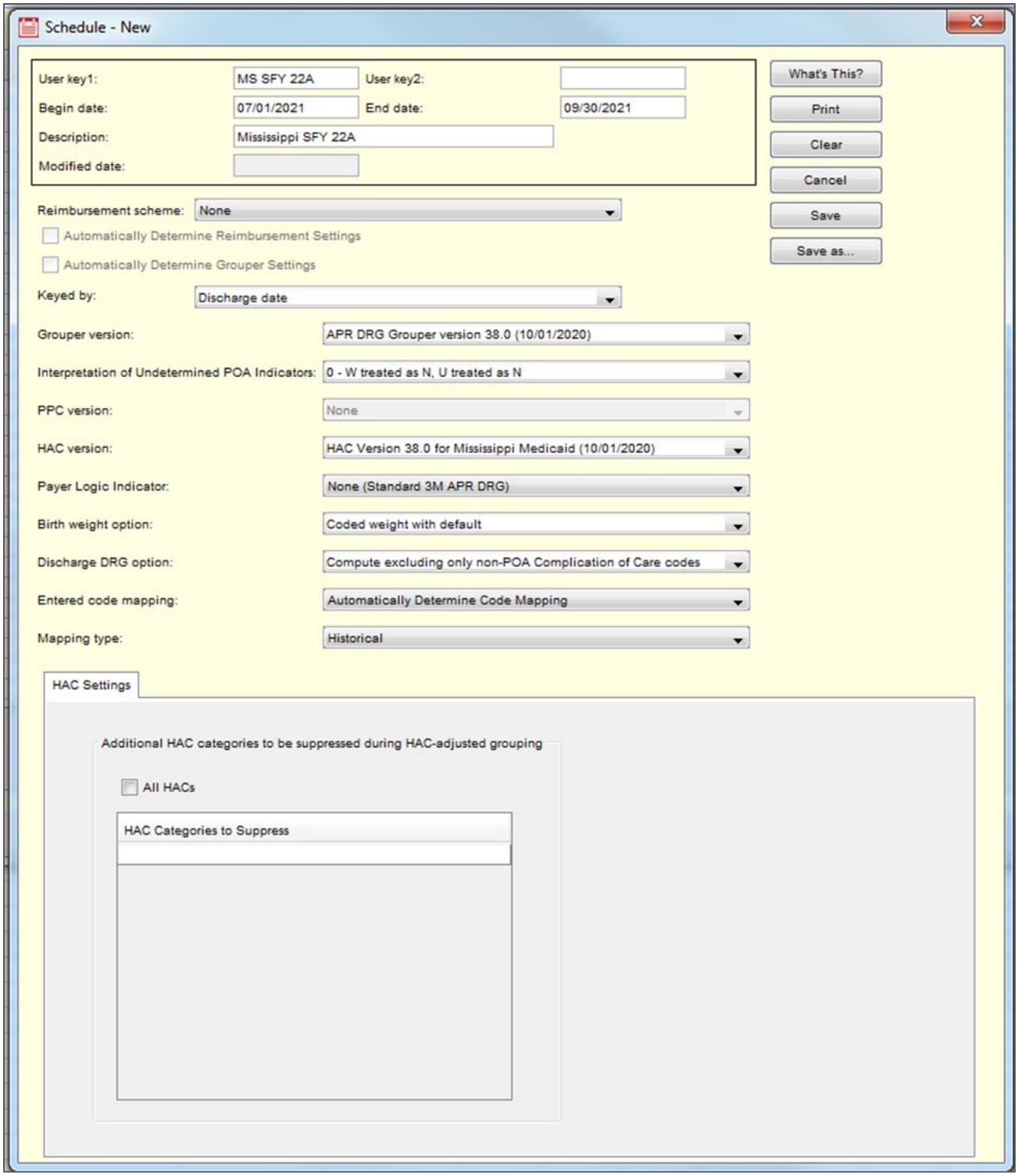


Figure 16: Grouper Settings, SFY 22B

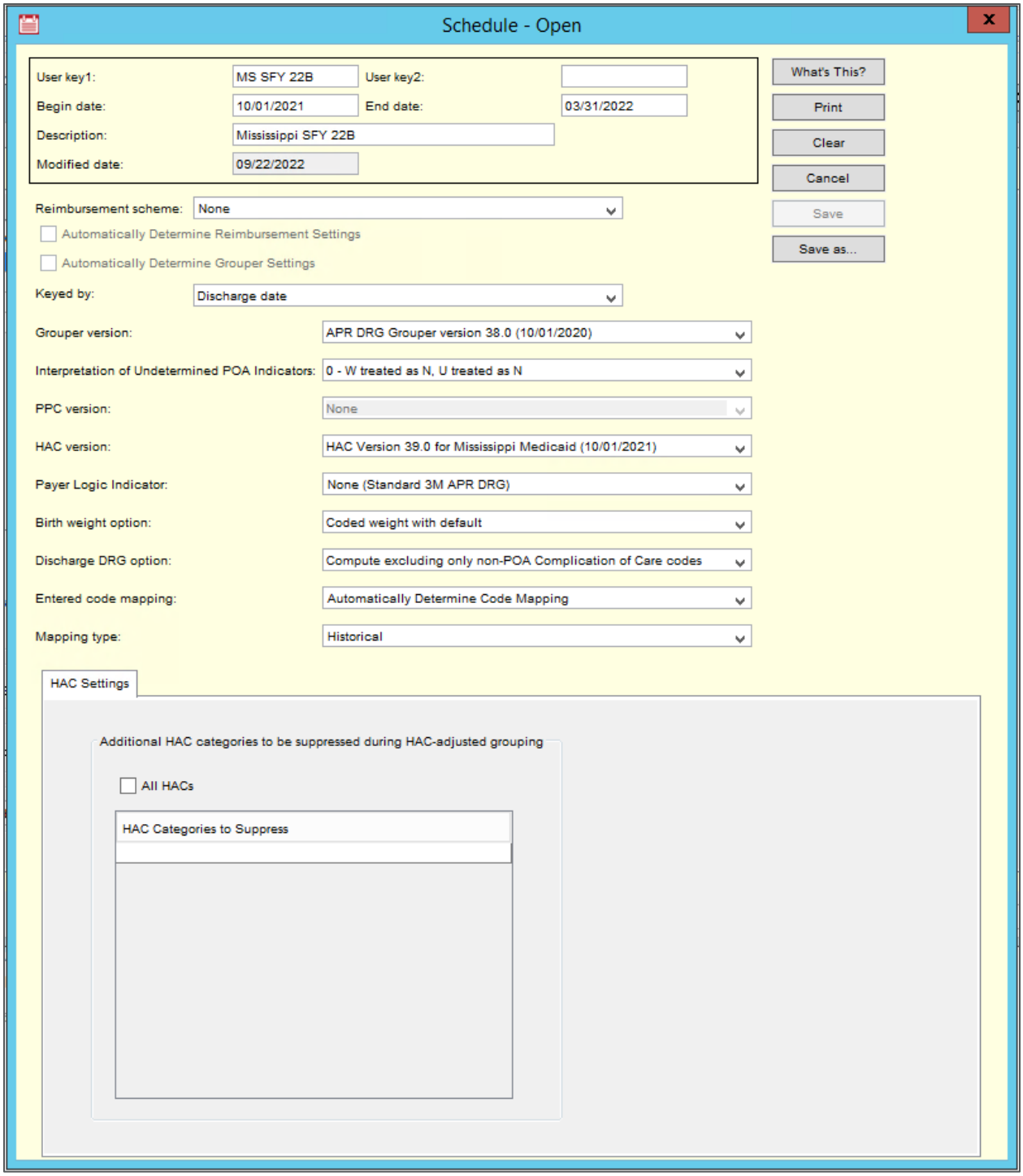


Figure 17: Grouper Settings, SFY 22C

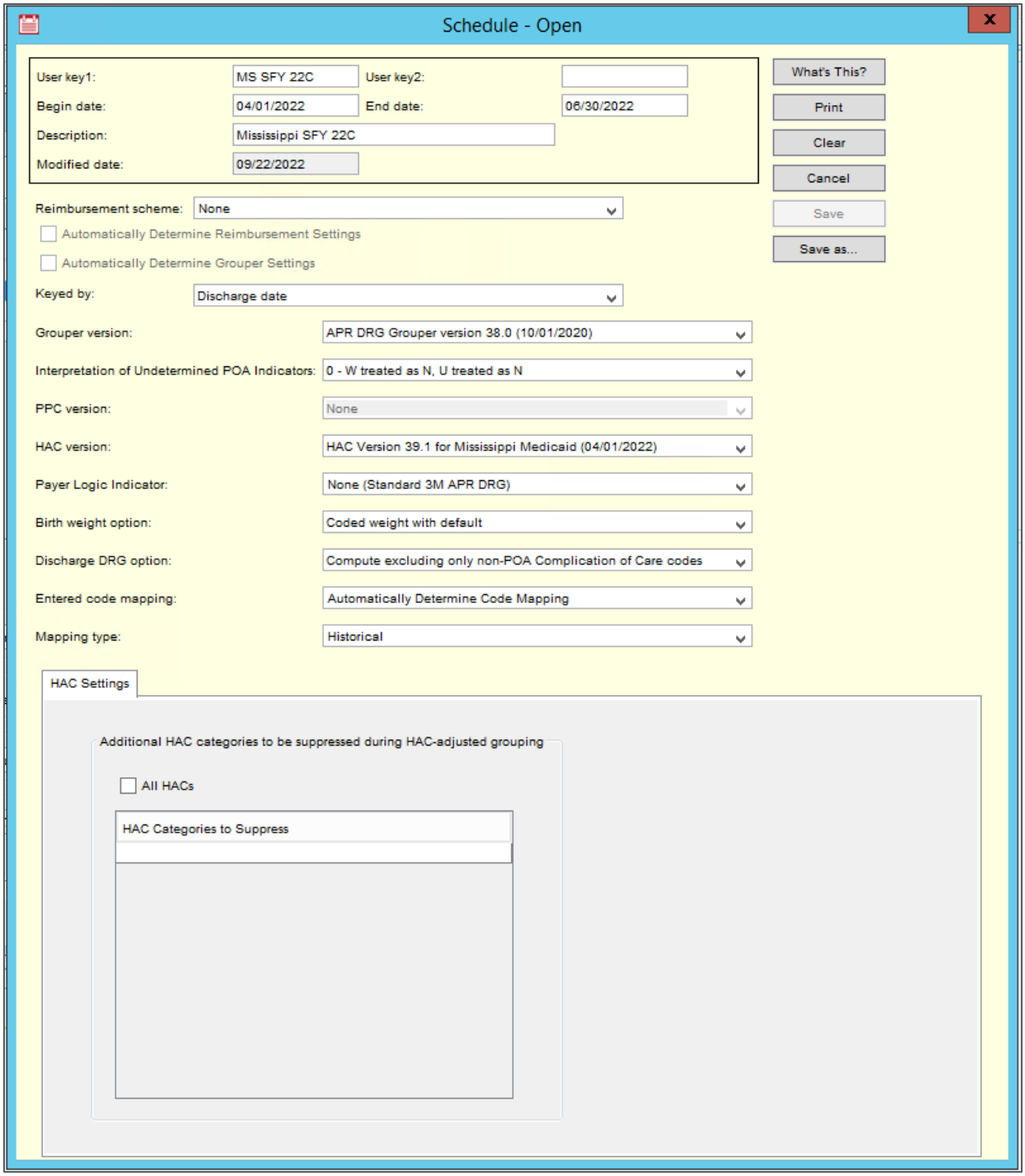


Figure 18: Grouper Settings, SFY 23A

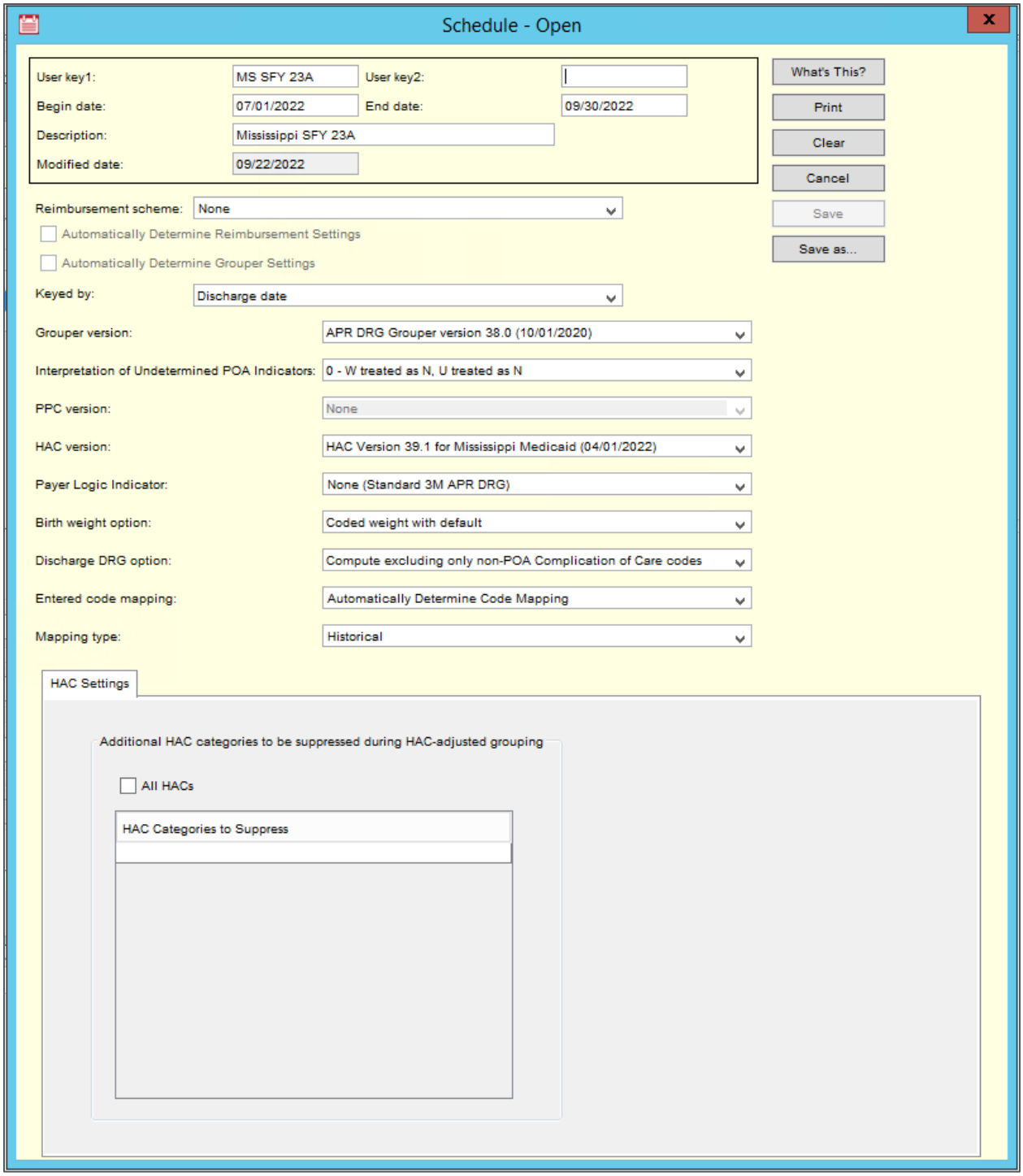


Figure 19: Grouper Settings, SFY 23B

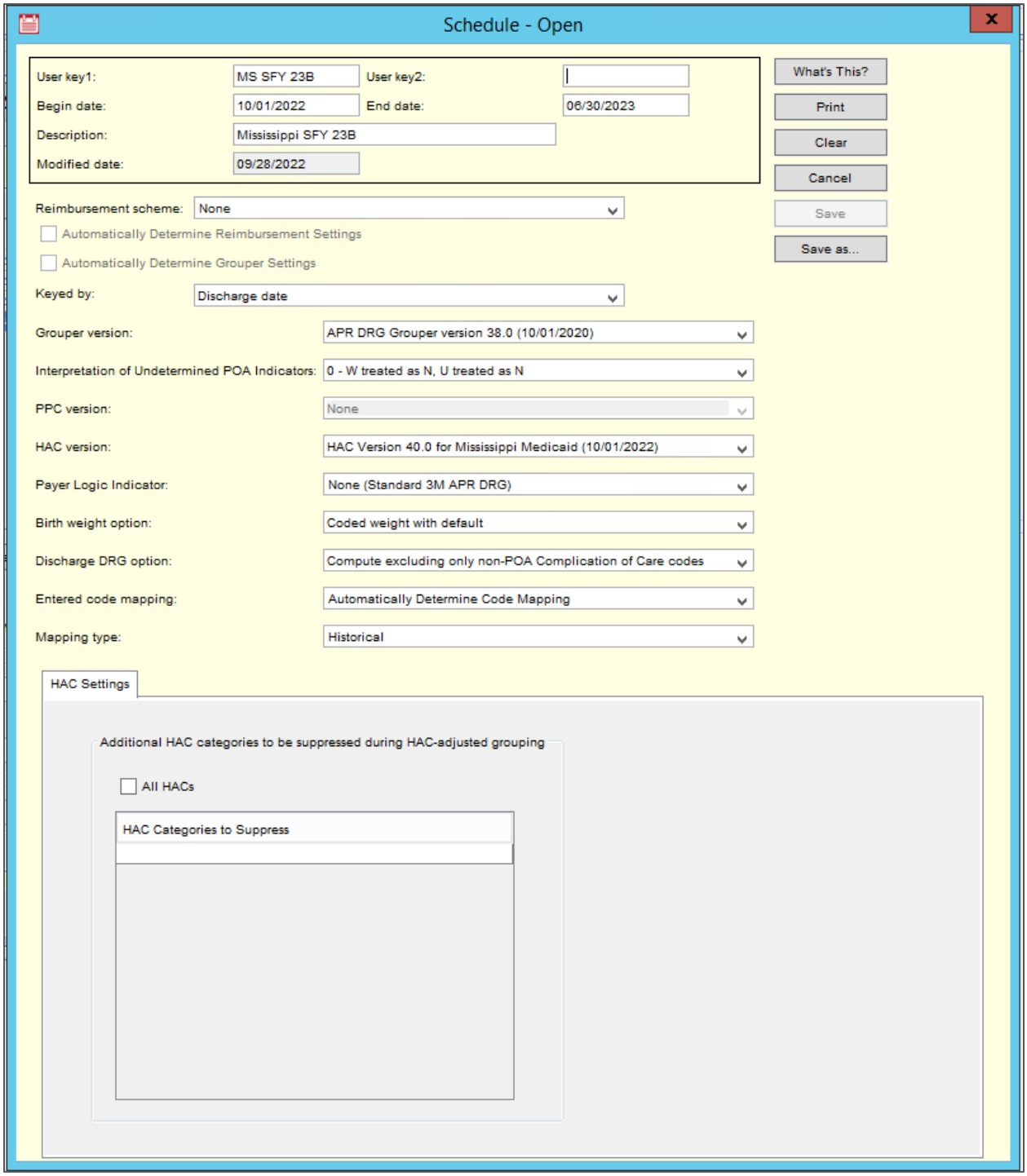


Figure 20: Grouper Settings, SFY 24A

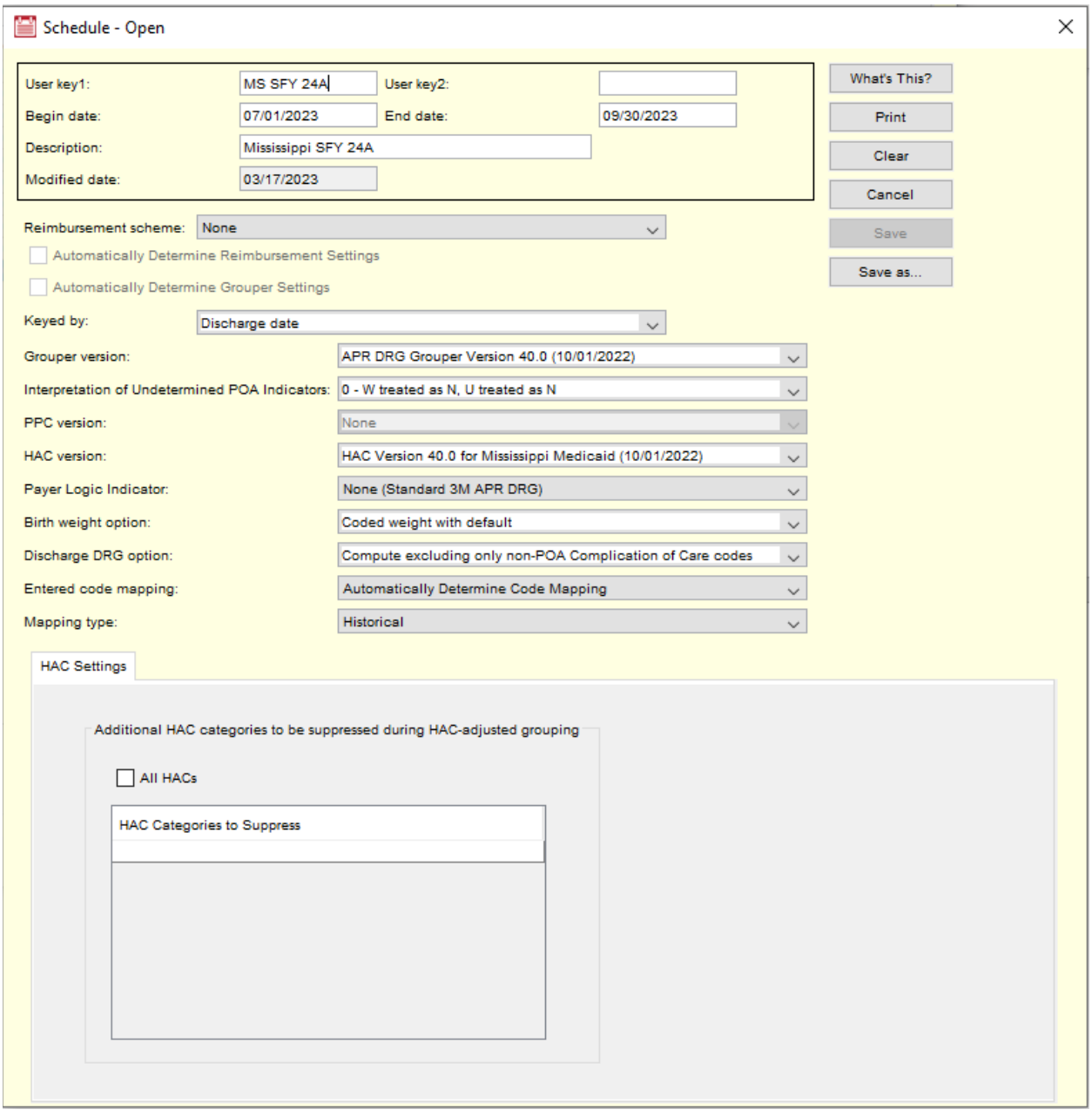


Figure 21: Grouper Settings, SFY 24B

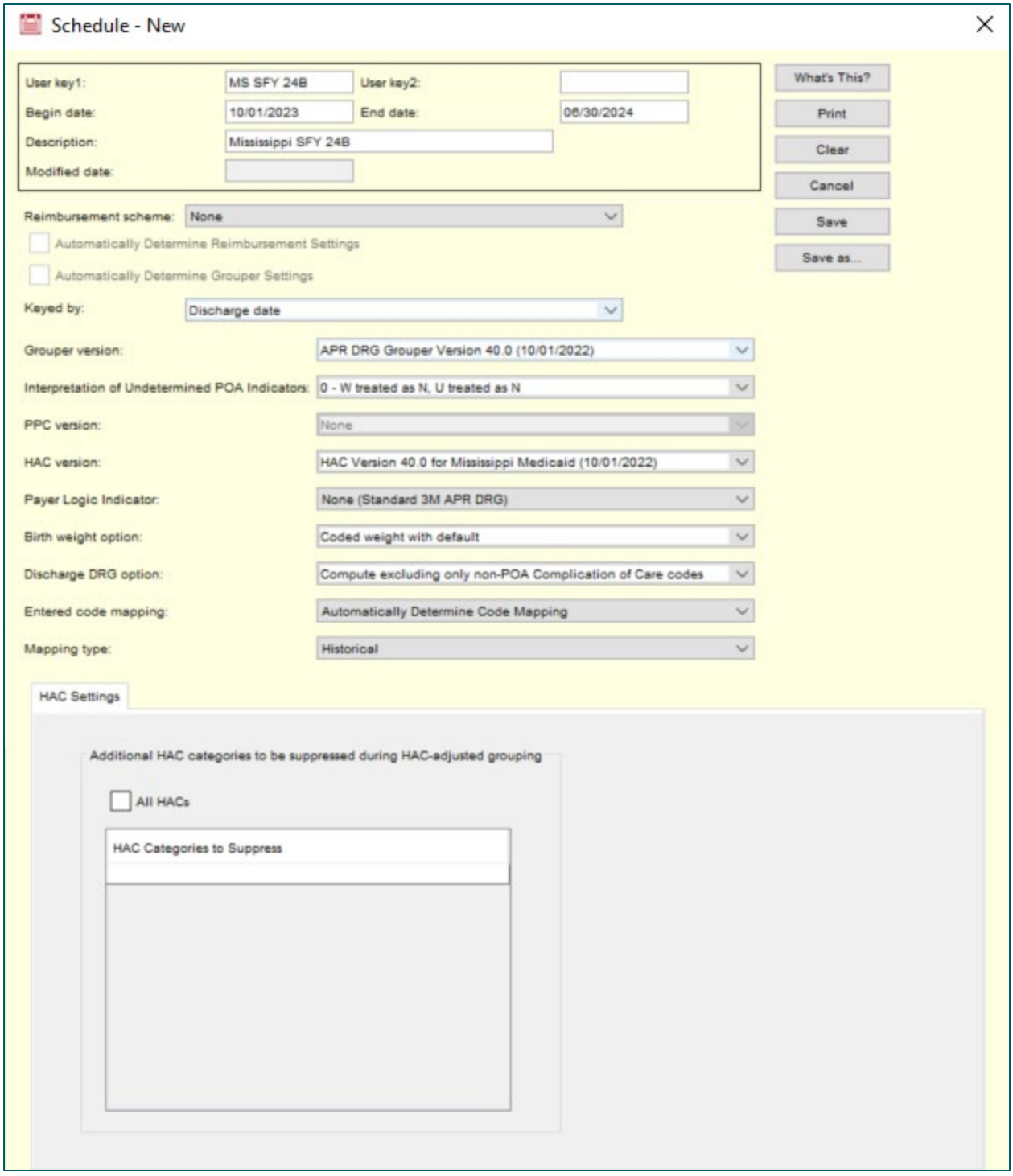


Figure 22: Grouper Settings, SFY 25A

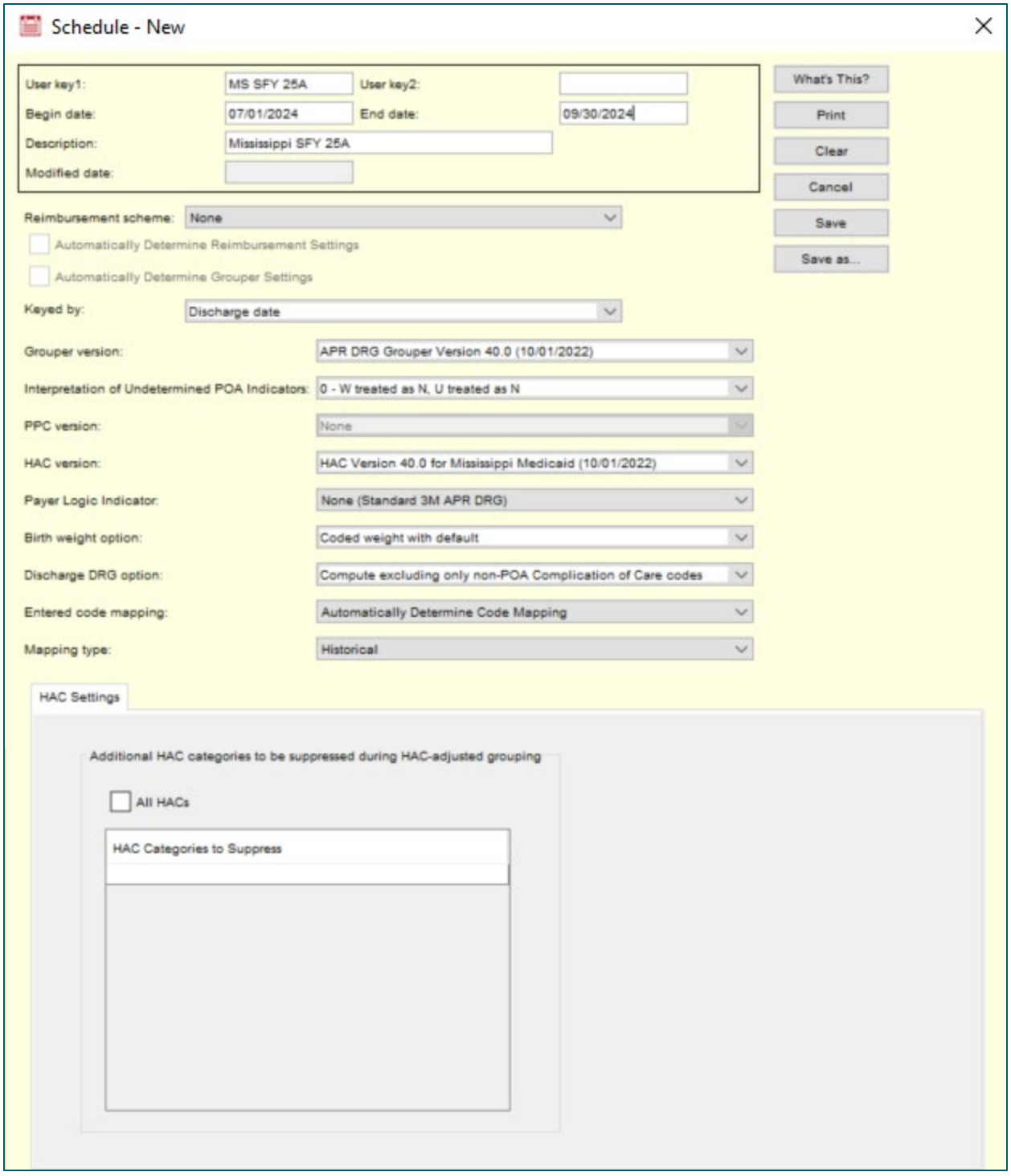


Figure 23: Grouper Settings, SFY 25B

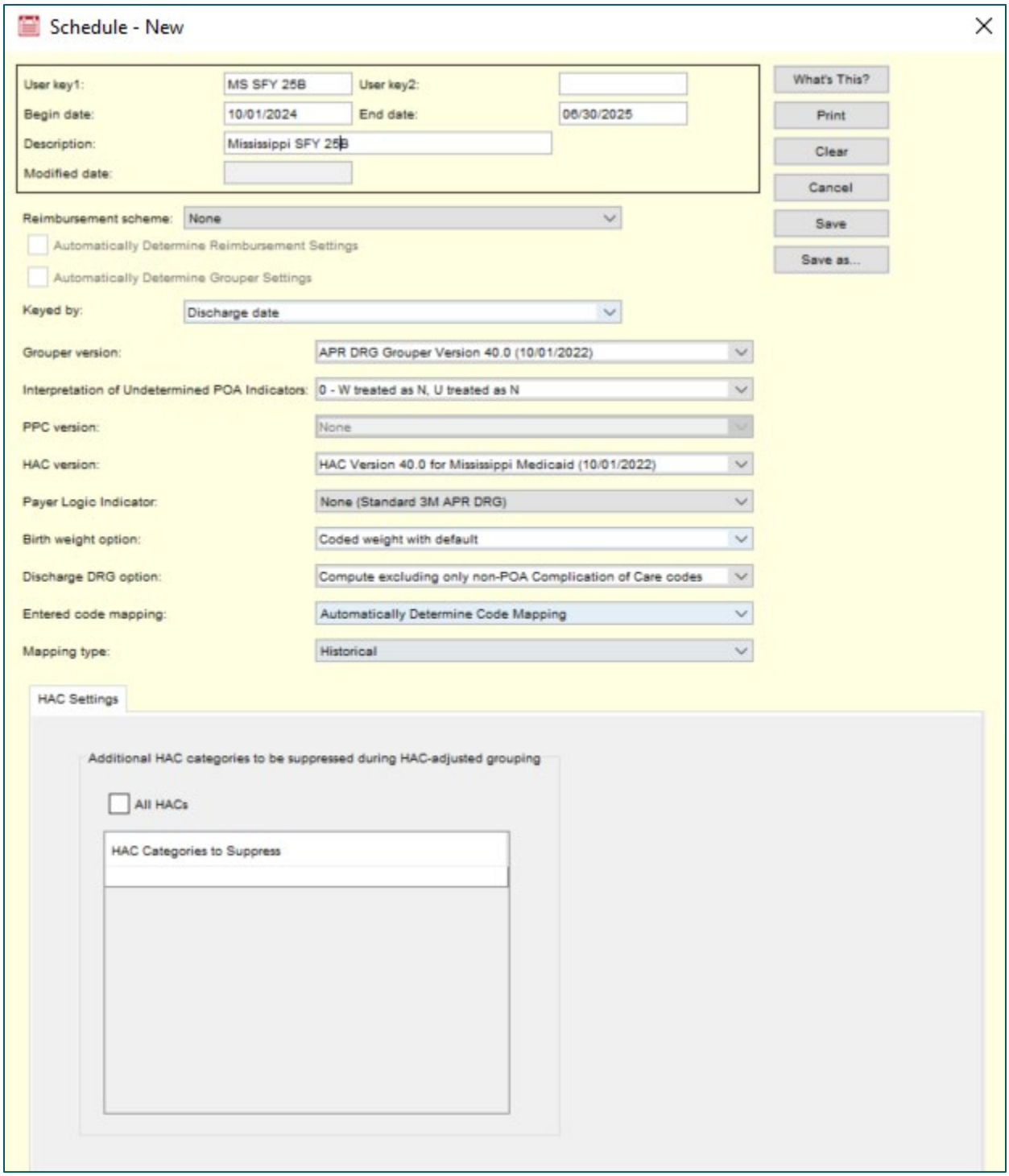


Figure 24: Grouper Settings, SFY 26A

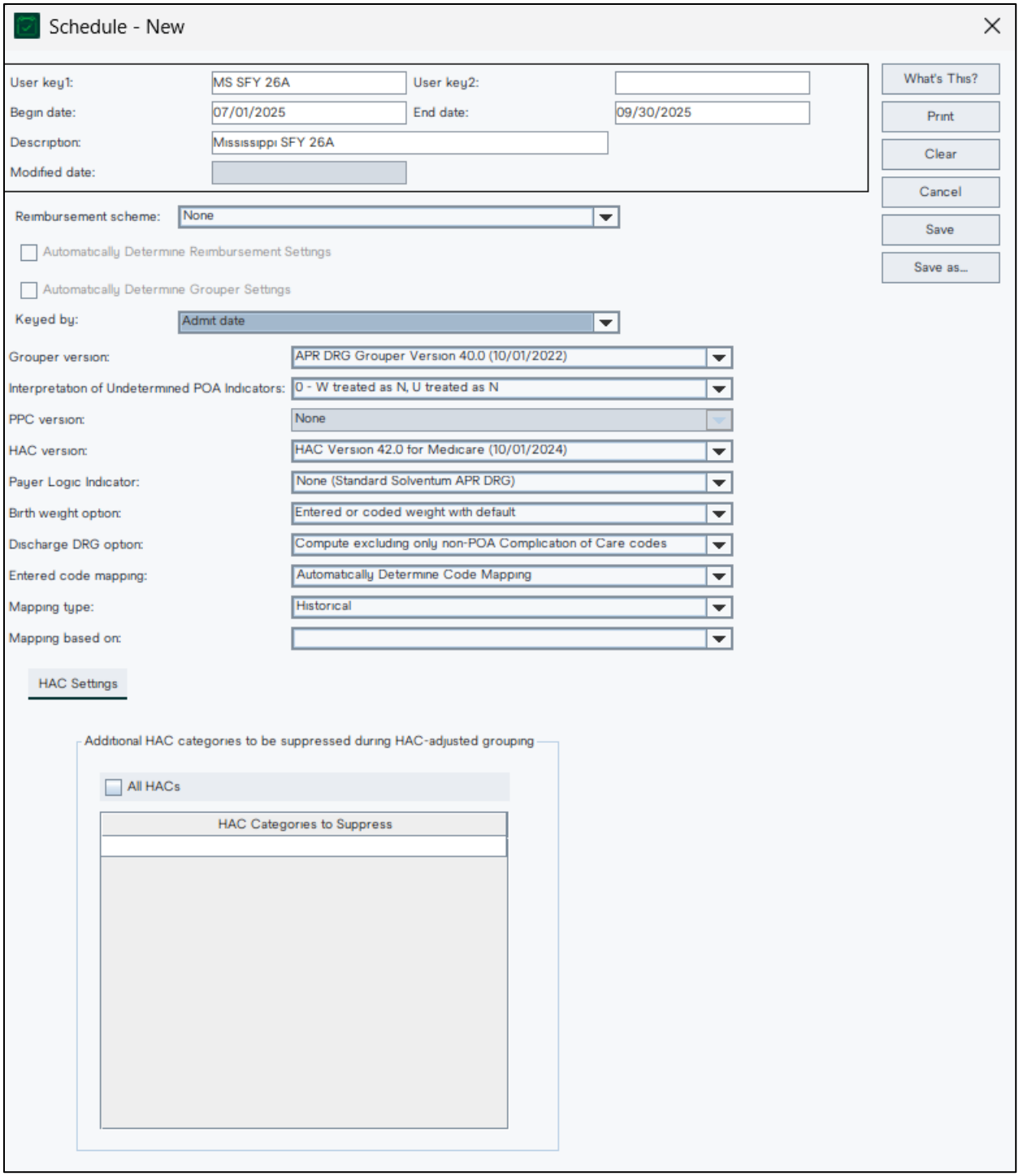


Figure 25: Grouper Settings, SFY 26B

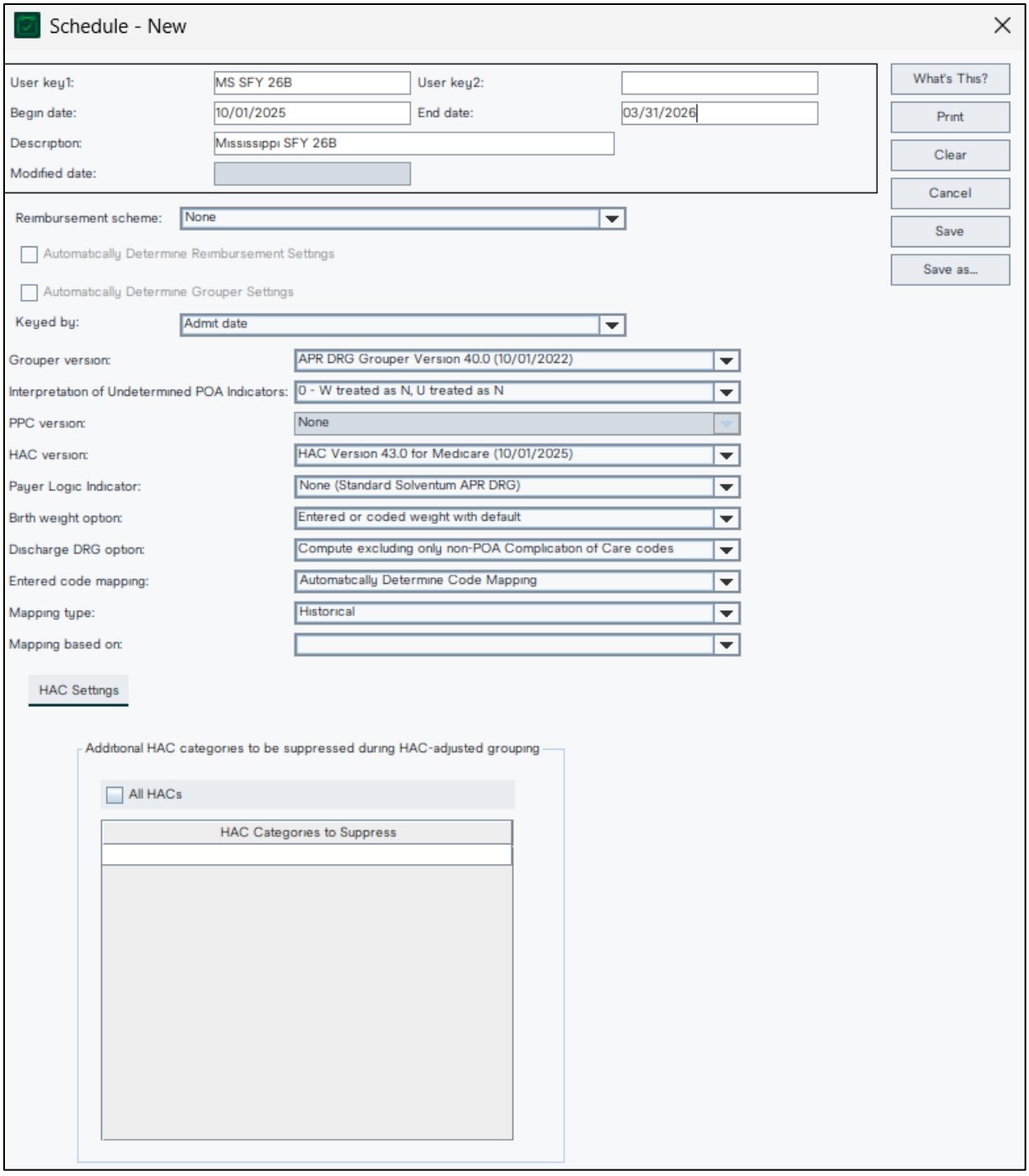
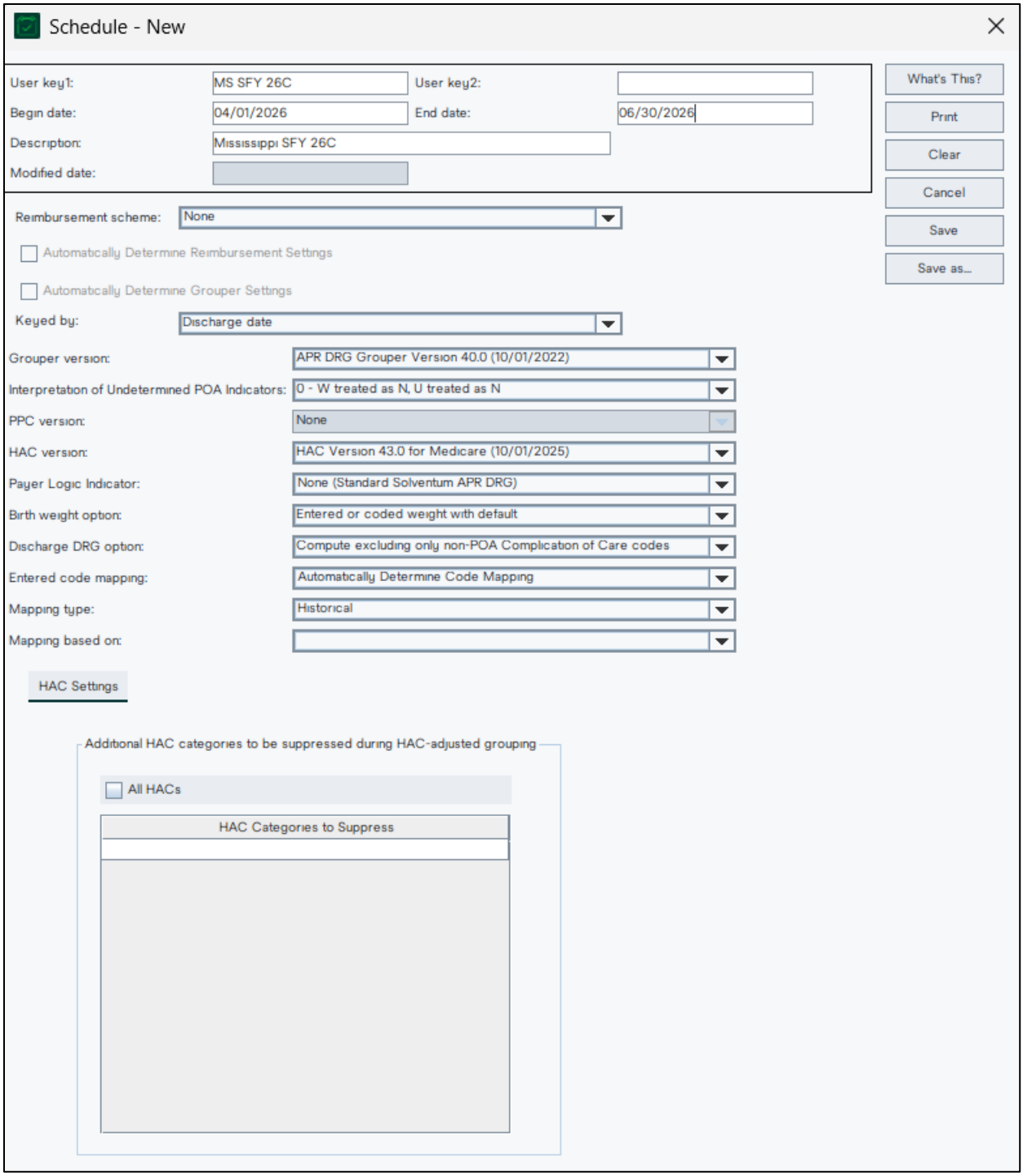
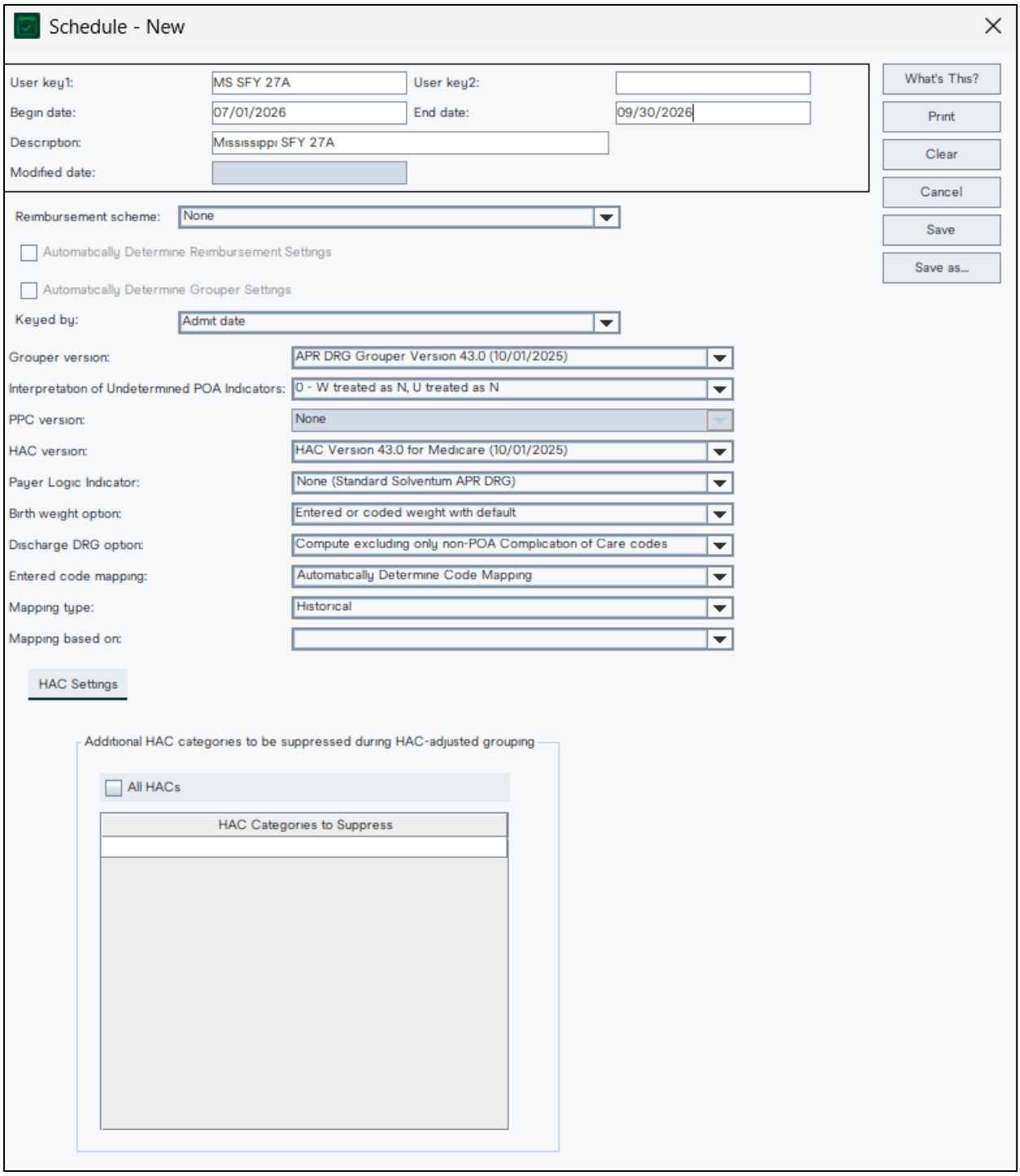


Figure 25: Grouper Settings, SFY 26C



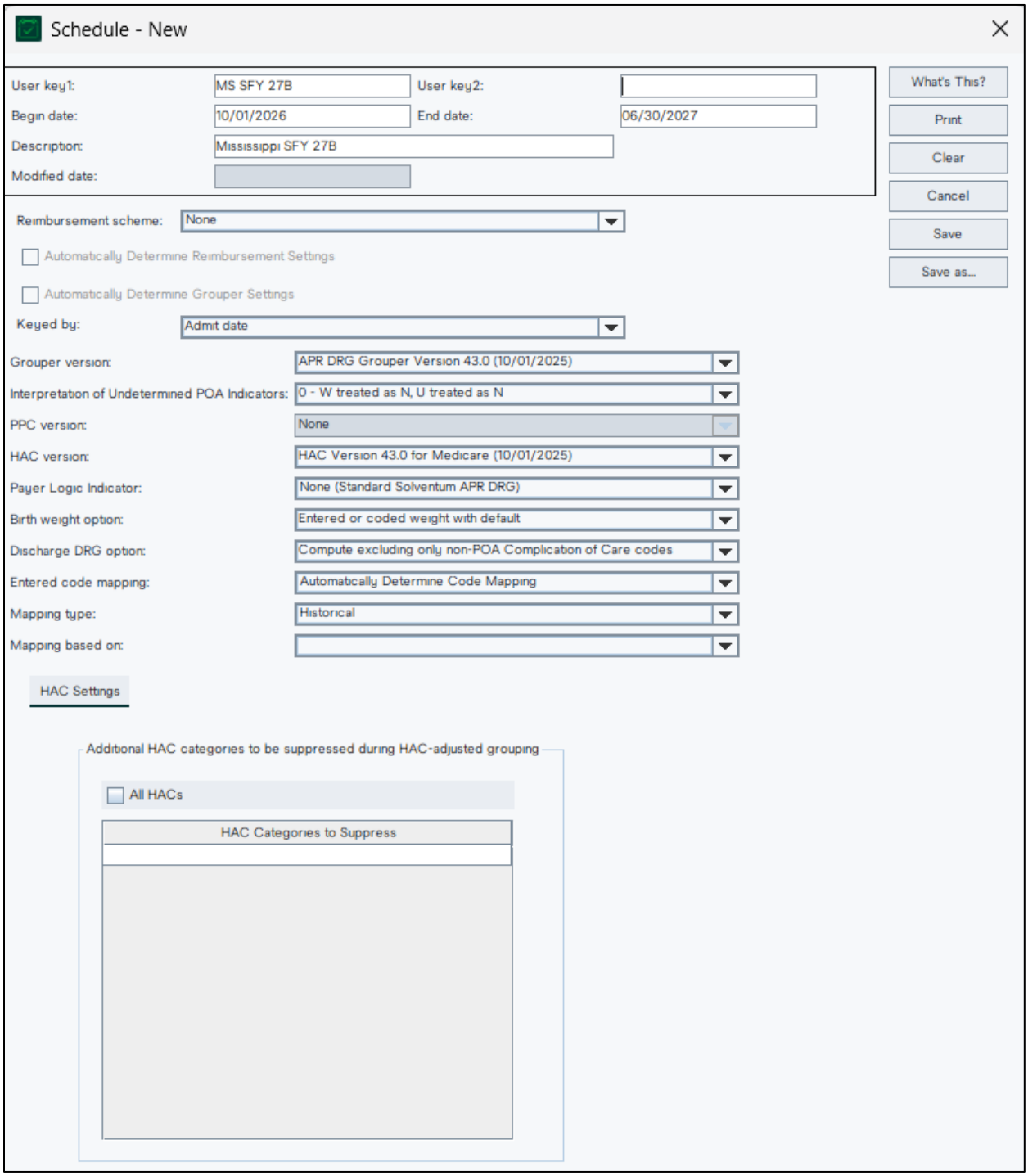
Version 43.1 is the appropriate HAC Version to use for claims in the 4/1/2026-6/30/2026 period. It was not available at the time of this publication.

Figure 26: Grouper Settings, SFY 27A



Version 43.1 is the appropriate HAC Version to use for claims in the 7/1/2026-9/30/2026 period. It was not available at the time of this publication.

Figure 27: Grouper Settings, SFY 27B



Version 44 is the appropriate HAC Version to use for claims in the 10/1/2026-6/30/2027 period. It was not available at the time of this publication.