Chronic Condition Data Warehouse

Your source for national CMS Medicare and Medicaid research data

CCW User Guide:

Medicare

Encounter Data Files

July 2018

Version 1.0

This page intentionally left blank.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Overview

Medicare is the primary health insurance program for people age 65 or older, people under age 65 with disabilities, and people of all ages with End-Stage Renal Disease (ESRD). Nearly all Medicare beneficiaries receive Part A hospital insurance benefits, which help cover inpatient hospital care, skilled nursing facility stays, home health and hospice care. Most beneficiaries also subscribe to Part B medical insurance benefits, which help to cover physician services, outpatient care, durable medical equipment (DME), and some home health care. Additionally, many beneficiaries elect to purchase Medicare Part D prescription drug coverage (available since 2006).

Beneficiaries may elect to receive original fee-for-service (FFS) Medicare or, as an alternative, enroll in Medicare Part C (Medicare Advantage, or MA). Medicare Advantage Organizations (MAOs) sponsor privately managed care plans, such as Health Maintenance Organizations (HMOs), Preferred Provider Organizations (PPOs), Private Fee-for-Service Plans (PFFS), and Special Needs Plans (SNPs), which provide Medicare Part A and Part B services. The Medicare managed care benefit is explained in greater detail on the Medicare.gov website[1].

In general, Medicare pays a fixed amount for each Part C enrolled beneficiary each month to the companies that have been approved by the Centers for Medicare & Medicaid Services (CMS) to offer Medicare Advantage Plans. The MAOs must follow the minimum coverage rules set by Medicare for Part A and Part B benefits[2]. The one exception to this rule is hospice -- regardless of whether beneficiaries are enrolled in MA or FFS Medicare, hospice services are paid under FFS rather than as part of the managed care plan's offerings. MA plans may also offer additional coverage, such as vision, hearing, dental or wellness programs. Most MA plans include the Medicare Part D prescription drug benefit (all except PFFS plans,[3]), and are referred to as MA-PD plans.

While an MA plan may offer additional coverage as a supplemental benefit, it may not limit the original Medicare coverage. Plans may limit enrollees' choice of providers more narrowly than under the traditional FFS program. Each MA plan can charge different out-of-pocket costs and

[1] Centers for Medicare & Medicaid Services (CMS). "Your Medicare Coverage Choices." https://www.medicare.gov/sign-up-change-plans/decide-how-to-get-medicare/your-medicare-coverage-choices.html
[2] CMS. "Medicare Managed Care Manual. Chapter 4 – Benefits and Beneficiary Protections." https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/mc86c04.pdf
[3] MedPAC. "Medicare Advantage Program Payment System. Payment Basics." October 2015.http://www.medpac.gov/docs/default-source/payment-basics/medicare-advantage-program-payment-system-15.pdf?sfvrsn=0

have different rules for how beneficiaries receive services (e.g., whether beneficiaries need a referral to see a specialist or if beneficiaries have to seek care from providers within the plan's network for non-emergency or non-urgent care). These rules can change each year[4].

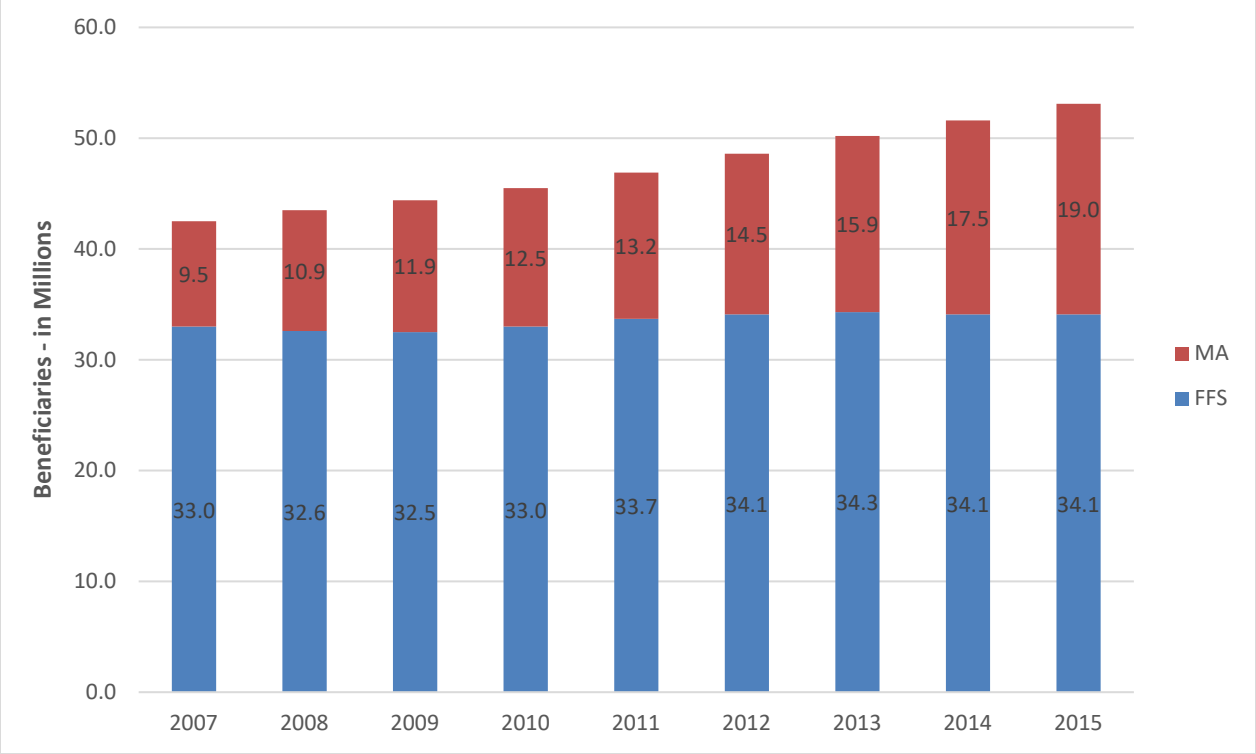
CMS uses the Chronic Conditions Warehouse (CCW) to develop and manage CMS research data resources. CCW Medicare research data files are created from the CMS enrollment files, FFS administrative claims submitted for payment to CMS, and encounter records submitted by MAOs to CMS. The CCW contains complete (100 percent) Medicare enrollment and eligibility information for all beneficiaries, whether they are in the FFS program or an MA plan and includes-complete data for Part A and Part B FFS claims, complete data for Part D prescription drug events (starting in 2006), and MA encounter data submitted by MAOs (starting in 2015). The CCW also contains assessment data (e.g., Minimum Data Set [MDS] and Outcome and Assessment Information Set [OASIS]), and Medicaid eligibility and claims data (the Medicaid Analytic eXtract [MAX] files). This guide provides users with information about working with the CCW Medicare Encounter data files and understanding the limitations of those files.

[4] CMS. "How do Medicare Advantage Plans Work?" https://www.medicare.gov/sign-up-change-plans/medicare-health-plans/medicare-advantage-plans/how-medicare-advantage-plans-work.html

Chapter 1: Overview of Medicare Advantage

The Medicare Prescription Drug, Improvement, and Modernization Act (MMA) expanded beneficiaries' options for participation in MA plans[5]. The proportion of Medicare beneficiaries with Part A and B coverage who were enrolled in MA plans has increased since 2007. In 2015, 36% of Medicare beneficiaries selected MA plans[6], compared to 22% in 2007 (see Figure 1).

Figure 1. Medicare Beneficiaries with Part A and B Coverage Enrolled in MA Plans*, 2007-2015



*Numbers are rounded, and expressed in millions.

A. Types of MA Plans

MAOs may operate as either local or regional plans. A MAO may have multiple contracts that cover different geographic regions or offer different types of plans. In July 2015, CMS had 739 contracts with MAOs[7]. Regional plans are all organized as PPOs, and cover entire states or multi-

[5] SSA. "Medicare Program Description and Legislation. Annual Statistical Supplement, 2015." https://www.ssa.gov/policy/docs/statcomps/supplement/2015/medicare.html
[6] CMS. "Medicare Beneficiary Characteristics." https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Chronic-Conditions/Medicare_Beneficia ry_Characteristics.html
[7] CMS. "Medicare Advantage/Part D Contract and Enrollment Data." https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MCRAdvPartDEnrolData/Monthly-Contract-and-Enrollment-Summary-Report-Items/Contract-Summary-2014-07.html?DLPage=4&DLEntries=10&DLSort=1&DLSortDir=descending

state regions. Approximately 7% of MA enrollees in 2015 were in regional PPOs[8]. HMO and Local PPOs enroll 86% of beneficiaries in MA and PFFS plans enroll one percent. The remaining 6% of MA enrollees are in other types of private plans, such as the Programs of All-Inclusive Care for the Elderly (PACE), plans paid their reasonable costs (i.e., cost plans), or demonstrations. Medicare utilization for cost plan and PACE enrollees will be partially captured in FFS claims data (e.g., cost plan institutional claims are paid by FFS). Cost and PACE plans can be identified using CMS's monthly contract enrollment data (i.e., organization type of "HCPP - 1833 Cost", "1876 Cost", or "National PACE") [9]. This monthly field is available in the MBSF_ABCD using the monthly PTC_PLAN_TYPE_CD_MM.

MA plans are generally required to offer at least one plan that covers the Part D drug benefit, and 87% of MA plans offered prescription drug coverage in 2015[10].

B. MAO Requirements

MAOs are responsible for providing Medicare benefits by furnishing the benefits directly to enrollees, through arrangements with providers, or by paying for the benefits on behalf of enrollees[11]. MAOs are not required to follow original Medicare claims processing procedures.

The health care providers (either professionals or institutions) who serve the beneficiaries enrolled in the MA plan submit claims for payment to MAOs. Participating MAOs utilize a variety of payment systems. Some providers may be paid by the MAO on a capitated basis or through bundling of services. Capturing all the services within these arrangements may be difficult when each service is not separately paid by the MAO.

[8] Kaiser Family Foundation. "Medicare Advantage. Fact Sheet." May 2016. http://kff.org/medicare/fact-sheet/medicare-advantage/
[9] CMS. "Medicare Advantage/Part D Contract and Enrollment Data." https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MCRAdvPartDEnrolData/Monthly-Enrollment-by-Contract.html
[10] Kaiser Family Foundation. "Medicare Advantage. Fact Sheet." May 2016. http://kff.org/medicare/fact-sheet/medicare-advantage/
[11] CMS. "Medicare Managed Care Manual. Chapter 4 – Benefits and Beneficiary Protections." https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/mc86c04.pdf

Chapter 2: What are Medicare Encounter Data?

The Medicare encounter data reflect services provided to beneficiaries through the Medicare Part C benefit. MAOs must submit data, in accordance with CMS instructions, to characterize the context and purposes of items and services provided to their enrollees by a provider, supplier, physician, or other practitioner[12]. There are important differences between encounter and Medicare FFS data and limitations that should be kept in mind when using the encounter data (see Using Medicare Encounter Data Files in Chapter 4 for more details).

The primary purpose of encounter data is to determine the risk adjustment factors used to adjust CMS' payments to MAOs, for which CMS needs diagnosis information from MA plans. However, the risk adjustment factors only include encounter data from certain claim types – inpatient, outpatient, and professional services (which CCW delivers as the "Carrier Encounter" file). CMS also uses encounter data for purposes such as updating risk adjustment models, conducting quality review and improvement activities, and program oversight.

Encounter data are not the sole input for determining risk adjustment payments to MAOs, and therefore, beneficiary risk scores cannot currently be replicated with encounter RIF data. MAOs separately submit diagnoses along with a limited set of additional data elements through the CMS Risk Adjustment Processing System (RAPS). For 2015 services (used for 2016 risk adjustment payment), the diagnostic information included in encounter data is used as a partial source for risk adjustment, which determines CMS' beneficiary-level payments to MAOs, but does not affect MAO payments to providers. Beginning with 2015 services, a portion (10%) of risk adjustment payment will rely exclusively on encounter and FFS data rather than RAPS. In future years, the proportion of risk adjustment payment that relies exclusively on encounter data may increase (thereby relying less on RAPS data).

A. Source Data

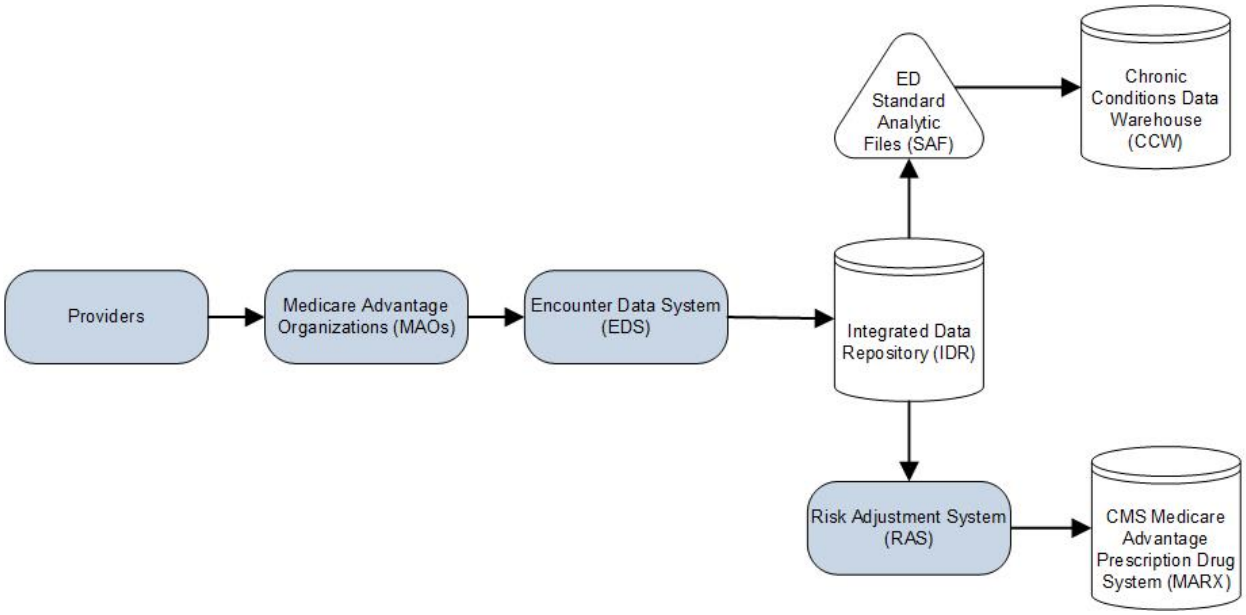
MAOs are required to send encounter data to CMS using the standard health care claims 837, 5010 record format set by the American National Standards Institute Accredited Standards Committee. CMS has been receiving data from MAOs since 2012 through the MA Encounter Data System (MA EDS). The MA EDS is comprised of two systems, one for data submission (the front end) and another for data processing (the back end). Encounter data records are submitted through the front end, which sends reports to MAOs that include notification of syntax and formatting errors, and acknowledgement of which encounters are accepted and rejected. Subsequently, the front end performs automated checks, e.g., to determine whether key data elements are submitted. Once encounters are successfully processed by the front end, they are

[12] e-CFR. Title 42.Chapter IV. Subchapter B, Part 422, Subpart G §422.310. https://www.ecfr.gov/cgi-bin/text-idx?SID=8d82851302026fa9501ff2cb62483255&mc=true&node=se42.3.422_1310&rgn=div8

sent to the back end for editing and validation. MAOs are notified about which records were accepted and which were rejected, and if rejected an explanation was provided. These encounter records are updated and stored in the CMS Integrated Data Repository (IDR) (see Figure 2).

The IDR is the data source that CMS uses to extract encounter data standard analytic files (SAF) that are loaded into the CCW. The SAFs are then extracted from the CCW Oracle database, and the Research Identifiable Files (RIF) files are produced.

Figure 2. Encounter Data Processing Flow



When the SAFs are extracted from the IDR and loaded into the CCW, those files contain a copy of each accepted encounter record in the database. It may take multiple iterations for MAOs to submit encounter data that is complete and accurate; that is, a single encounter may be re-submitted multiple times, and each submission will be contained in a separate encounter record. MAOs are required to submit fully adjudicated encounters with a final disposition of either paid or denied. The SAFs (and therefore the RIFs) include all occurrences of the encounter – not just the latest version of the encounter.

There is a set cut-off date for plans (MAOs) to submit encounter records for inclusion in the risk adjustment payment process. In general the data are to be submitted 13 months after the end of the service year. However, in some years (including 2015), CMS grants deadline extensions to accommodate various circumstances[13]. The IDR continues to accept encounter records beyond

[13] For payment year 2016 (2015 dates of service), CMS will allow MAO's to submit encounters through September 14, 2018, beyond the typical 13 month deadline. For more information, see HPMS Memo published July 11, 2018 titled "Final Risk Adjustment Deadline and MAO-004 Reports."

this deadline, in order to capture a more complete universe of services, but those encounters are not used for risk adjustment purposes. In general, most encounter records are submitted before the cut-off date for inclusion in the risk adjustment payment process.

1. Encounter Records

An encounter record indicates a service has been provided to a beneficiary enrolled in the MA plan. Because the MA program is organized differently than the FFS program, there are several differences between encounter records and claims, such as: 1) the record of service is reported to CMS by the MAO, rather than directly by the provider, 2) multiple records may be associated with the same service, 3) some encounter records contain service codes that are not used in FFS (e.g., HCPCS codes for transportation services), 4) a record may be designated as a nonfinal action record because—unlike FFS—final action encounter records are only indicative of the latest accepted version of a record, which may consist of the MAOs review of a medical record related to the service (i.e., chart review – note that there is additional information regarding chart reviews in the next section of this document), 5) service information on an encounter may not be always populated for all fields that are either situational to the service or not required by the MA EDS, and 6) payment may not be associated with each service (e.g., some plans pay providers on a capitated basis).

2. Chart Review Records

Chart review records are a type of encounter data record that allow MAOs to add or remove diagnoses that they identified through medical record reviews that are different from diagnoses initially reported on encounter data records. Chart review records may be submitted for any service type that is eligible for risk adjustment (i.e., inpatient, outpatient and professional [carrier claim type]), and there are no limitations on the number of chart review records in totality or per encounter. Chart reviews are a way for MAOs to submit more complete service-level diagnosis information, for example if an encounter generated more diagnosis codes than the maximum number of diagnosis code spaces on an encounter data record (12 for professional, 25 for institutional). MAOs and other entities can perform the following actions through a chart review record:

- Add specific diagnoses not reported on an original or replacement encounter data record or prior chart review (note that these records are those where CLM_FREQ_CD = ’1’, ‘7’)
- Delete specific diagnoses from a prior record (note that these records are those where CLM_FREQ_CD = ’1’,’7’ and CLM_MDCL_REC = ’8’). As all chart review records are intended to be encounter-level adjustments, diagnosis deletions can only be correctly identified when the CLM_ORIG_CNTL_NUM of the chart review is traced back to the CLM_CNTL_NUM of the original record. Otherwise, users cannot identify which diagnoses to delete from the original record.

- Replace a chart review record with another chart review record (note that these records are those where CLM_FREQ_CD =’7’).

Chart review records are submitted on the same 837, 5010 version record format as other encounters. Chart review records are processed in EDS the same way as other encounter data records. Chart review records may be identified in the encounter records where the chart review switch (variable called CLM_CHRT_RVW_SW) =’Y’. In some cases, chart reviews may be the only record of a particular service in the encounter data.

MAOs and other entities may submit two types of chart review records to the Encounter Data System (EDS):

- Linked chart reviews: linked to an original encounter data record through the claim control number (i.e., CLM_ORIG_CNTL_NUM of chart review is equal to the CLM_CNTL_NUM of the original record). Linked chart reviews can be used to add or delete risk adjustment eligible diagnoses.
- Unlinked chart reviews: not linked to an original encounter record through the claim control number. Unlinked chart reviews can only be used to add risk adjustment eligible diagnoses, but cannot be used to delete diagnoses.

B. CCW Medicare Encounter Research Identifiable Files (RIFs)

The CCW obtains all encounter records that are available at the time the data are extracted from the IDR. The encounter data RIFs are annual files that are partitioned using the date a service ended (i.e., claim through date). The first RIFs that CMS is making available are for 2015 dates of service. For the 2015 service year, CMS will release 2 versions of the RIFs – a preliminary and a final version. The preliminary version was created in May 2017 and includes accepted encounters submitted through that date. The final versions will be created later this year after the submission window closes in August 2018 (as mentioned previously, the 2015 service year submission window was extended).

The CCW Encounter RIFs may contain multiple copies of the same service record, since we include all occurrences of the encounter – not just the latest version of the encounter. Note that the term “final action” is used differently in encounter data than it is with FFS claims. Additional details, as well as guidance for identifying the version of the record that is suitable for typical study questions, appear in Chapter 4, Section A.

The CCW assigns a unique beneficiary identifier (BENE_ID). The CCW also partitions the records into base records which contain the header portion of the encounter, and revenue center or line records which contain the trailer portion of the encounter.

The encounter data files contain key variables which can be used to join the files together, when appropriate (e.g., the BENE_ID, the CLM_TYPE_CD, and the claim line/record join key [variable called ENC_JOIN_KEY]). The linkage keys used may vary depending on which files you are attempting to join. When medical services provided to a beneficiary are the focus, the primary linkage will be at the person level (i.e., the BENE_ID), after aggregation of the encounter level files. Data file users may also wish to join information from encounter data files to other CCW files, such as Medicare enrollment and Plan Characteristics; additional information on linking to these other files appears in Chapter 3, Section A.

1. Structure of Encounter RIFs

The CCW Encounter RIFs consist of all accepted encounter records for a given year (i.e., records that were complete and distinct enough from previously submitted encounters to be accepted by the CMS Encounter Data Processing System), including chart reviews, when applicable. Duplicate services across multiple final action records may exist, and users should make appropriate adjustments when identifying distinct services. Additional information regarding identification of distinct services or identification of populations appears in Chapter 4, Section A.

Encounter RIFs are available for six settings: inpatient (IP), skilled nursing facility (SNF), home health (HH), institutional outpatient (OP), professional, and durable medical equipment (DME). Record counts for each of the 2015 CCW Encounter RIFs are in Table 1.

Table 1. Encounter RIF Record Counts, 2015

Encounter Type	Total Encounter File Record Count*	Chart Review	
		Record Count*	% Records that are Chart Review
Inpatient (IP)	5,884,952	1,043,581	17.73%
Skilled nursing facility (SNF)	1,687,390	92,670	5.49%
Home health (HH)	4,674,743	41,557	0.89%
Institutional outpatient (OP)	64,970,318	1,134,651	1.75%
Professional	491,211,431	39,058,948	7.95%
Durable medical equipment (DME)	23,453,563	376,140	1.60%

*Note: Record counts do not necessarily represent unique encounters or services. See Chapter 4 for a more detailed explanation of identifying unique services.

The RIF data for each of the settings is partitioned into header and trailer records, which we refer to as the "base" and "line" or "revenue center" files. The ***base file*** contains the base encounter record, while the ***line file or revenue center file*** may contain multiple revenue

centers (for records from institutional settings) or line items (for non-institutional settings) for a corresponding base encounter record.

- **Base File –** This file contains encounter header information such as the claim control number, beneficiary ID, claim type, claim from date, claim through date, processing date, provider ID, plan ID, admitting diagnosis, primary diagnosis, and up to 25 additional diagnosis code fields and 25 procedure codes with associated dates, as well as the DRG (for inpatient records). Note that for professional and DME files, the base record layout only allows for up to 12 diagnosis codes.

The revenue centers represent institutional cost centers, for which separate charges are billed. For example, there are revenue centers for emergency department (ED), intensive care, physical therapy, laboratory, pharmacy, blood, imaging, etc. It is common to use the revenue center detail if you are interested in the outpatient file because the revenue center contains important information to help distinguish between care settings (e.g., clinic vs. dialysis care).

- **Revenue Center File –** This file contains the line-level procedures (HCPCS) for the institutional encounter. Revenue center fields, which are available for the institutional encounter records (IP, SNF, HH and OP), include the claim control number, claim type, HCPCS, Revenue Center code, Revenue Center date, rendering physician ID, and revenue center unit count.

The base and revenue center file records for an encounter are linked using the BENE_ID, CLM_TYPE_CD, and the ENC_JOIN_KEY. The revenue center lines are numbered sequentially using the claim line number (CLM_LINE_NUM).

- **Line file –** This file contains the individual line level information from the non-institutional encounter (i.e., for professional or DME records). This includes the HCPCS code(s), first and last expense dates, and performing provider identifier.

  The line item detail contains important information on procedures performed by providers who had a role in caring for the patient. The base and line files for an encounter are linked using the BENE_ID, CLM_TYPE_CD, and the ENC_JOIN_KEY. The line file records for the encounter are numbered sequentially using the claim line number (CLM_LINE_NUM).

- **Reference Code Files –** Four types of reference code files are available to link to the base encounter for the institutional encounter types (i.e., IP, SNF, HH and OP), including condition, occurrence, span, and value code files. These files are rarely used; however, they contain information regarding special conditions which may affect payer processing. For example,

outpatient encounters may include information on whether additional health indicators factored into the service provided, such as hemoglobin reading and patient weight. See Table 2 for more detail on Reference Code files.

Table 2. Reference Code Files

File Name	Description
Condition codes	Codes that indicate a condition relating to an Institutional encounter (e.g., insurance related, special condition, student status, accommodation, CHAMPUS, SNF, etc.). Information in the Condition Code File may help identify outlier payment situations (e.g.,
Occurrence codes	Codes that identify a significant event/date relating to an Institutional encounter (e.g., accident, medical condition, insurance related, service related, etc.). The corresponding date of the occurrence is listed.
Span codes	Codes that relate to an institution (e.g., exhausted all full/coinsurance days but covered on cost report, hospital prior stay dates, visits occurring in this billing period if different, etc.). The from and through dates during which the situation indicated in the span code are given.
Value codes	Codes indicating value of a monetary condition used by the intermediary to process an Institutional encounter (e.g., the wage index to be applied to home health care due to the beneficiary

The base and reference code file records for an encounter are linked using the same fields described above: BENE_ID, CLM_TYPE_CD, and ENC_JOIN_KEY–and the sequence number field within each file numbers the lines sequentially (e.g., the claim related occurrence code sequence RLT_OCRNC_CD_SEQ).

2. Variables on Encounter RIFs

The variables on the CCW Encounter RIF are similar to variables on the fee-for-service claims RIF, whenever possible. The information available in the encounter data includes the CCW-assigned beneficiary ID, claim type, organization provider number, dates of service, claim processing date, claim control number, diagnosis and procedure codes. Please note that payment variables are not included in the RIFs due to the proprietary and confidential nature of this information.

A complete list of variables is available in the Encounter Data Codebook[14]. Some key encounter variables are highlighted below:

Claim control number – This is the field (CLM_CNTL_NUM) that, in combination with the original claim control number (CLM_ORIG_CNTL_NUM), identifies a unique version of a service record. As mentioned previously, multiple iterations of a single service (i.e., a particular type of claim for

[14] Please see https://www.ccwdata.org/web/guest/data-dictionaries for the Encounter Data Codebook.

a specific service date for the person) are present in the Encounter RIFs; records are not limited to the final version of the encounter record. Therefore, it is helpful to be able to identify versions of the service record that have been adjusted or deleted by a subsequent encounter record. In addition, occasionally, two final action records that are submitted separately but may be duplicative. When multiple records for a service exist, the higher the claim control number, the later it was adjusted (i.e., the highest CLM_CNTL_NUM is the latest version of the encounter).

Original claim control number – When an MAO submits an adjustment, the claim control number (CLM_CNTL_NUM) for the encounter record that is being adjusted is populated in the CLM_ORIG_CNTL_NUM field – and a new CLM_CNTL_NUM is assigned to this updated record. A null/missing CLM_ORIG_CNTL_NUM indicates that a prior encounter record has not been adjusted by the MAO. Generally, this implies that it is the first occurrence of an encounter service record, but occasionally, multiple record submissions for the same service may appear as original encounters.

Organization NPI Number – This is the CMS National Provider Identifier (NPI) number assigned to uniquely identify the institutional provider that is billing/providing the services to the beneficiary (ORG_NPI).

Claim from and through dates – This is the first date of service (CLM_FROM_DT) on the billing statement/encounter record covering services rendered to the beneficiary (i.e., the record covers services starting on this date). The claim from date may not always correspond with the first date the beneficiary received services (i.e., it is not always equal to admission date), if services were provided over a long period of time–such as for lengthy SNF stays or HH episodes. Similarly, the claim through date (CLM_THRU_DT) is the last day on the billing statement services rendered to the beneficiary (i.e., the record covers services through this date). Note that this may not always correspond with the last date the beneficiary received services (i.e., it is not always equal to discharge date). The example below (Table 3), which presents hypothetical records for a beneficiary, help demonstrate the meaning of the claim control number (CLM_CNTL_NUM) and original claim control number (CLM_ORIG_CNTL_NUM) variables.

Table 3. Example of Claim Control Numbers

BENE_ID	CLM_FROM_DT	CLM_THRU_DT	CLM_CNTL_NUM	CLM_ORIG_CNTL_NUM	ORG_NPI
Jones	12-Feb-15	12-Feb-15	1234567899999		1357986420
Jones	12-Feb-15	12-Feb-15	1468975321344	1234567899999	1357986420

In this example, there are two encounter records for Mr. Jones for the same service (the same dates, the same ORG_NPI). The first encounter submission is in the first row – and there is a null/missing CLM_ORIG_CNTL_NUM. The second record is an updated version of the service record, and the CLM_CNTL_NUM from the record that is being updated appears in the CLM_ORIG_CNTL_NUM field (i.e., the value = 1234567899999). A new claim control number is assigned for each iteration of the encounter record, and it is a higher number than the earlier claim control number.

Claim type code – This field (CLM_TYPE_CD) is used to identify particular types of care settings. Particular claim types are included within an encounter file. Values are listed in Table 4 below.

Final action indicator – This field (CLM_FINL_ACTN_IND) is stored in the IDR as the final action indicator but it is only indicative of the last adjustment to a record. For 2015 encounter data, records that are modified by a chart review—although they appear as nonfinal action—should also be treated as final action records.

Table 4. Claim Type Code by File Type

Encounter File	CLM_TYPE_CD	Description
IP	4011	Hospital Inpatient
	4041	Religious Nonmedical Health Care Institutions - Hospital Inpatient
SNF	4018	Hospital Swing Beds
	4021	SNF Skilled Nursing Inpatient
	4028	SNF Skilled Nursing Swing Beds
HH	4032	Home Health + Inpatient (inpatient covered by Medicare Part B – not Part A)
	4033	Home Health + Outpatient
OP	4012	Hospital Inpatient (covered by Medicare Part B – not Part A)
	4013	Hospital Outpatient
	4014	Hospital Laboratory Services Provided to Non-patients
	4022	SNF Skilled Nursing Inpatient (covered by Medicare Part B – not Part A)
	4023	SNF Skilled Nursing Outpatient
	4034	Home Health + Laboratory Services Provided to Non-patients
	4071	Clinic (RHC) Rural Health

Encounter File	CLM_TYPE_CD	Description
	4072	Clinic (ESRD) Renal Dialysis Hospital Based or Independent
	4073	Clinic Freestanding
	4074	Clinic (ORF) Outpatient Rehab Facility
	4075	Clinic (CORF) Comprehensive Outpatient Rehab Facility
	4076	Clinic (CMHC) Community Mental Health Centers
	4077	Clinic (FQHC) Federal Qualified Health Center
	4079	Clinic – Other
	4083	Special Facility (ASC) Ambulatory Surgery Center
	4085	Special Facility (CAH) Critical Access Hospital
	4089	Special Facility – Other
Professional	4700	Professional
DME	4800	DME

Institutional Providers. Encounter data from institutional providers and/or settings, which are required through the Medicare Part A benefit, appear in the IP, SNF and HH files. In addition, encounters for institutional-based services covered by the Medicare Part B benefit (e.g., home health, institutional outpatient) appear in the HH and OP files, respectively. For each setting, there is a base file, revenue center file, and the reference code files (condition, occurrence, span and value code files). The files for institutional providers include the following:

- **IP –** This file is for inpatient services, and includes ICD-9 and ICD-10 diagnoses and procedure codes, DRG information, dates of service, organization provider ID (National Provider Identifier [NPI]), and beneficiary demographic information. This file includes services from inpatient rehabilitation facilities, inpatient psychiatric facilities, and long-term care hospitals. Please note that Encounter data does not contain a provider variable (e.g., CMS Certification Number) that explicitly differentiates between these facility types.
- **SNF** – This file is for services furnished by SNF providers. This file includes ICD-9 and ICD-10 diagnosis codes, dates of service, organization provider number (the NPI), and beneficiary demographic information. Please note that MAO submission of Health Insurance Prospective Payment System (HIPPS) codes, which are required on FFS claims for SNFs, was only required for SNF encounters with "from" dates of July 1, 2015 or later.
- **HH –** This is the HH services file, which includes the number of visits, type of visit (e.g., skilled nursing care, home health aides, physical therapy, speech therapy, occupational therapy, and medical social services), diagnosis (ICD-9 and ICD-10 codes), date(s) of visit(s), and HH provider number (NPI). Please note that MA billing periods for HH services may differ from FFS and episodes of care cannot be constructed in the same manner. Further, MAO submission of Health Insurance Prospective Payment System (HIPPS) codes was only required for HH encounters with "from" dates of July 1, 2015 or later.

- **OP –** This file is for outpatient services submitted by institutional providers (e.g., hospital outpatient departments, Rural Health Clinics, Federally Qualified Health Centers, renal dialysis facilities, outpatient rehabilitation facilities, comprehensive outpatient rehabilitation facilities, and community mental health centers). This file includes ICD-9 and ICD-10 diagnosis and procedure codes, outpatient provider number (NPI), and beneficiary demographic information. By using the associated revenue center records, you can obtain information regarding the CMS Healthcare Common Procedure Coding System (HCPCS) codes, dates of service, and revenue center codes.
- **Hospice –** As mentioned previously, hospice services are not paid for by MA plans, and therefore there is no hospice file for MA. When an MA enrollee elects hospice, hospice claims are paid by FFS Medicare and CMS' payments to the MAO for this enrollee are reduced to the monthly amount for MA supplemental benefits. The MA plan is still responsible for any supplemental benefits offered by the plan (e.g., dental, hearing, or reduced cost sharing)[15]. For example, if the MA plan offers reduced cost sharing for some Part A or Part B services as a supplemental benefit, the plan must offer the reduced cost sharing to a hospice enrollee in certain circumstances (e.g., when the service is for a diagnosis unrelated to the terminal condition, is furnished by a network provider, and follows plan rules). Therefore, we recommend that researchers examine both encounter data records and FFS claims data for these beneficiaries.

Non-Institutional Providers. The Medicare non-institutional encounter data include services covered by the Part B benefit, and consist largely of professional services and DME. The files for non-institutional providers include the following:

- **Professional –** This file is for practitioner/provider services (e.g., physicians, physician assistants, clinical social workers, nurse practitioners, independent clinical laboratories, ambulance providers, and free-standing ambulatory surgical centers). This file includes ICD-9 and ICD-10 diagnosis codes, dates of service, and non-institutional provider numbers (e.g., NPI). The line records document the applicable HCPCS codes for the visit.
- **DME –** This file contains encounter data for DME suppliers. It includes ICD-9 and ICD-10 diagnosis codes, dates of service, and DME provider number (i.e., supplier NPI). The line records document the applicable HCPCS codes.

Place of Service on Non-Institutional Encounters – Non-institutional encounters cover a variety of settings. The line place of service codes on the professional and DME line files

[15] MedPAC. Payment Basics. Hospice Services Payment System. October 2016: http://www.medpac.gov/docs/default-source/payment-basics/medpac_payment_basics_16_hospice_final.pdf?sfvrsn=0

(variable called LINE_PLACE_OF_SRVC_CD) identifies the type of setting where the service was provided. The line HCPCS codes (HCPCS_CD) indicate the type of service that was provided.

Medicare Prescription Drug Event Files. There are no encounter data records for Medicare Part D drugs. All of the Part D prescription drug events (PDEs) data from all beneficiaries participating in the Part D program, regardless of whether the beneficiary is enrolled in MA or a FFS plan, are in the PDE file. See ccwdata.org for the file record layout and definitions (https://www.ccwdata.org/web/guest/data-dictionaries). PDEs are available for all prescription fills that are covered as part of the Part D benefit from 2006 forward (the inception of the benefit), whereas encounter data are available from 2015 forward.

Note that some drugs are covered under the Medicare Part B benefit, and appear in the professional encounter data file rather than the Part D event file. The Part B covered drugs are generally injectable or infused drugs administered in a medical setting (e.g., IV chemotherapy and some vaccines).

Chapter 3: Medicare Advantage Enrollment Data

Data for 100% of Medicare-enrolled beneficiaries is available from the CCW. The CCW downloads the CMS Common Medicare Environment (CME) database each month to create an annual enrollment RIF data file known as the Master Beneficiary Summary File (MBSF). Each annual file includes all beneficiaries documented as being alive for some part of the calendar year and enrolled in the Medicare program (Part A or Part B) for at least one month of the year.

Upon enrollment in Medicare, each beneficiary receives a health insurance claim (HIC) number. HIC numbers appear on Medicare claims and encounter data and were traditionally used to identify beneficiaries, but they are not ideal for research purposes because beneficiaries may have more than one HIC number during their lives due to events such as the death of a spouse or remarriage. The CCW creates a unique beneficiary identifier (known as the BENE_ID) using information from the CMS enrollment database, which contains a variety of identifying information for each beneficiary, such as his or her HIC, sex, Social Security number (SSN), and date of birth. The BENE_ID uniquely identifies each beneficiary, and is used in CCW data files in lieu of more sensitive identifiers such as the HIC or SSN (unless otherwise specified/approved in the CMS data use agreement [DUA]). The BENE_ID allows linkage of an individual's data across data sources/years/types.

The unique CCW beneficiary identifier field is specific to the CCW and is not applicable to any other identification system or data source. This identifier is encrypted prior to delivering the data files to researchers. In addition, all data files delivered to researchers are encrypted (see Encryption Information in Chapter 6 for details). Each research request employs a different encryption key for the beneficiary identifier field and the data files.

The record layouts for all of the CCW data files may be obtained from the ccwdata.org website, under the Data Dictionaries tab (https://www.ccwdata.org/web/guest/data-dictionaries).

A. Demographic and Medicare Coverage Variables

The MBSF contains information on beneficiaries' demographic characteristics and details of their enrollment in Medicare. Examples of the types of information in the MBSF include:

- **Demographic** – age, race, sex, date of death;
- **Geographic** – state, county, zip code;
- **Enrollment** – the start date for Medicare coverage; how the beneficiary qualified for Medicare (both the original reason and the current reason, which can differ); and

monthly information on eligibility (Part A, Part B, or both), enrollment in MA (aka Medicare Part C), and enrollment in Part D. Please note that nearly 100% of beneficiaries enrolled in MA have coverage under both Part A and Part B. In contrast, about 88% of beneficiaries enrolled in FFS have coverage under both Part A and Part B.

The base Beneficiary Summary File is also known as the MBSF Part A, B, C and D segment.

B. Identifying Managed Care-Enrolled Beneficiaries

The MBSF includes Medicare enrollment and coverage information for all beneficiaries. There is a single row of data in the MBSF for each beneficiary enrolled in Medicare at any time during the year. Information provided in the MBSF can be used to subset a study population. For example, it is possible to limit your data to the subsample with MA enrollment to allow for adequate surveillance (opportunity to observe encounter records). The MBSF indicates the type of Medicare coverage obtained.

Some key variables from the MBSF related to MA coverage are listed in Table 5.

Table 5. Variable Names for Medicare Enrollment Variables with Monthly Values

Variables with monthly values	**Description**	**SAS Variable name** the last 2 digits <MM> are sequential 01-12
HMO indicator	Monthly MA enrollment indicator	BENE_HMO_IND_<MM>
Part C Contract ID*	The unique number CMS assigns to each contract that a Part C plan has with CMS. The first character of the contract ID is a letter representing the type of plan (e.g., H is assigned to MA local contracts, cost contracts, PACE organizations, and demonstrations)	PTC_CNTRCT_ID_<MM>
Part C Plan Benefit Package ID	The unique number CMS assigns to identify a specific Part C plan benefit package (PBP) within a contract	PTC_PBP_ID_<MM>
Part C Plan Type Code	The type of MA plan for the beneficiary for the month (e.g., Local or Regional PPO, PFFS, PACE, MMP, etc.)	PTC_PLAN_TYPE_CD_<MM>

*Note: In some instances, due to retroactivity (e.g., data lags in updating beneficiary contract changes) or other issues, the contract number on the encounter data record may be different than the contract of record for that beneficiary found on the Part C Contract ID.

To determine whether the beneficiary had Medicare FFS or MA during a particular month, the HMO indicator variable appears 12 times to represent each month of coverage (variable called

BENE_HMO_IND_01-12). The beneficiary has HMO coverage for any month where the BENE_HMO_IND_<MM> has a value other than 0 or 4. A summary variable that counts the months of MA coverage (variable called BENE_HMO_CVRAGE_TOT_MONS) is also available in the MBSF (values = 0-12 months within the calendar year).

To understand the benefit package to which the beneficiary is subscribing, the contract and Plan ID must be used together; for a single Part C contract, there may be more than one PBP offered (e.g., PBPs may offer different levels of supplemental benefits and beneficiary cost sharing).

Options for summarizing beneficiary Medicare coverage information are described in a Technical Guidance paper, "Getting Started with CMS Medicare Administrative Research Files", on the CCW website: https://www.ccwdata.org/web/guest/technical-guidance-documentation.

Chapter 4: Using Medicare Encounter Data Files

The Encounter files are very large. It will be important to determine whether you need to include all records for your sample, regardless of whether it is the latest version of the record or a chart review. For some analytic objectives, you may be able to use only records related to receipt of specific types of care, care for certain conditions, or care for particular beneficiaries.

In this section of the document we provide some guidance for working with the encounter data files to fulfill your analytic objectives. Investigators are reminded that the encounter files differ from FFS claims data files (or other CCW RIF files); therefore even experienced Medicare data users should use caution when analyzing the encounter data.

A. Considerations for Selecting Encounter Records

The encounter files may contain multiple versions of the same service record, since they include all occurrences of the encounter. For example, a hospital may submit an additional record that provides updated diagnosis information, or a physician may submit a second record with additional procedure codes. Similarly, there may be a chart review record related to the service, or a chart review record where there is no other record of the service. Creating the appropriate analytic dataset can be the key to obtaining accurate information to address your study objectives. The following are some questions to consider when determining which encounter records are necessary:

1. **Should you include encounter service records only, or also chart reviews**? For some purposes, encounter (service) records alone may suffice; however, chart review records are helpful if you want to make sure you are not missing any diagnoses which may not appear in the encounter service records. Additional information regarding the content and utility of the chart review records appears in Chapter 2, Section A.2.
2. **What variables should I use to de-duplicate records so that I have unique service counts**? The next step in examining encounter data is to perform some level of de-duplication so that you identify a unique number of services; that is, for a given beneficiary, you are counting each unique occurrence of a particular service on a particular service date only once.

Please note that for dates of submission on or after for October 1, 2015, a 5-key edit was implemented within the Integrated Data Repository (IDR) to check inpatient encounter records for duplicates. Users may want to apply a similar logic (identified in Table 6) to check for duplicate inpatient encounters with submission dates prior to 10/01/2015.

Table 6. Variables Used in 5-Key Edit

Variable Description	RIF Field Used
Beneficiary Identification	BENE_ID
From Date of Service	CLM_FROM_DT
Through Date of Service	CLM_THRU_DT
Provider ID Number	ORG_NPI
Type of Bill	defined as concatenation of (CLM_FAC_TYPE_CD, CLM_SRVC_CLSFCTN_TYPE_CD, CLM_FREQ_CD)

How important is it that you remove all potentially duplicate encounter records? For some analytic purposes, the method described above will be sufficient for removing duplicate records. However, certain analyses will require additional analytic steps to remove other duplicate records:

a) For analyses that require service line-level information, users should always include those service-level variables when de-duplicating records. We recommend that users include additional variables that align with users' specific analytic interests. These variables may include DGNS_CD, REV_CNTR, or HCPCS_CD.
b) For institutional encounters, such as for inpatient, a single stay may generate multiple facility encounter records. In these cases, users may want to incorporate additional deduplication steps (e.g., unique BENE_ID, CLM_ADMSN_DT, CLM_THRU_DT; unique BENE_ID, CLM_FROM_DT, BENE_DSCHRG_DT).
c) Some encounter records may have the same claim control number but different value for the final action status variable. We recommend using the final action indicator (CLM_FINL_ACTN_IND = 'Y') to determine which record to keep.
d) Finally, please note that some records have a "default" organizational National Provider Identifier (NPI); that is, the actual NPI is not used – the NPI= 1999999976, 1999999984, or 1999999992. In these instances it is not possible to determine the specific provider. This may cause some difficulty when deduping encounter records, as two records may appear identical except the NPIs do not match, or two records may appear identical and both have default NPIs but in reality are different providers.

B. Limitations of Encounter Data

Unlike FFS claims records, CMS does not use encounter records as the basis for direct payments to providers since CMS pays MAOs, who in turn pay providers for treating MA enrolled beneficiaries. MAOs are not paid for each encounter, rather, MAOs are paid a capitated amount per beneficiary determined through a bidding process, regardless of how many services each beneficiary uses in a year. Therefore, service-level detail in encounter data depends on a few factors, including the extent to which an MAO captures FFS-level detail in their interactions with providers.

CMS uses encounter data for risk adjustment purposes, and the timeline for this business need creates a time lag between the provision of the services and the time the CCW Encounter RIF files can be delivered to researchers. MAOs will typically have 13 months after the end of a service year to submit encounter data to CMS that will be eligible for risk adjustment payment. After the CMS risk adjustment deadline has passed for a given service year, the CCW receives annual encounter files from the CMS IDR–starting with 2015. Typically, the time lag between the risk adjustment deadline and encounter RIF creation means that there are encounter records included in the RIF that were not available at the time the encounter data were used for calculating risk scores.[16] Similarly, some encounter records may have been updated after creation of the RIFs and therefore are not included in those files.

It is important to keep in mind that not all encounter records are used for risk adjustment calculations. Only certain records with claim types related to inpatient, outpatient, and professional services are considered for risk adjustment purposes. For more details about which services are included, please see the CMS Health Plan Management System (HPMS) Memo for the appropriate payment year[17].

Given that the purpose and collection of encounter data differs from FFS claims data, the availability and consistency of claims-level variables may also differ from FFS data. For example, unique provider identifiers in the encounter data are only available at the NPI level. Any higher or lower level of provider affiliation (e.g., CMS Certification Number) is not currently available in the encounter RIFs). Encounter NPI information may be supplemented with other variables in

[16] Due to 2015 submission deadlines extending beyond the initial 13 month window, this will only apply to the 2015 Final RIFs and not the Preliminary RIFs.
[17] CMS. Health Plan Management System (HPMS). Memos Archive. For example - https://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/HPMS/HPMS-Memos-Archive-Annual-Items/SysHPMS-Memo-Archive-%E2%80%93-2015-Qtr4.html?DLPage=2&DLEntries=10&DLSort=1&DLSortDir=descending

the encounter data (e.g., revenue center code, provider taxonomy codes) and may also be linked to Medicare provider data (e.g., the CMS National Plan and Provider Enumeration System).

In addition, because MAO payment arrangements may differ from FFS, bundling of services and billing cycles may also differ from FFS. For example, FFS HH claims are based on all services covered during episodes of care that can last up to 60 days. However, MAOs may pay HH providers based on shorter episodes of care (e.g., 30 days). Similarly, differences in payment structures and data collection by MAOs may contribute to some variables being populated less consistently compared with FFS claims data. For example, encounter data is far more likely to contain DRG value of '000' relative to FFS data, which may mean that some MAOs do not use a DRG for those services. To supplement '000' DRG values, CMS has created a derived DRG variable in the IP file (DRVD_DRG_CD) that applies 3M™ software to inpatient claims to create a DRG value similarly to how DRGs would be derived in FFS data. Please note that this derived variable should not be used for records for inpatient rehabilitation facilities or chart reviews.

Finally, researchers should be aware that Medicare-Medicaid Plans (MMPs, i.e., those participating in demonstrations under the Financial Alignment Initiative) were implemented on a phased in basis starting in October 2013, with most starting in 2014 or 2015. Due to the MMP start-up process, we urge particular caution in analyzing this subset of plans. Please see Appendix C for a list of contract numbers associated with these plan types.

C. Generalizing Encounter Data

While 2015 encounter data likely captures most services provided to MA enrollees, the totality of how encounter data is collected and used means that 2015 data will not represent the entire universe of MA services. CMS has been working with MAOs to ensure that accuracy and completeness of encounter data improves over time. The number of encounters per enrollee submitted by MAOs will likely continue to increase as: 1) MAOs become more familiar with encounter submission requirements, 2) encounter data become more transparent to the research community, and 3) risk adjustment payment becomes more reliant on encounter data. Encounter data users should understand the limitations of the data before generalizing findings to an MA plan, MAO, or the entire MA program.

Encounter data does not necessarily reflect all Medicare-covered services obtained by MA enrollees. Some services may have been covered through other health insurance (e.g., employer; the US Department of Veterans Affairs). In addition, beneficiaries may have been enrolled in FFS for part of the year.

Chapter 5: Receiving CCW Data

The CCW Medicare RIFs are provided to academic researchers and certain government agencies, to conduct approved research studies under a Data Use Agreement (DUA). The CCW Medicare data contain identifiable information, and are subject to the Privacy Act and other Federal government rules and regulations (see ResDAC web site for information on requesting Medicare data http://www.resdac.org/). All who seek approval for access to the encounter data must ensure that their research proposal can be reliably supported by the data. All guidance and data limitations in Chapter 4, Chapter 5 and Appendix B, should be considered while writing study protocols for research requests.

External researchers have two options for accessing the data files – they may access them directly from the CCW within the Virtual Research Data Center (VRDC), or they can have their data shipped. For CCW/VRDC users, their access is initiated by the CCW team upon receipt of the approved DUA and payment. For researchers who request that their data be shipped, once the DUA is in place and payment for the files has been received, data files are shipped to the requestor on either a USB external hard drive or a DVD. These data files are packaged as encrypted self-decrypting archive (SDA) files (see the CCW User Guide at ccwdata.org for additional information on encryption). The decryption password is sent to you electronically via email. When you receive the data package (via hard drive or DVD/CD), copy them from the shipping media to your local workspace. Note some data shipped on a hard drive can be decrypted on that hard drive, depending on the size of the data files. Using the password provided to you via email, follow the Decryption Instructions enclosed in the data package. Each SDA contains the data file(s), SAS® code and a file transfer summary (.fts) file which can be used to verify the data was read in correctly.

Chapter 6: Further Assistance with Medicare Encounter Data

The Research Data Assistance Center (ResDAC) offers free assistance to those using Medicare data for research. The ResDAC website provides links to descriptions of the CMS data available, request procedures, supporting documentation, workshops on how to use Medicare data and other helpful resources. Visit the ResDAC web site at (http://www.resdac.org) for additional information.

ResDAC is a CMS contractor and requests for assistance in the application, obtaining, or using the CCW data should first be submitted to ResDAC. Investigators can reach ResDAC by phone at 1-888-973-7322, e-mail at resdac@umn.edu, or online at (http://www.resdac.org).

In the event that a ResDAC technical advisor is not able to answer the question, the technical advisor will direct the investigator to the appropriate person. If additional CMS data (data not available from the CCW) is required to meet research objectives, or the investigator has any questions about other data sources, the investigator can review all available CMS data by visiting the ResDAC website and contact ResDAC for further assistance.

www.ccwdata.org
Email: CMSdata@gdit.com
Phone: 1-866-766-1915

Appendix A: List of Acronyms and Abbreviations

Acronym	Definition
CCW	Chronic Conditions Data Warehouse
CMS	Centers for Medicare & Medicaid Services
DME	Durable Medical Equipment
DRG	Diagnosis Related Group
DUA	Data Use Agreement
ED	Emergency Department
EDS	Encounter Data System
ESRD	End Stage Renal Disease
FFS	Fee-for-Service
HCPCS	Healthcare Common Procedure Coding System
HIC	Medicare Health Insurance Claim Number
HH	Home Health
HMO	Health Maintenance Organization
HPMS	Health Plan Management System
OP	Institutional Outpatient
ICD-9	International Statistical Classification of Diseases and Related Health Problems, 9th revision
ICD-10	International Statistical Classification of Diseases and Related Health Problems, 10th revision
IDR	CMS Integrated Data Repository
IP	Inpatient
MA	Medicare Advantage
MAO	Medicare Advantage Organization
MA-PD	Medicare Advantage – Prescription Drug Plan
MBSF	Master Beneficiary Summary File
MDS	Minimum Data Set
MMA	Medicare Prescription Drug, Improvement, and Modernization Act
NPI	National Provider Identifier
OASIS	Outcome and Assessment Information Assessment
PACE	Programs of All-Inclusive Care for the Elderly
PBP	Plan Benefit Package
PDE	Prescription Drug Event
PFFS	Private Fee-for-Service Plans
PPO	Preferred Provider Organization
RAPS	Risk Adjustment Processing System
ResDAC	Research Data Analytic Center
RIF	Research Identifiable File
SAF	Standard Analytic File
SAS	Statistical Analysis Software

SDA	Self-Decrypting Archive
SNF	Skilled Nursing Facility
SNP	Special Needs Plan
SSN	Social Security Number

Appendix B: Additional Encounter Analytic Considerations

1. **Removing records that have been voided by MAOs.** MAOs may submit "void" encounter data records to void previously submitted, accepted encounter data records. (note that these are identified as records where CLM_FREQ_CD='8'). The record that is being voided can be identified by comparing the CLM_ORIG_CNTL_NUM of the void record to the CLM_CNTL_NUM of the original record. All voids are nonfinal action in the encounter data.
2. **Identifying inpatient rehabilitation facilities, psychiatric facilities, and long-term care hospitals in the encounter IP file.** Researchers performing analyses that include IP admissions and readmissions may want to account for the different types of inpatient facilities in the encounter IP file. While the CMS Certification number is not available, encounter data users may consider using revenue center codes and provider taxonomy codes to assist in differentiating between inpatient facility types.
3. **Encounter services that may differ from FFS.** Some services and procedure codes may be different from what is typically used in 2015 FFS claims data. The following are some of the procedures that were rarely/never found in FFS claims. Please note that this is not a comprehensive list of HCPCS code differences, and each data user should decide how they want to use the data regarding these services for their own individual purposes:
    a) HCPCS codes that end in "F" are typically a category II code that are used by private health plans for performance measurement;
    b) HCPCS code that begin with:
        - S - supplemental services; codes are typically used by private health plans or Medicaid state agencies, and not billable to Medicare FFS
        - T – typically used by Medicaid state agencies, and not billable to Medicare FFS
        - V - vision or hearing service
        - E - durable medical equipment, K- DME temporary codes, and L - orthotic procedures and devices
        - H - drug and alcohol rehabilitation
        - D - dental service

    c) HCPCS codes for:
        - ophthalmology determination of refractive state (HCPCS code 92015)
        - periodic comprehensive preventive exam (HCPCS codes 99391-99397)
        - unlisted evaluation and management (HCPCS code 99499)

    In addition, some FFS professional services are not typically found in encounter data. These services include:

- Medical homes and the Multi-payer Advanced Primary Care Practice demonstration (HCPCS codes G9148-G9153)
- Medicare Coordinated Care demonstration (HCPCS codes G9005-G9010)
- Pharmacy supplying fee for immunosuppressive, oral anti-cancer, and oral anti-emetic drugs (HCPCS codes Q0511- Q0512)

Appendix C: Medicare-Medicaid Plan Contract Numbers

Contract number	Plan name
H0022	Buckeye Community Health Plan, Inc.
H0137	Commonwealth Care Alliance, Inc.
H0147	HealthKeepers, Inc.
H0148	Care 1st Health Plan
H0192	AmeriHealth Michigan, Inc.
H0281	IlliniCare Health Plan
H0336	Humana Health Plan, Inc.
H0480	Meridian Health Plan of Michigan, Inc.
H0773	Health Alliance Medical Plans, Inc.
H0811	GuildNet, Inc.
H0927	Health Care Service Corporation
H1723	Absolute Total Care, Inc.
H1916	New York State Catholic Health Plan, Inc.
H1977	Upper Peninsula Health Plan
H2005	Fallon Community Health Plan
H2506	Aetna Better Health of Illinois
H2531	United Healthcare Community Plan of Ohio, Inc.
H2533	Molina Healthcare of South Carolina, Inc.
H2751	Wellcare of New York, Inc.
H3018	Centers for Healthy Living, LLC
H3067	Virginia Premier Health Plan, Inc.
H3129	North Shore-Long Island Jewish Health System, Inc.
H3237	Health Net Community Solutions, Inc.
H3480	Humana Health Plan, Inc.
H4465	Independence Care System, Inc.
H4740	Catholic Managed Long Term Care, Inc.
H5172	Community Health Group
H5280	Molina Health Care of Ohio
H5355	IEHP Health Access
H5441	Managed Health, Inc.
H6080	Meridian Health Plan of Illinois
H6229	Blue Cross of California Partnership Plan, Inc.
H6263	Health Insurance Plan of Greater NY
H6308	AgeWell New York, LLC
H6435	ElderServe Health, Inc.
H6751	Health Spring of Tennessee, Inc.

H6870	Superior Health Plan, Inc.
H6974	AlphaCare of New York, Inc.
H7172	Aetna Better Health, Inc.
H7419	Tufts Associated HMO, Inc.
H7542	Advicare, Corp.
H7833	United Healthcare Community Plan of Texas, LLC
H7844	Molina Healthcare of Michigan
H7885	Health Plan of San Mateo
H7890	Santa Clara County Health Authority
H8016	Orange County Health Authority
H8026	Aetna Better Health of Michigan
H8029	Elderplan, Inc.
H8046	Molina Healthcare of Illinois
H8056	Aetna Better Health of New York
H8150	Integra MLTC, Inc.
H8197	Molina Healthcare of Texas
H8213	Select Health of South Carolina, Inc.
H8258	LA Care Health Plan
H8417	Amerigroup New York, LLC
H8420	CenterLight Healthcare, Inc.
H8423	Health Spring Life & Health Insurance Company, Inc.
H8452	CareSource
H8490	VNS Choice
H8677	Molina Health Care of California
H8786	Amerigroup Texas, Inc.
H8851	Senior Whole Health of New York, Inc.
H9115	MetroPlus Health Plan
H9264	Alameda Alliance Joint Powers Authority
H9345	Village Care of New York
H9487	Fidelis SecureCare of Michigan, Inc.
H9576	Neighborhood Health Plan of Rhode Island
H9712	Midwest Health Plan, Inc.
H9869	Partners Health Plan, Inc.