



**PROCESSING OF CLAIMS
FOR PART A AND PART B**

ENTERPRISE ARCHITECTURE

APRIL 2006

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Chapter 1

Introduction

From Medicare's start, the federal government has used private insurance companies to process claims and perform related administrative services for the program's beneficiaries and health care providers. Today, the Centers for Medicare and Medicaid Services (CMS) relies on a network of contractors to process nearly 1 billion Medicare claims each year from more than 1 million health care providers. In addition to processing claims, the contractors, in conjunction with other entities, enroll health care providers in the Medicare program and educate them on Medicare billing requirements, handle claims appeals, answer beneficiary and provider inquiries, and detect and prevent fraud and abuse.

At present, the contractors include 23 fiscal intermediaries (FIs) and 17 carriers that process fee-for-service (FFS) claims. FIs process claims for Medicare Parts A and B for facilities, including hospitals and skilled nursing facilities. Carriers process claims for Medicare Part B, in particular for physician, laboratory, and other services. In addition, 4 FIs serve as regional home health intermediaries (RHHIs), concentrating exclusively on home health and hospice (HH) claims. Similarly, 4 carriers serve as durable medical equipment regional carriers (DMERCs), focusing exclusively on claims for durable medical equipment, prosthetics, orthotics, and supplies.

This document, a companion document to *Processing of Fee-for-Service Claims for Part A and B: Concept of Operations*,¹ presents a detailed enterprise architecture (EA) view of the FFS business, focusing on the functional and technical environments for processing FFS claims. The EA describes the Medicare Part A and B environment as it will exist after the MAC contracts are awarded; it is not intended to represent the current environment of the FIs and carriers. One purpose of this document is to provide potential MACs some key information they need to develop proposals that effectively address CMS requirements.

This document presents the enterprise architecture for processing Part A/B claims in three domains:

- ◆ The *business architecture* represents the functions and processes that support the business, the organizations that perform the business, and the locations where the business is performed.
- ◆ The *application architecture* identifies and describes applications and modules, as well as their relationships to business processes and other ap-

¹ CMS, *Processing of Fee-for-Service Claims for Part A and B: Concept of Operations*, August 2005.

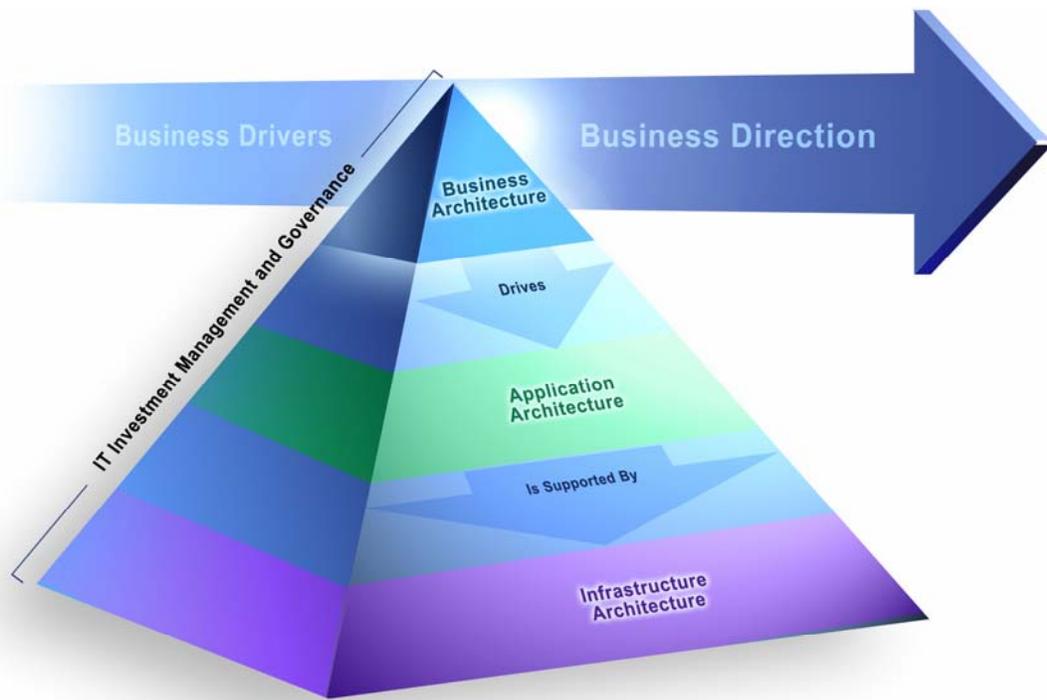
plications systems and modules. Major influences include technologies employed and interface requirements.

- ◆ The *infrastructure architecture* identifies and describes the hardware, software, and communications network technologies required to manage business applications in the Part A/B MAC environment.

The business architecture represents the Part A/B claims processing functions—the functional environment. The application and infrastructure architectures represent the technical environment in which the processing occurs.

Figure 1–1 depicts the domains and their interrelationships. The conceptual framework has various components that fit into the interrelated architectural layers, and security is integrated throughout the conceptual framework.²

Figure 1-1. Interrelationship of Architecture Domains in Part A/B MAC Environment



The enterprise architecture is presented in Chapters 2, 3, and 4, each devoted to one of three domains of the CMS enterprise architecture framework. The appendixes contain a glossary of key terms and abbreviations related to Part A/B claims processing.

² Security has many owners and many facets, including the contents of personnel policies and hiring practices, internal controls of functions such as the approval process, data access and update rights, and firewalls and encryption.

Chapter 2

Business Architecture

The business architecture represents the functions and processes that support the business, the entities that perform the business, and the locations where the business is performed. In other words, the business architecture addresses how the mission-critical functions of fee-for-service (FFS) processing are accomplished. It is a portrayal of how the organization actually accomplishes its mission rather than how it is organizationally structured to manage its mission. The business architecture also encompasses a strategic direction that an organization strives to attain. Major influences on the business architecture are laws and regulations, external and internal policies, organizational structures, organizational culture, business change, people, budgets, and technology. This layer ignores any physical constraints and contains no element of system design.

This chapter describes and depicts the high-level business architecture for Part A/B claims processing and thus focuses on the Medicare administrative contractor (MAC) and its relationship with CMS and various other entities known as functional contractors. A functional contractor is an entity that performs an FFS business function, e.g., prevention of fraud and abuse that traditionally had been performed by Medicare carriers and intermediaries. Although this document focuses on MAC activities, it describes all activities (and entities) involved in the Medicare FFS process for Part A/B claims.

The chapter begins with the business service model, providing the context and high-level breakdown, or decomposition, of the Part A/B claims processing function. The business service model displays what Part A/B claims processing is doing. Next, the chapter presents process maps and descriptions of the individual steps in each of the major claims processing functions. The process maps display how Part A/B claims processing functions are carried out. The processes depicted in this chapter represent the anticipated environment upon award of a MAC contract.

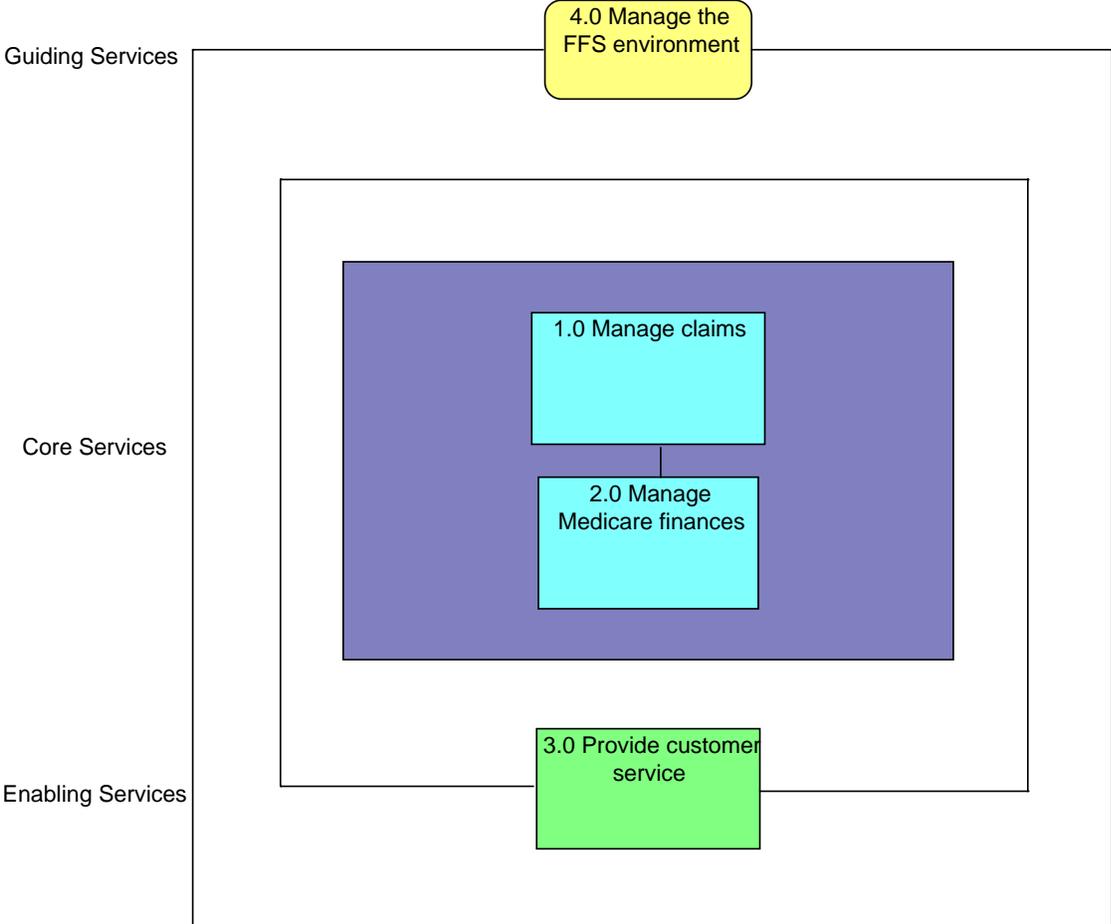
The processes are depicted as if there is a single A/B processing system. However, two distinct shared claims processing systems are used: Fiscal Intermediary Standard System (FISS) (for Part A claims) and Multi-Carrier System (MCS) (for Part B claims). The process maps and descriptions note when a business process or functionality is exclusive to either Part A or Part B.

BUSINESS SERVICE MODEL

A business service model depicts the business architecture at the highest level. To put it another way, the model shows the major relationships among service

groups. Figure 2-1 depicts the business service model for Part A/B claims processing. Please note that this document should be understood and viewed in the larger context of the overall FFS process as described in the previously published Concept of Operations (ConOps). The ConOps describes CMS' vision for the future of the fee-for-service environment.

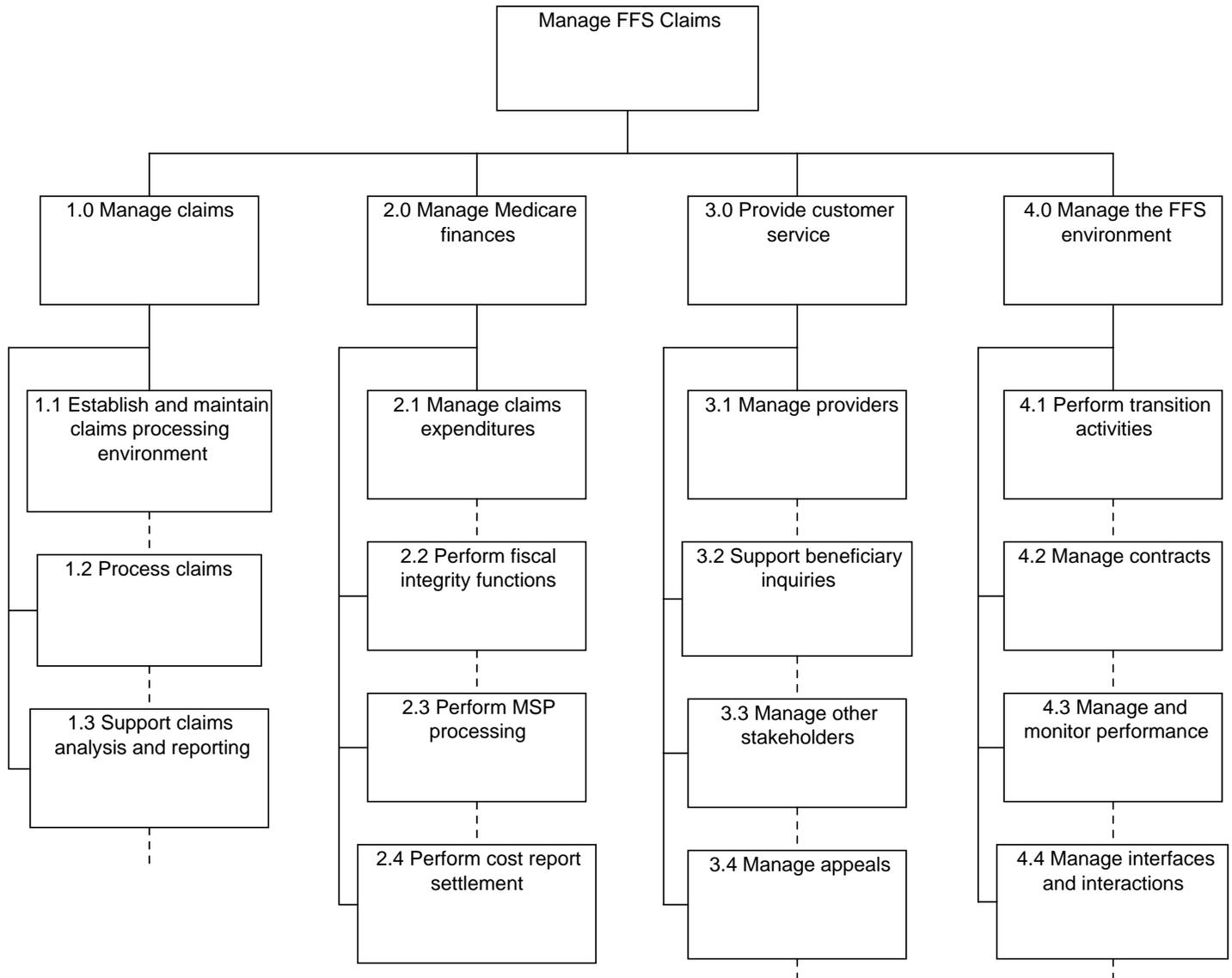
Figure 2-1. CMS Business Service Model for FFS Claims Processing



The business service model decomposition identifies the individual processes performed within the organization, decomposed to a level of detail appropriate for the scope of the review. Specifically, the model shows the hierarchal relationships between service groups, major business processes, and processes. The focus is on what the organization does, not on who does it, where and when it is done, what technologies or resources are used, or what flows of inputs, outputs, or interactions occur.

Figure 2-2 depicts the decomposed business service model for Part A/B claims processing. The top tier of the model represents the service group level of detail, the second tier represents the major business process level of detail, and lower-level tiers represent the process level of detail.

Figure 2-2. Decomposed Business Service Model for FFS Claims Processing



The Part A/B MAC's major FFS claims processes are defined as follows:

1 Manage claims—establish all of the environmental business processes and business rules that are needed to complete an individual claim; the receipt, edit, and adjudication of claims; and the analysis and reporting associated with claims files created during these processes.

1.1 Establish and maintain claims processing environment—provide foundation for claims processing by establishing the work flow that is best suited to a MAC's workforce environment, defining the edits that will be used to validate the claims, establishing prices, determining local medical policies, establishing prepay processing rules, and integrating the definitions and restrictions associated with demonstration projects or specialty claims processing.

1.2 Process claims—process claims and adjustments from original receipt through determination of disposition (does not include payment-related processes). Specific functions include receiving, verifying, and logging claims and adjustments received; performing internal claims edits; performing claim validation edits; completing claims development and adjudications; maintaining pricing and user files; and generating reports.

1.3 Support claims analysis and reporting—conduct error analysis, reporting, and management activities and specialized processes, including medical review of claims, routine and ad hoc reporting, and reporting of claim payments to insurance companies and Medicaid.

2 Manage Medicare finances—create, maintain, and track payments for services provided under Medicare from the Medicare trust funds or from the CMS administrative budget. Collect payments owed to CMS. Maintain information on providers, beneficiaries, insurers, employers, Medicaid state agencies, and other entities. Maintain and reconcile financial transactions. Perform financial reporting and financial audits.

2.1 Manage claims expenditures—create, maintain and track payments for the services provided under Medicare, collect payments owed to CMS, maintain information on providers and other payees, and manage all financial transactions associated with claims. Managing the expenditures includes payables management, receivables management, and financial reconciliation.

2.2 Perform fiscal integrity functions—establish program safeguards to protect the Medicare program from fraud and abuse by providers or beneficiaries and ensure the proper adjudication of claims and administration of Medicare program activities. This includes conducting provider audits, performing data analysis, utilizing corrective actions to reduce improper billing, and developing fraud and abuse cases.

2.3 Perform MSP processing—safeguard the trust fund where Medicare is the secondary payer and is not responsible for paying first on a claim. The term “coordination of benefits” is used to describe the situation in which two or more payers are responsible for parts of a claim. Coordination of benefits includes creating and updating eligibility information and processing Medicare secondary payer (MSP) claims.

2.4 Perform cost report settlement—safeguard payments made to institutional providers, which are paid on an interim basis and whose reimbursement is finally settled through the submission of an annual Medicare cost report. The audit process includes the timely receipt and acceptance of provider cost reports, desk review and audit of those cost reports, and the final settlement of the provider cost reports. In addition, the audit process includes such administrative functions as intermediary hearings and appeals to the Provider Reimbursement Review Board.

3 Provide customer service—ensure customer satisfaction of providers, other stakeholders, and ultimately the beneficiaries.

3.1 Manage providers—enroll providers and update provider information, offer general education to providers on Medicare processing, educate individual providers on specific issues, manage specialty and demonstration contractors, and handle provider inquiries.

3.2 Support beneficiary inquiries—update beneficiary information and respond to complex beneficiary inquiries referred from the Beneficiary Contact Center (BCC).

3.3 Manage other stakeholders—manage business dealings with numerous stakeholders and participants beyond those that give and receive health care. These stakeholders include commercial services such as banks and billing agencies, which are key players in billing financial functions and payment; law enforcement agencies, ranging from local ones to the Federal Bureau of Investigation (FBI), which investigate fraud and abuse cases; professional societies such as local physician groups or the American Medical Association (AMA); and employers, and their health plans, which play a key role in determining who is paying for particular services.

3.4 Manage appeals—receive, track, investigate, and issue decisions on claims appeals received from beneficiaries and providers (excluding the review of requests for waiver under debt collection). Medicare has six levels of appeals. A first-level appeal is called a “request for redetermination” and involves a simple reconsideration of the initial decision. Second-level (“request for reconsideration”) and third-level (“request for administrative law judge” or ALJ) appeals are forwarded to the appropriate Qualified Independent Contractor (QIC). Higher-level appeals may go to the federal courts. The result of an appeal is that a previous determination is affirmed or reversed (in full or in part). Effectuate timely adjustments based on the results of appeals.

4 Manage the FFS environment—manage transitions and contracts, manage and monitor performance, manage administrative budget, and manage interfaces and interactions with CMS and functional contractors to optimize the FFS environment for cost and operational effectiveness.

4.1 Perform transition activities—manage transitions as work is consolidated from multiple fiscal intermediaries (FIs) and carriers in a region. From an incoming MAC’s perspective, a contractor transition encompasses all of the tasks it must perform to assume the duties of an incumbent (outgoing) contractor running a Medicare FFS claims processing operation. Among those duties are successful transfers of claims processing operations and all related files, processes, and other activities from the outgoing contractors, and education of providers, and other affected parties regarding the change. All these activities need to be done with minimum disruption to payments and services.

4.2 Manage contracts—manage administrative budgets, ongoing expenditures, performance, and compliance activities. Manage the process for exercising a contract option with CMS as well as ongoing modifications to the contract. Manage contract costs by employing a work breakdown structure (WBS).

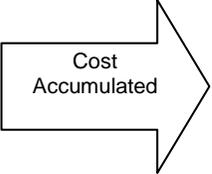
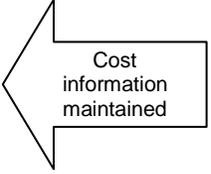
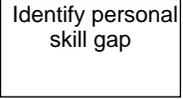
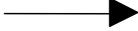
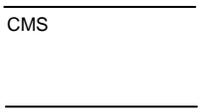
4.3 Manage and monitor MAC performance—manage performance in accordance with CMS-published performance standards and processing requirements for claims processing contractors; establish procedures, gather data, and submit data to CMS. CMS will review Part A/B MAC performance and follow up as appropriate. Manage award fee process for costs related to estimated (or target) costs and a larger potential award fee related to the quality and efficiency of services provided.

4.4 Manage interfaces and interactions—manage organizational and technical interactions. Manage and maintain relationships with functional contractors that will increase the efficiencies of Medicare services for beneficiaries and providers. Functional contractors include Beneficiary Contact Centers (BCCs), a Coordination of Benefits Contractor (COBC), Program Safeguard Contractors (PSCs), and Qualified Independent Contractors (QICs). Manage technical interactions and interfaces of an operational environment in which CMS, other contractors, and the MACs themselves provide applications, technology, and services (operations).

KEY TO PROCESS MAPS

A process map depicts the sequence of steps necessary to complete a major business process at the lowest level appropriate. By convention, a process map identifies the event that triggers the process, the steps involved in completing the process, the organizational unit responsible for each step, and the specific output of the process.

The following sections present the process map for and briefly describe each major fee-for-service process. The symbols used in the maps are as follows:

Symbol	Definition	Symbol	Definition
	Event that triggers processes. Denoted by a right-facing arrow.		Outcome of a process. Denoted by a left-facing arrow.
<p>Process/activity</p> 	Activity or group of activities. Denoted by a rectangular box.	<p>Mandatory connector</p> 	Path that the process always follows.
<p>Swim lane</p> 	Logical organization unit. Denoted by two horizontal lines that surround one or more processes. Processes surrounded by the swim lane take place in the organization indicated.	<p>Optional connector</p> 	Path that the process may follow, depending on the conditions.

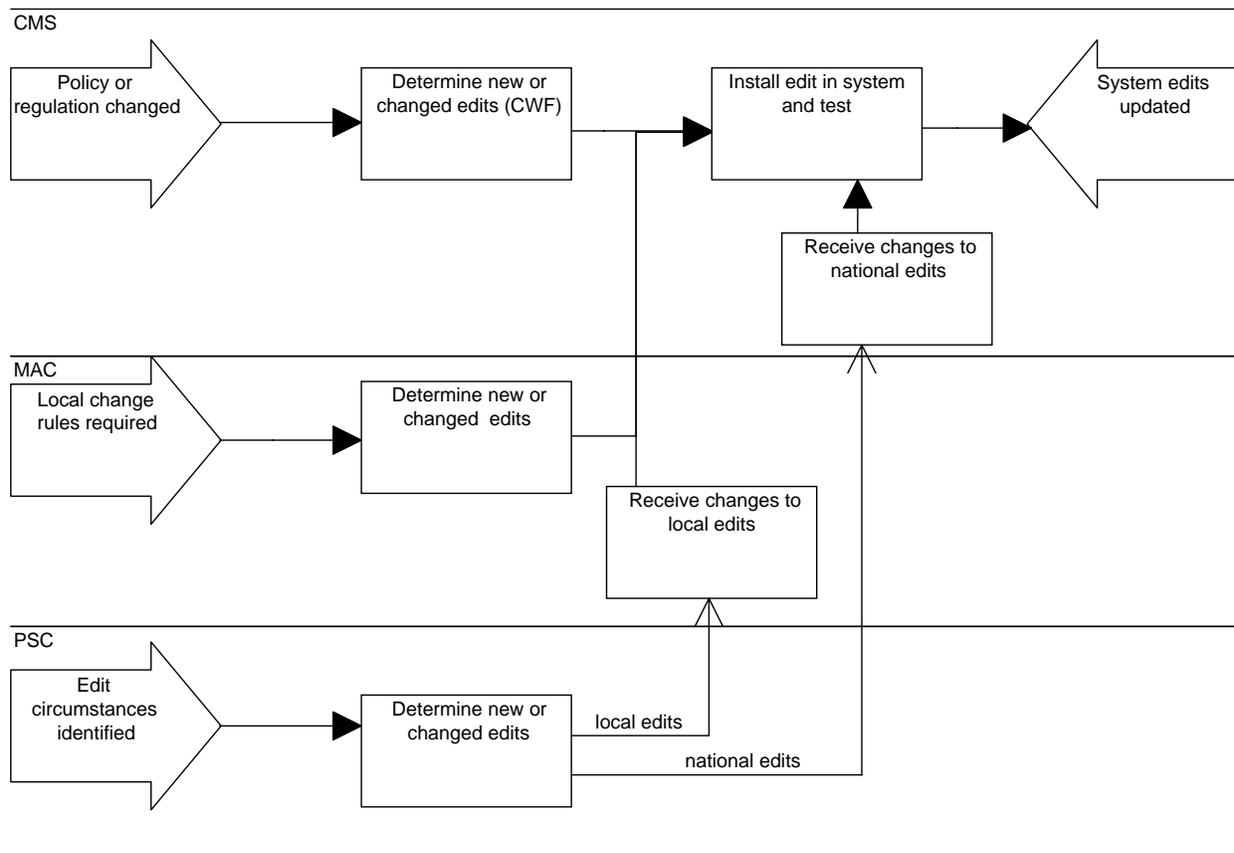
Note: The process maps correspond to the Part A/B MAC business functions as they are represented in the statement of work for future MAC operations. They do not necessarily represent current operations of FIs and carriers.

PROCESS MAPS: MANAGE CLAIMS (1)¹

“Manage Claims” consists of three major functions: establish and maintain claims processing environment, process claims, and support claims analysis and reporting.

Establish and Maintain Claims Processing Environment (1.1)

ESTABLISH EDITS (1.1.1), ESTABLISH PRE-PAY PROCESSING RULES (1.1.3)



Events

Policy or regulation changed—CMS implements a new law, new policy, or policy reconsideration that requires edits or pre-processing rules to change.

Local change rules required—MAC identifies a process improvement or local situation for edit.

Edit circumstances identified—PSC identifies a need for an edit.

¹ The numbers in parentheses are the “ConOps IDs” that refer to the business function model shown, at a high level, in Figure 2-2.

Process Steps

Determine new or changed edits (CWF)—The shared systems contain extensions or user facilities that can be tailored by the MACs. The shared systems, common working file, and Healthcare Integrated General Ledger Accounting System (HIGLAS) are described in Chapter 4. The MAC can also tailor the hardware and software that it controls, such as the front-end or back-end electronic data interchange (EDI) (prior to the implementation of a standard front-end contract). The MAC's local change control process should approve the technical aspects of the edit, after the business or functional change control process has been completed. If the edit would be part of the shared systems or other CMS government-furnished item (GFI), the MAC should submit the recommendation to CMS.

Install edit in system and test—CMS shared system maintainer installs edits in the prescribed manner for the system or tool used. All edits are tested before being placed in production.

Receive changes to local edits—MAC receives changes to local edits from the PSC.

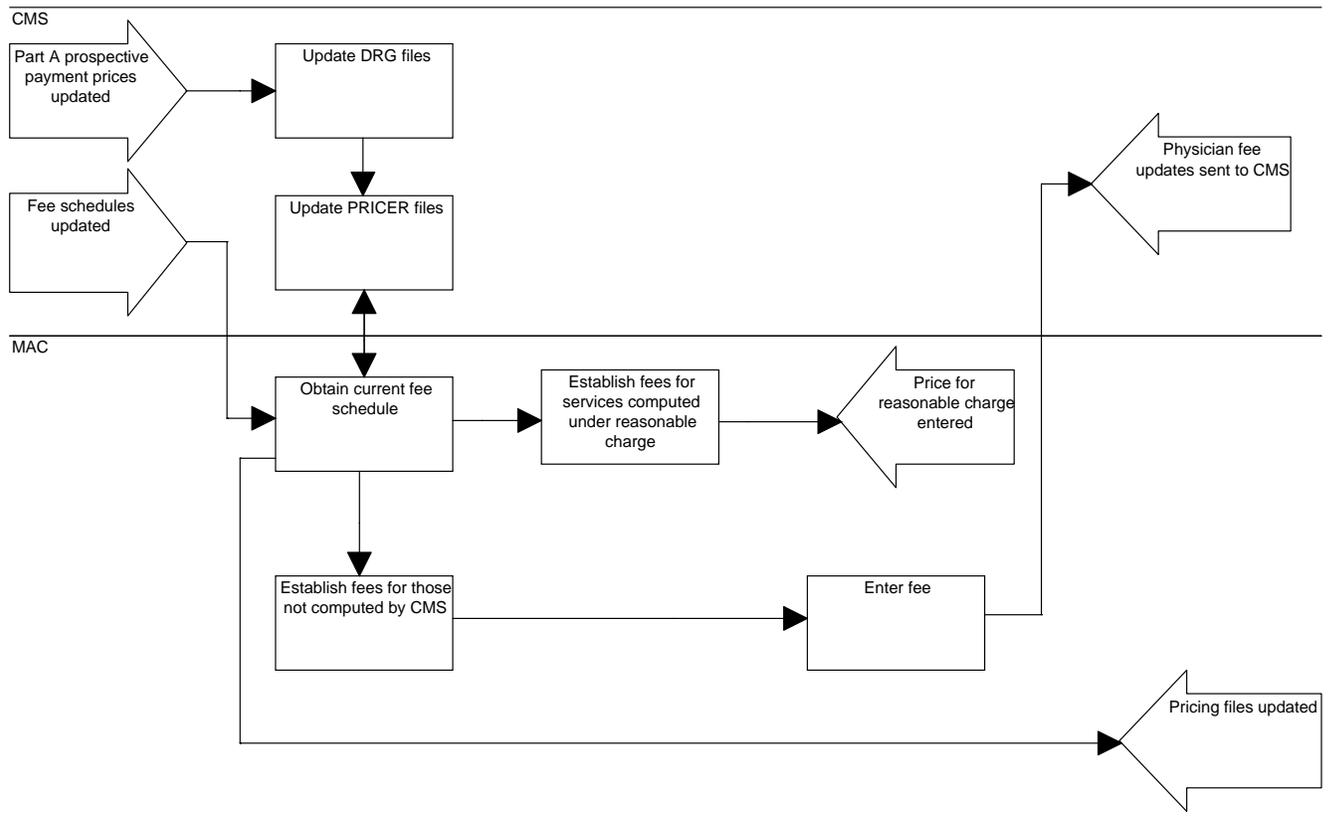
Receive changes to national edits—CMS is responsible for Common Working File (CWF) edits that are programmed and managed by CWF contractors or shared system maintainers.

Results

System edits updated—New edits are part of FFS processing.

ESTABLISH PRICES (1.1.2)

The prices allowed for claims payments are normally established through fee schedules. If, however, the claim has a code that does not have a payment associated with it, the MACs will need to create local prices for the payments.



Events

Part A prospective payment prices updated—CMS updates the prospective payment prices. This includes fee schedules for inpatient, skilled nursing facility, and other Part A institutional providers.

Fee schedules updated—CMS updates the master files containing the various Medicare fee schedules used by the MAC to pay for covered services. This includes the physician fee schedule, laboratory rates, and ambulance charges.

Process Steps

Update DRG files—CMS updates the Diagnosis Related Group (DRG) system file by updating the weights of the DRGs and by adding or subtracting medical procedures and diagnoses.

Update PRICER files—CMS updates the PRICER file in the Prospective Payment System (PPS) to reflect the updated price that is payable to an institution for a particular treatment category or DRG.

Obtain current fee schedule—MAC downloads the latest fee schedule from the master files and updates provider-specific files (Part A) for all payment factors. Examples of payment factors include Disproportionate Share Hospital, Indirect Medical Education, Cost to Charge Ratio, and Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA). Note: For NOC procedure codes, the allowance is typically established based on “individual consideration” on a claim-by-claim basis.

Establish fees for services computed under reasonable charge—MAC adds price developed for services computed under reasonable charge. A reasonable charge is based on the method that uses billed amounts and arrays them to determine the allowed amount.

Establish fees for those not computed by CMS—MAC adds price for services not computed by CMS.

Enter fee—Enter fee from fee schedule.

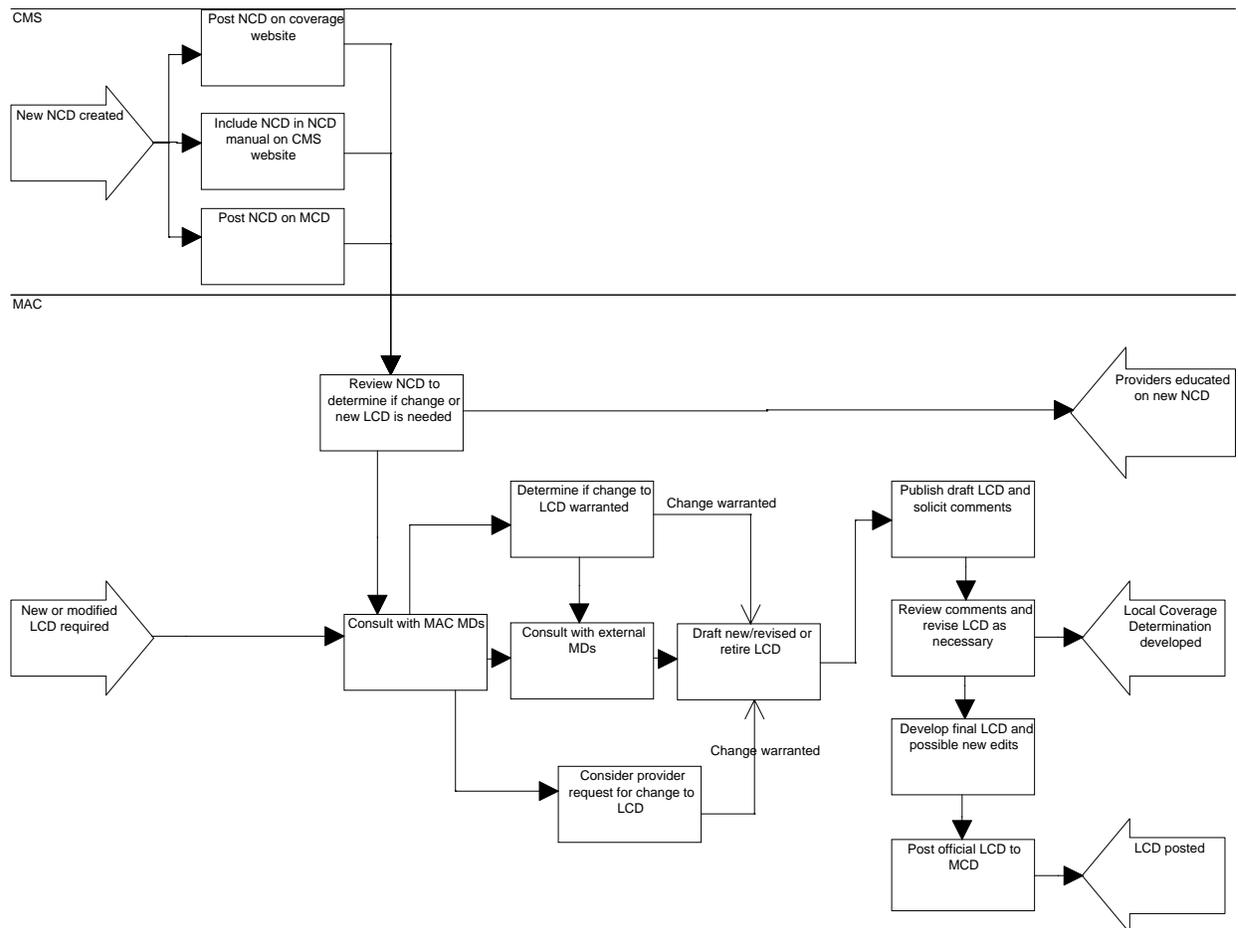
Results

Physician fee updates sent to CMS—CMS receives information to use in future schedules.

Pricing files updated—MAC has updated pricing file in shared systems for future claims pricing.

Price for reasonable charge entered—MAC enters amount for reasonable charge in the shared systems.

ESTABLISH LOCAL COVERAGE DETERMINATIONS (1.1.4)



Events

New NCD created—CMS creates a new National Coverage Determination (NCD).

New or modified LCD required—MAC requires a new Local Coverage Determination (LCD).

Process Steps

Post NCD on coverage website—CMS posts the official NCD on the coverage website.

Include NCD in NCD manual on CMS website—CMS posts the official NCD to the NCD manual on CMS website.

Post NCD on MCD—CMS posts the official NCD to the Medicare Coverage Database (MCD).

Review NCD to determine if change or new LCD is needed—MAC reviews the NCD to see if the current LCD needs to be changed.

Consult with MAC MDs—MAC consults MAC MDs on changes to LCD.

Consult with external MDs—MAC consults with external MDs on changes to LCD.

Determine if change to LCD warranted—MAC reviews the National Coverage Decision to determine if a change to its LCD is warranted. LCDs must be consistent with statutes, rules, regulations, NCD, payment, and coding policies. A change is warranted if the LCD is in conflict with the new National Coverage Decision or if the MAC wants to supplement the new decision.

Consider provider request for change to LCD—MAC reviews the request for change to its LCD submitted by a provider.

Draft new/revised or retire LCD—MAC drafts a new or revised LCD, or decides to retire a LCD. LCDs explain when an item or service will be considered covered (including when it is “reasonable and necessary”) and how it should be coded.

Publish draft LCD and solicit comments—MAC publishes its draft LCD, typically by posting it to the MCD, and solicits public comment.

Review comments and revise LCD as necessary—MAC reviews comments received on its draft LCD and revises it as necessary.

Develop final LCD and possible new edits—MAC develops the final LCD and possible new edits.

Post official LCD to MCD—MAC posts the official LCD to the MCD.

Results

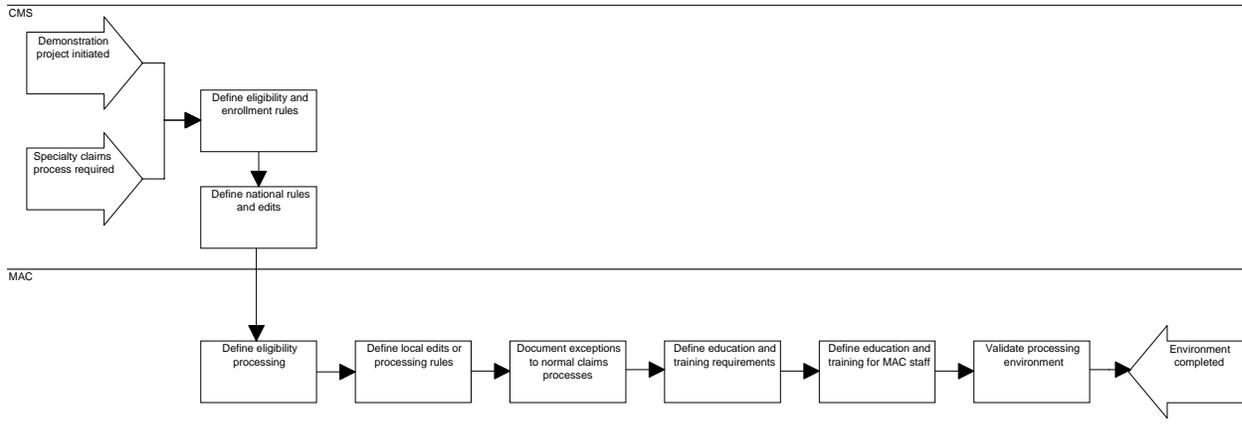
Providers educated on new NCD—MAC educates providers on new NCD.

Local Coverage Determination developed—LCD has been developed.

LCD posted—LCD has been posted to the MCD.

ESTABLISH DEMO PROJECTS AND SPECIALTY CLAIMS ENVIRONMENT (1.1.5 AND 1.1.6)

CMS establishes demonstration projects to test the feasibility of a benefit; demonstration projects are generally limited in scope and limited in duration. Specialty claims are processed by one MAC (or a limited number of MACs); such claims are generally small in number and/or require particular expertise.



Events

Demonstration project initiated—CMS initiates a demonstration project to meet legislative or policy mandates.

Specialty claims process required—CMS requires particular specialty claims processing and determines that one or more MACs will process those claims.

Process Steps

Define eligibility and enrollment rules—CMS determines the type of medical procedures, the jurisdictions, and the providers for either the demonstration or specialty processing, and identifies the MACs that will perform the processing.

Define national rules and edits—CMS determines the rules for processing and for editing claims and enters them into the change control process for the shared systems or other government-furnished equipment (GFE).

Define eligibility processing—MAC, in conjunction with CMS, determines and documents how eligibility and enrollment will be done.

Define local edits or processing rules—MAC determines any special processing requirements to be met. (The process for implementing the rules is part of Establish Edits 1.1.1 and Establish Pre-Pay Processing Rules).

Document exceptions to normal claims processes—MAC identifies any special processing, such as medical review that will be required.

Define education and training requirements—MAC identifies education and training requirements. (Implementation and delivery are part of provider education in 3.1.2 and 3.1.3.)

Define education and training for MAC staff—MAC identifies education and training needed for internal staff to process the claims. (Implementation and delivery are part of MAC training in 4.3.3.)

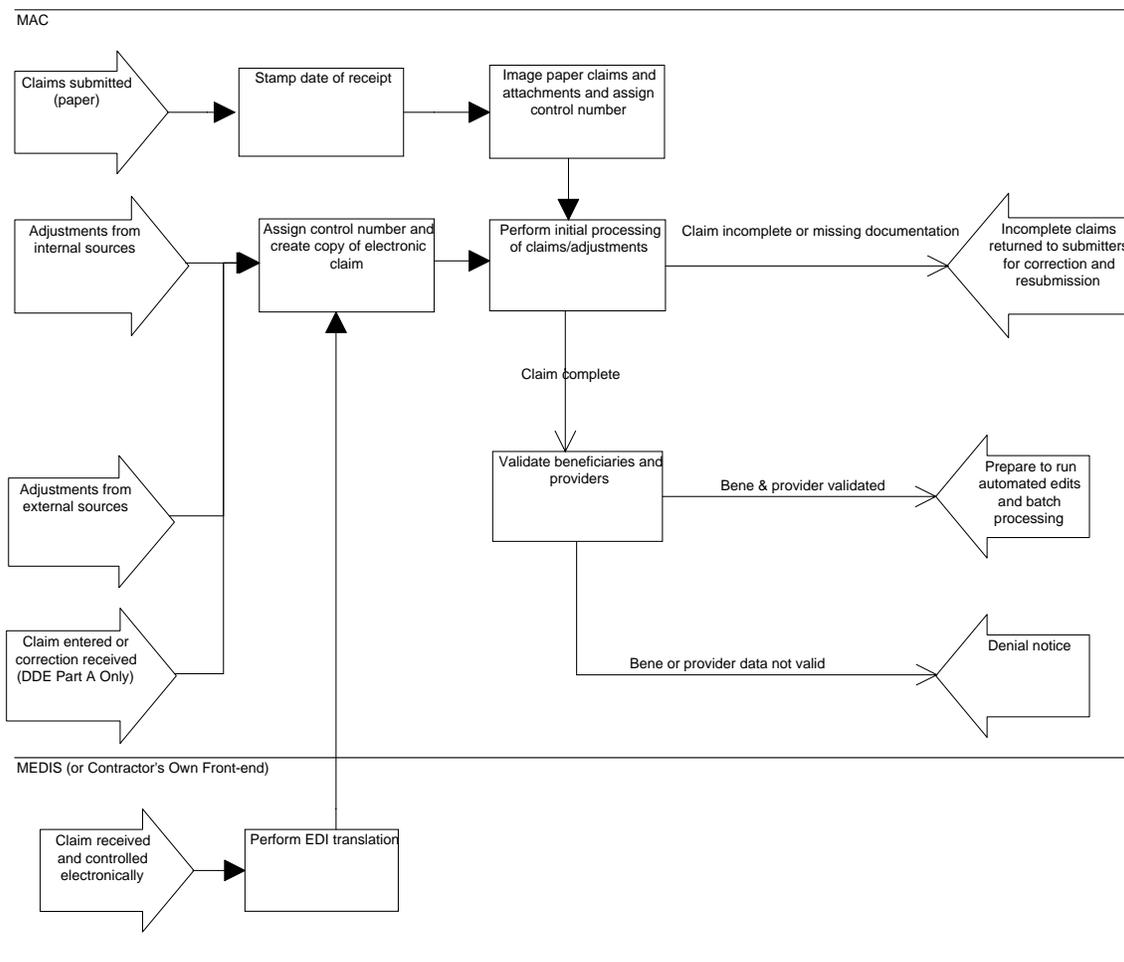
Validate processing environment—MAC ensures that all business, technical, and staff actions are complete so that special processes can begin.

Results

Environment completed—MAC has all business processes in place to support the demonstration or specialty claim processing.

Process Claims (1.2)

INPUT AND ACCEPT CLAIMS (1.2.1),
 PERFORM INTERNAL CLAIM CONSISTENCY EDITS (1.2.2),
 PERFORM CLAIM VALIDATION EDITS AGAINST EXTERNAL FILES (1.2.3)



Events

Claims submitted (paper)—Provider submits claims in hard-copy format.

Adjustments submitted from internal sources—Provider submits claims in electronic format (includes direct data entry, or DDE). Adjustments may also be produced by MAC, or internally generated, to correct errors or effect redetermination appeal results.

Adjustments submitted from external sources—QIC submits notices of effectuation following reconsideration and ALJ appeals processing.

Claim entered or correction received (DDE Part A only)—Provider enters Part A claims correction data via DDE.

Claim received and controlled electronically—Claim received through standard front-end contractor (or MAC front end) processing system.

Process Steps

Stamp date of receipt—MAC stamps the date of receipt on paper claims when they are received.

Image paper claims and attachments and assign control number—MAC creates and stores images of incoming documents. MAC tracks information on incoming paper claims.

Perform EDI translation—Standard front-end contractor (or MAC front end) translates the incoming transactions into flat-file formats and automated processes perform an initial format validation check. Health Insurance Portability and Accountability Act (HIPAA) compliancy edits are performed as well as “Medicare return as unprocessable” edits. The standard front-end contractor (or MAC front end) creates a backup copy of the electronic files for audit and archival purposes, sorts the claims, assigns control numbers, and sends them in batches to the shared systems. Any claims submitted electronically that do not pass the edits are rejected back to the provider.

Assign control number and create copy of electronic claim—MAC assigns a unique identifier to the claim and creates a copy of the claim.

Perform initial processing of claims/adjustments—MAC receives and controls claims:

- ◆ Claims submitted in electronic format are processed by the standard front-end contractor (or MAC front end) and made available to MAC for claims processing.

- ◆ MAC batches claims submitted in hard-copy format; captures them for audit and archival purposes using imaging, microfilming, or intelligent character recognition (ICR/OCR); assigns a control number to each claim; manually keys in claim information or uses ICR technology; and then submits the claims to the shared system.
- ◆ MAC inputs adjustments in the appropriate system in as timely a manner as possible. These adjustments may be generated internally to correct errors, may result from effectuation of redetermination appeals, or may be forwarded from the QIC to effectuate results of reconsideration or ALJ appeals.

Validate beneficiaries and providers—MAC checks the beneficiary and provider data on the claim against the data in the corresponding beneficiary and provider data files. If the provider or beneficiary data on the claim do not match the data on file, the claim is rejected.

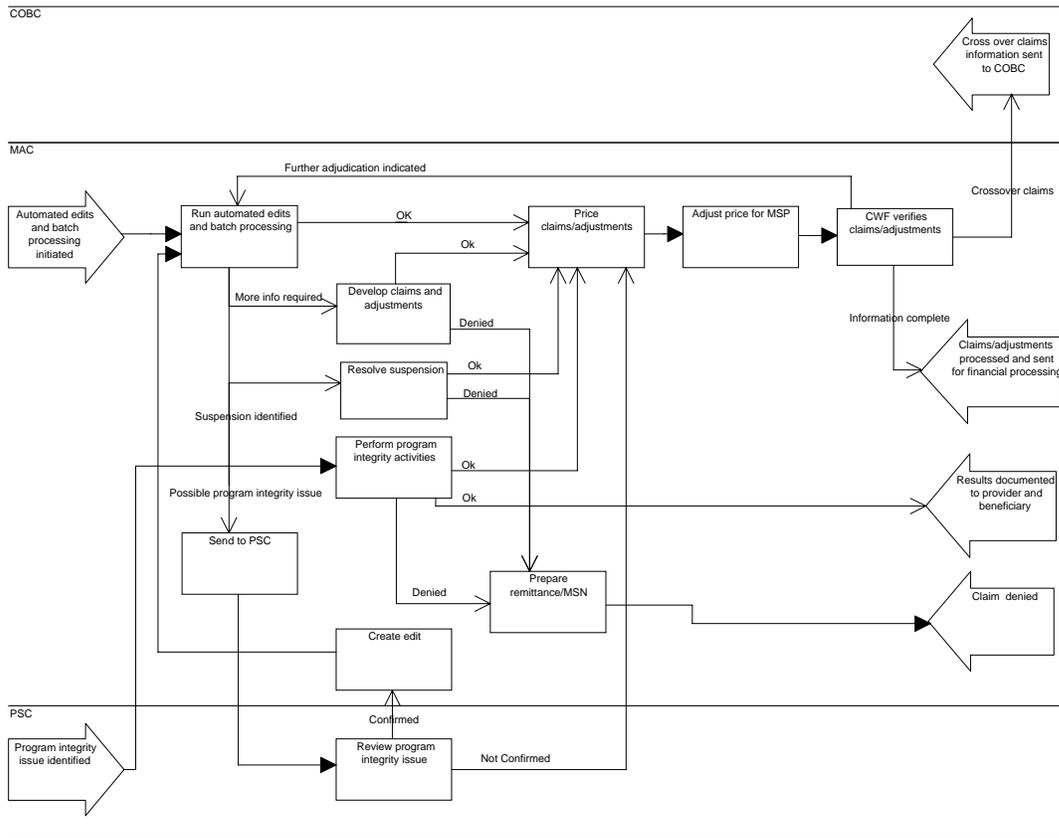
Results

Incomplete claim returned to submitters for correction and resubmission—claim is returned with needed additional information identified.

Complete claim ready for automated edits and batch processing—claim moves to the next processing stage.

Denial notice issued—claims with invalid data are denied.

ADJUDICATE CLAIMS (1.2.4), REPORT RESULTS (1.2.5)



Events

Automated edits and batch processing initiated—Automated edits and batch processing are initiated in order to process claims.

Program integrity issue identified—Program integrity edits screen the claim.

Process Steps

Run automated edits and batch processing—MAC runs automated edits and batch processing. Automated edits check for completeness, valid submittals, valid values, and data consistency. The edits also apply rules and guidelines, check for duplicates and suspensions, and validate provider and beneficiary eligibility. If suspensions are generated or further investigation is required, the claim/adjustment may undergo further manual processing. Rejections may be generated by line or by claim; if some parts of the claim are acceptable, that part of the claim may be paid. Once the claim/adjustment is complete, it goes through pricing and is then sent to the CWF for verification.

Perform program integrity activities—Once these edits are resolved, they reenter the normal claims process.

Send to PSC—MAC sends claims with potential program integrity issues to PSC for review.

Review program integrity issue—PSC reviews claim and makes determination of any problems.

Create edit—If needed, PSC will define a program integrity edit to be added to normal processing.

Resolve suspension—MAC resolves other suspensions generated during the automated edits process.

Price claims/adjustments—MAC runs claims through automated processes to apply pricing to the claims.

Adjust price for MSP—MAC adjusts claims payment amount to account for MSP status.

Verify claims/adjustments—MAC submits claim/adjustment to the CWF for verification. When the claim/adjustment returns from the CWF, it may either go back through the adjudication process or move forward to finalization. For claims that have multiple payment sources, the claims are forwarded to the COB contractor.

Develop claims and adjustments—MAC develops the claim/adjustment. Development is done until all information for adjudication is collected and the claim/adjustment is ready to send to the CWF for verification. If development indicates the claim/adjustment cannot be processed, or if no timely response to contractor inquiries is received, the claim/adjustment is returned to the provider.

Prepare remittance/MSN—MAC issues the claim/adjustment payment and remittance decision. The actual provider reimbursement amount is determined, taking into account any required interest, offsets, or other adjustments. Whether a claim is accepted or denied, the beneficiary is notified via a Medicare Summary Notice (MSN) and the provider is notified through remittance advice.

Results

Cross over claims information sent to COBC—Information on fully adjudicated claims for which there are payment sources other than Medicare are sent to the COB contractor.

Claims/adjustments processed and sent for financial processing—
Claims/adjustments have been adjudicated and sent to the payment floor.

Results documented to provider and beneficiary—Remittance advice and Medicare Summary Notice have been sent.

Claim denied—Claims/adjustments have been returned to the provider, either because the claim information is incomplete, or because the claim has been denied.

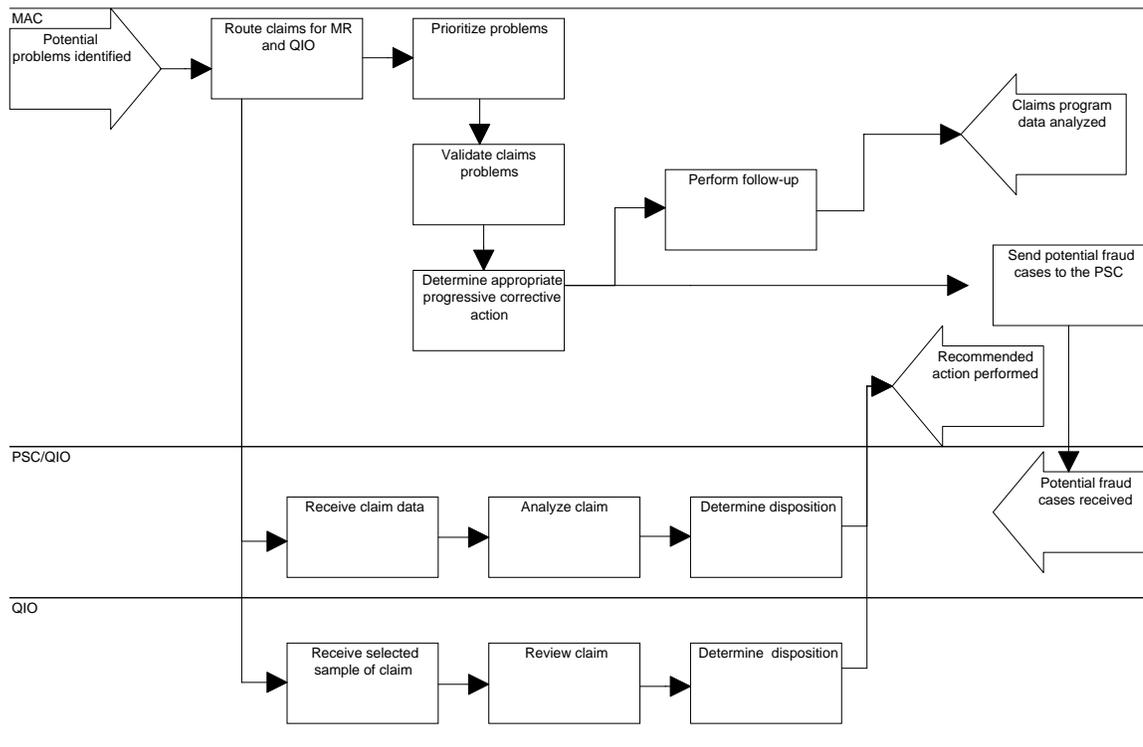
Support Claims Analysis and Reporting (1.3)

PERFORM ANALYSIS OF CLAIMS (1.3.1)

Claims data are saved at various points in processing, beginning with the front-end documentation of the submission of an electronic claim, through the history files that are stored to ensure that duplicate claims are not paid. The MACs and other contractors use these files both to improve their processing of claims and to meet various business functions. The following are sample types of analyses:

- ◆ Processing by the Comprehensive Error Rate Testing (CERT) contractor
- ◆ Conducting research and analysis to support claims edit and medical review processing
- ◆ Identifying program vulnerabilities (PSC contractor)
- ◆ Screening claims to identify those related to settlements
- ◆ Performing statistical sampling for claims for overpayment estimation
- ◆ Analyzing data to design/support provider education programs
- ◆ Determining Claims Submission Errors (CSEs) or patterns of errors
- ◆ Reviewing provider billing records
- ◆ Monitoring limits, for example, annual expenditure ceilings for independent rehabilitation facilities and critical access hospitals
- ◆ Using HIGLAS history to track trends for accounts receivable
- ◆ Monitoring limiting charges for providers who do not accept assignment
- ◆ Running ad hoc reports.

PERFORM MEDICAL REVIEW (1.3.2)



Events

Potential problems identified—MAC identifies program vulnerabilities that threaten the Medicare Trust Fund. Examples of potential problems include providers incorrectly billing for services and providers submitting claims for numerous services during a specified time period.

Process Steps

Route claims for MR and QIO—MAC runs automated edits and batch processing. Automated edits check for completeness, valid submittals, valid values, and data consistency. The edits also apply rules and guidelines (including various business rules and LCDs), check for duplicates and suspensions, and validate provider and beneficiary eligibility. If suspensions are generated or further investigation is required, the claim/adjustment undergoes further manual processing. Denials may be generated by line or by claim. Once the claim/adjustment is complete, it goes through pricing and is then sent to CWF for verification.

Receive claim data—PSC or Quality Improvement Organization (QIO) receives claim for review.

Receive selected sample of claim—QIO receives a sampling of claims for review.

Prioritize problems—MAC prioritizes claims for reviews.

Validate claims problems—MAC reviews claims rejected by edits and determines disposition. Some edits, such as those for PSC, cause automatic routing and do not require analysis by the MAC.

Determine appropriate progressive corrective action—MAC determines whether claim requires further information or further review before adjudication can be completed.

Perform follow-up—MAC performs follow-up activities with providers based on the determination.

Send potential fraud cases to the PSC—If it suspects a benefit integrity issue, MAC sends case to PSC.

Analyze claim—PSC or QIO analyzes claims for problems.

Review claim—QIO reviews claims.

Determine disposition—QIO or PSC makes decision.

Results

Claims program data analyzed—Errors are tracked for potential follow-up.

Recommended action performed—MAC performs any actions needed by PSC or QIO.

Potential fraud cases received—PSC performs additional analysis on potential fraud cases.

REPORT CLAIM ACTIVITY TO INSURANCE COMPANIES AND MEDICAID (1.3.3)

Insurance companies who provide Medigap or other policies that can be affected by the FFS determination and valuation of claims can provide the COBC a file of beneficiaries whom they insure. Periodically, the MAC provides a report back to the insurance companies on claims processed for these beneficiaries.

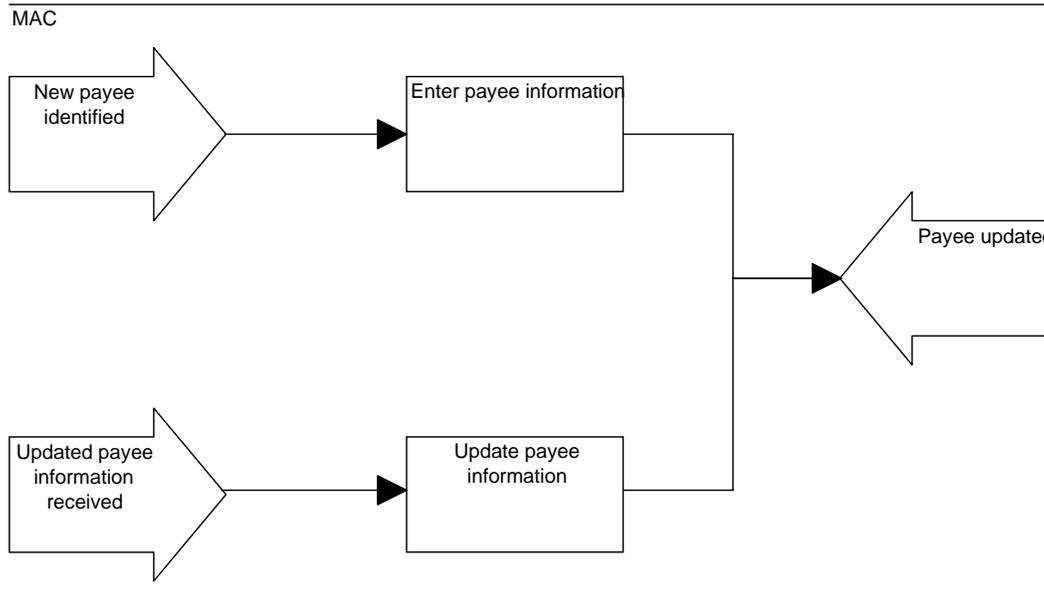
PROCESS MAPS: MANAGE MEDICARE FINANCES (2)

Manage Medicare finances has four components: manage claims expenditures, perform fiscal integrity functions (performed primarily by the PSCs), perform MSP processing, and perform cost report settlement. (The establishment of banking or clearinghouse relationships is part of 3.3 Manage other stakeholders.)

Manage Claims Expenditures (2.1)

MANAGE CONTRACTOR PAYABLES (2.1.1)

Maintain Payees (2.1.1.1)



Events

New payee identified—New payee is identified. Payees include providers, beneficiaries, insurers, employers, institutions, Medicaid state agencies, and other entities.

Updated payee information received—MAC receives updated information.

Process Steps

Enter payee information—MAC or other entity creates the entries that allow payments to be issued, based on the type of payee and the type of information to be updated. Payee data are maintained for each so that the name, provider number, payment address, payment method, and tax identification number are accurate. Entry may be automated or manual. Information on the different payees is maintained in the following systems:

- ◆ Providers—maintained in the shared systems, Provider Enrollment Chain Ownership System (PECOS), and HIGLAS.
- ◆ Beneficiaries (eligibility information)—maintained in CWF.

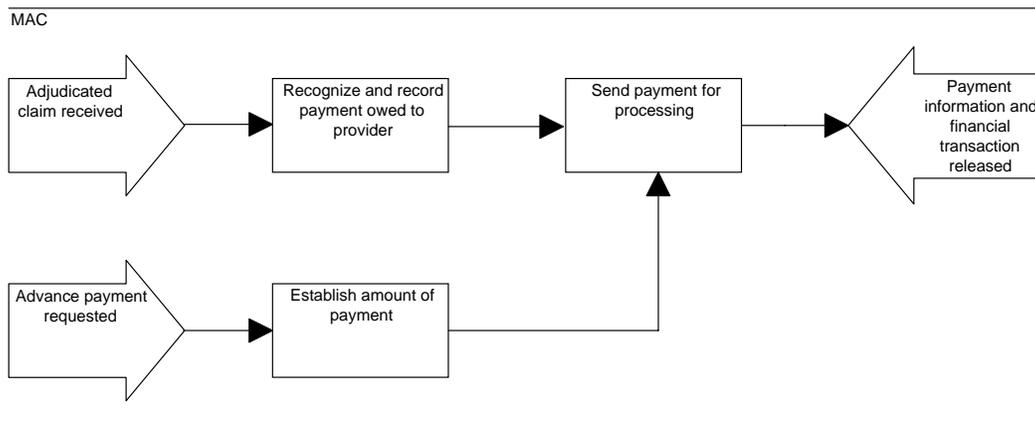
- ◆ Employers, Medicaid state agencies—maintained by the MACs in the shared systems, PECOS, and HIGLAS.

Update payee information—MAC (or other record maintainer) updates new information, such as address changes, bank information, or similar information needed to support payment management. Payee information also needs updating from business events, such as changes in ownership, mergers and acquisitions, or consolidations. Payee may also be requesting an Extended Repayment Plan for outstanding receivables.

Results

Payee updated—all data needed for claims or payment transactions have been entered into the appropriate system and are accessible to the MAC as needed.

Establish Payables (2.1.1.2)



Events

Adjudicated claim received—Claims processing has been completed and has resulted in CMS owing funds for this transaction.

Advance payment requested—Provider is eligible for advance payments.

Process Steps

Recognize and record payment owed to provider—MAC processes individual claims that potentially require disbursement and records accrued liabilities upon receipt and acceptance of services. Processing includes automated payables, manual payables, manual prepayments, automated payable adjustments, manual payable adjustments, and payable withholds. For advance or accelerated payments, payments may be made as a one-time charge or, more usually, on an ongoing basis until the situations that caused the issues are resolved. Another option to pay

the institutional providers on an ongoing basis is under the Periodic Interim Payment (PIP) method. PIP is a mechanism by which a provider receives a flat bi-weekly payment to approximate the allowable costs of covered services during that period.

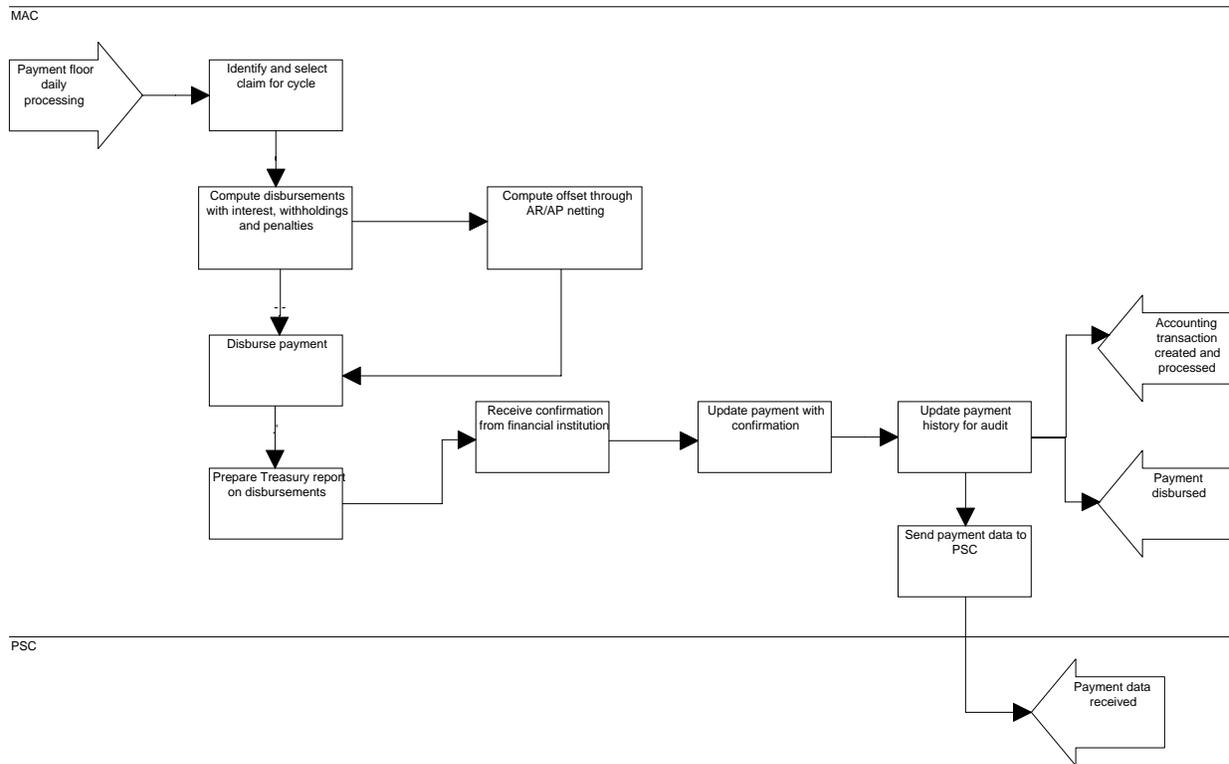
Establish amount of payment—MAC may make advanced or accelerated payments under specific circumstances to institutions (e.g., hospitals or, less frequently, non-institutional providers). Payments may be made to ensure cash flow for the entity for either capital or operating expenses. MAC determines the amount of the payment based on geography, facility type, wage rates, past history and other factors.

Send payment for processing—MAC holds approved payables on the payment floor until the correct time period has elapsed for the MAC to issue payment. The period varies depending on the type of claim and the method by which it was submitted.

Results

Payment information and financial transaction released—completed payment is ready to be processed on the appropriate date.

Generate Payments (2.1.1.3)



Events

Payment floor daily processing—Shared system examines payment floor holding file each day for claims with charges to be paid.

Process Steps

Identify and select claim for cycle—Shared systems automatically select completed claims held on the payment floor based on their due date. The due date varies depending on the type of claim and the method by which it was submitted. The claims are forwarded to HIGLAS for processing.

Compute disbursements with interest, withholdings, and penalties—HIGLAS computes the amount to be paid for the completed claims. Processing includes CPT interest calculations and confirmation of payment batches. Processing also includes payment adjustments such as stops, voids, and reissues and processing of stale-dated checks. HIGLAS returns payment instructions to the MAC for disbursement. Physician incentives, payments for Health Professional Shortage Areas (HPSAs), and Physician Scarcity Areas (PSAs) are also calculated by HIGLAS.

Compute offset through AR/AP netting—HIGLAS adjusts payment for outstanding accounts receivable balances (accounts receivable/accounts payable netting or, more traditionally, offset).

Disburse payment—MAC distributes payments electronically and, in a few cases, prints the checks or prints the Medicare Summary Notice for each disbursement. The MAC prepares the materials for mailing and mails them to proper recipients.

Prepare Treasury report on disbursements—HIGLAS creates the Treasury report for disbursements being made.

Receive confirmation from financial institution—MAC updates the payment information with date, time, and related information from the financial institution that makes the payment.

Update payment with confirmation—MAC adds confirmation information to payment transaction.

Update payment history for audit—MAC updates payment records to reflect processing. All accounting transactions are created and processed.

Send payment data to PSC—MAC sends payment data to PSC for program integrity analysis.

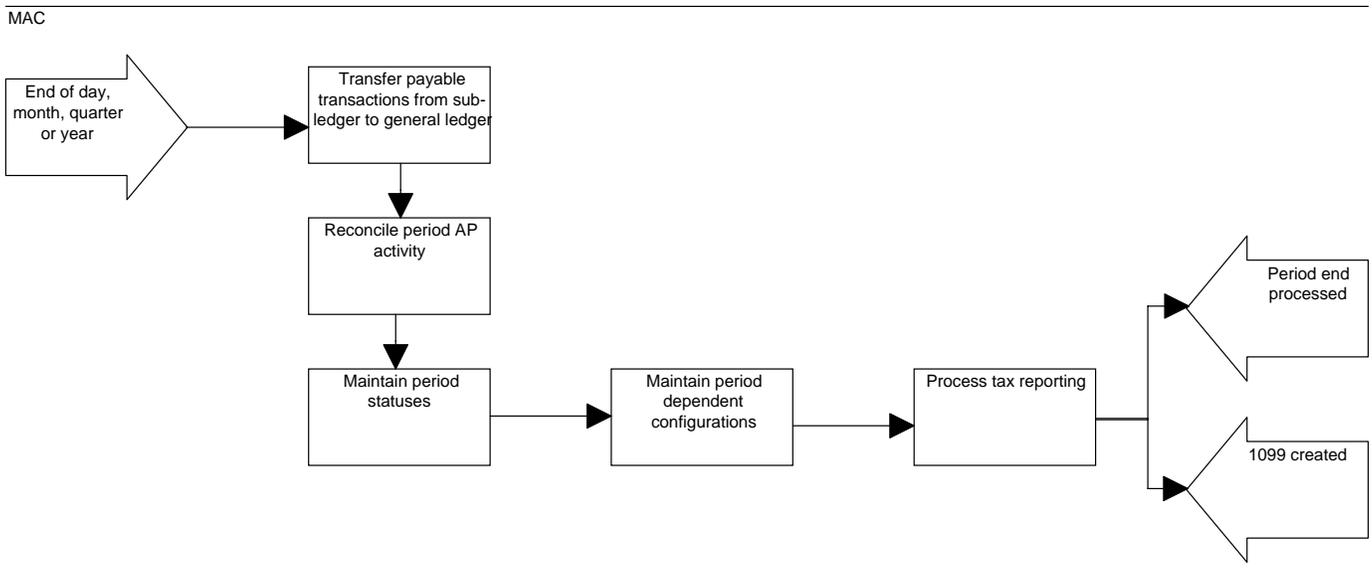
Results

Accounting transaction created and processed—Accounting transaction has been created and processed.

Payment disbursed—Check or electronic funds transfer (EFT) (accompanied by remittance advice) and Explanation of Medicare Benefits (EOMB) or statement have been sent to payee for a claim, or an advance payment has been made to an institution or provider.

Payment data received—PSC has received the payment data sent from the MAC.

Process Period End (2.1.1.4)



Events

End of day, month, quarter, or year—Accounting period ends.

Process Steps

Transfer payable transactions from sub-ledger to the general ledger—If it uses sub-ledgers, MAC enters all payables into the HIGLAS general ledger according to CMS-defined accounting rules.

Reconcile period AP activity—MAC reconciles results of all transactions for the period and monitors financial transaction flow through the system.

Maintain period statuses—MAC keeps appropriate status for financial reporting at any of the period levels, using HIGLAS.

Maintain period dependent configurations—MAC keeps information such as the current interest rate so that payment information can be recomputed or confirmed in audit.

Process tax reporting—MAC creates and records Internal Revenue Service (IRS) information, including 1099 forms.

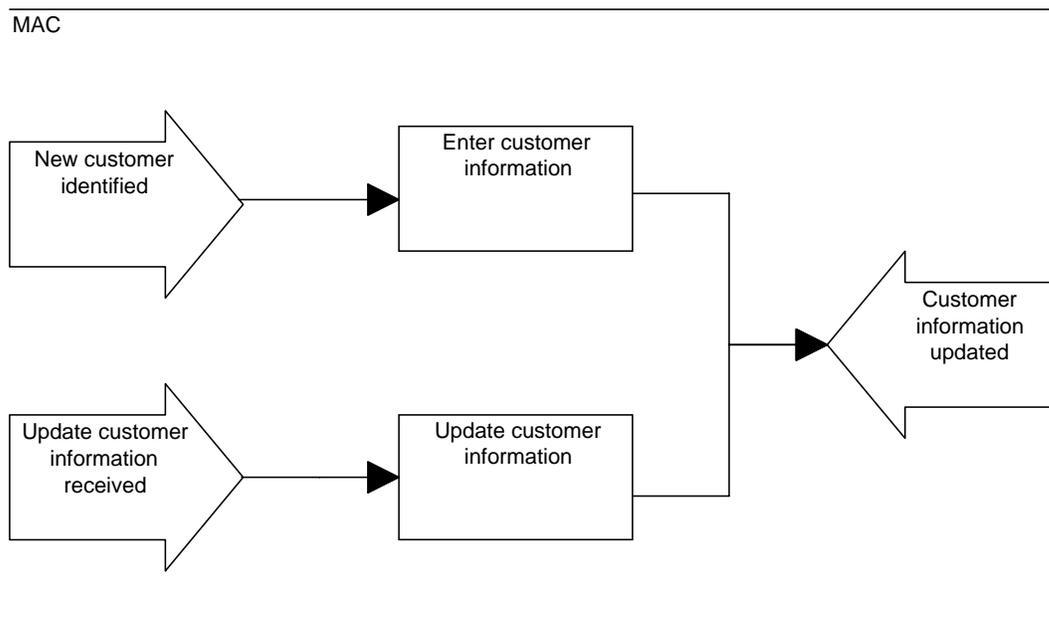
Results

Period end processed—Period-end balances for each account are correct.

1099 created—IRS Form 1099 has been created.

MANAGE CONTRACTOR RECEIVABLES (2.1.2)

Maintain Customer (2.1.2.1)



Events

New customer identified—MAC is informed of new customer. Customers include physicians, beneficiaries, insurers, employers, institutions, and other entities.

Updated customer information received—MAC receives information on an existing customer.

Process Steps

Enter customer information—MAC creates the entries that allow payments to be issued. Information on the different customers is maintained in the following systems:

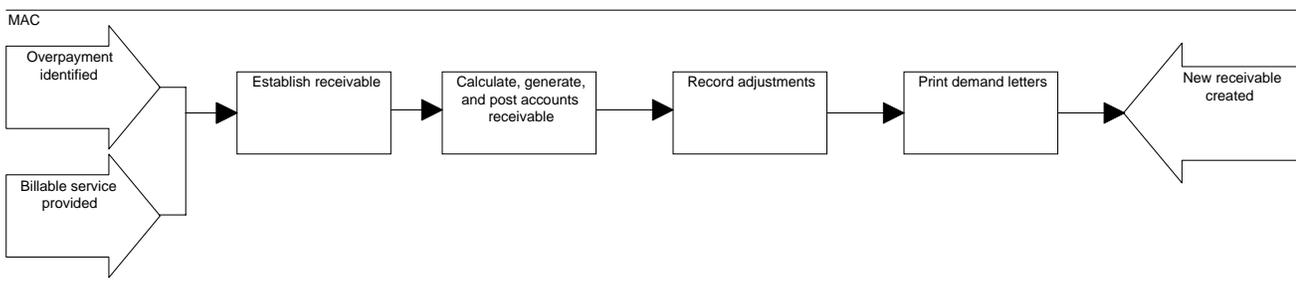
- ◆ Institutions—information created by CMS and maintained by MAC
- ◆ Providers—maintained by MAC
- ◆ Beneficiaries (eligibility information)—maintained in CWF
- ◆ Employers, Medicaid state agencies—maintained in shared system files
- ◆ MSP information—resides in CWF loaded by the COBC.

Update customer information—MAC (or other maintainer) updates new information, such as address changes, bank information, or similar information needed to support payment management. Updates may be made in PECOS, shared systems, and/or HIGLAS.

Results

Customer information updated—All customer data needed for claims or payment transactions have been entered into the appropriate system and are accessible to the MAC as needed.

Establish Receivables (2.1.2.2)



Events

Overpayment identified—MAC identifies situation in which the customer owes CMS funds. Overpayments can also be identified by other contractors, e.g., QIOs.

Process Steps

Establish receivable—MAC uses HIGLAS and creates the financial transactions and tracking entries that identify the customer and related information for the overpayment.

Calculate, generate, and post accounts receivable—MAC calculates, generates, and posts accounts receivable based on a source, event, or time period and type of claim in accordance with CMS program requirements.

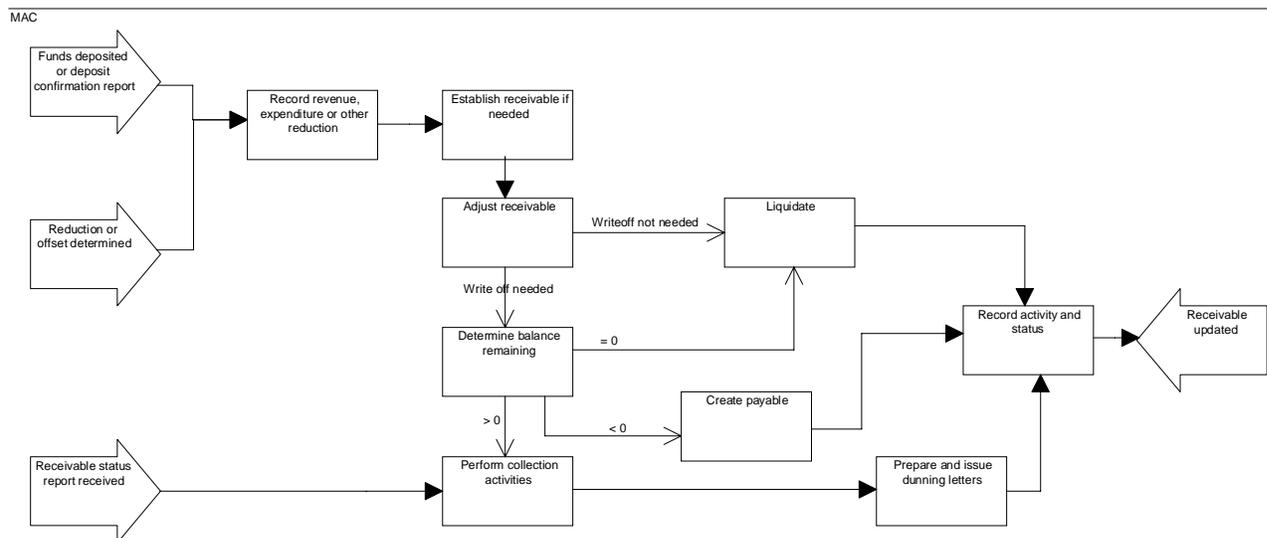
Record adjustments—MAC creates and maintains the financial transactions associated with changes to a receivable.

Print demand letters—MAC prints the demand letter for the receivable.

Results

New receivable created—All financial transactions have been properly recorded.

Process Collections (2.1.2.3)



Events

Funds deposited or deposit confirmation report—MAC receives cash, check, or payment.

Reduction or offset determined—Reductions or offsets to existing receivables are required due to settlements, appeals, or other events.

Receivable status report received—Periodic reports are required on delinquent debt and debtors.

Process Steps

Record revenue, expenditure, or other reduction—MAC records cash or check and creates HIGLAS financial transaction. The MAC also records revenues, expenditure reductions, or other appropriate amount associated with collections for unapplied collections for which no receivable was previously established; records deposits and related debit vouchers for reconciliation to deposit confirmation information provided by Treasury or the banking system; and matches receipts to appropriate receivables.

Establish receivable if needed—MAC establishes receivable for funds received, if one does not already exist.

Adjust receivable—MAC adjusts the existing receivable to reflect the current activity; processes refunds, waivers, compromises, and appeals; and makes other receivable adjustments.

Determine balance remaining—MAC takes action based on adjusted balance of the receivable.

Liquidate—MAC removes receivable that is now satisfied. MAC, using the shared systems or HIGLAS, liquidates and accounts for receivables that are set to \$0, either through payments or write-offs, and writes off receivables that meet CMS criteria for being uncollectible. The contractor also identifies and reports receivable for bad debt provisions or write-off.

Create payable—For receivables that are positive, MAC creates a payment transaction to be added to next payment cycle.

Perform collection activities—For delinquent receivables, MAC initiates or continues collection activities, based on circumstances of the debt and the CMS established time frames. MAC processing includes assessing and maintaining interest, processing Currently Non-Collectible receivables, managing collection activities such as preparing dunning letters, and managing debt referrals, write-offs, and offsets to other payables and receivables. The MAC may suspend payments to providers to help ensure proper recovery of overpayments.

Prepare and issue dunning letters—MAC issues letters or other collection activities for delinquent receivables.

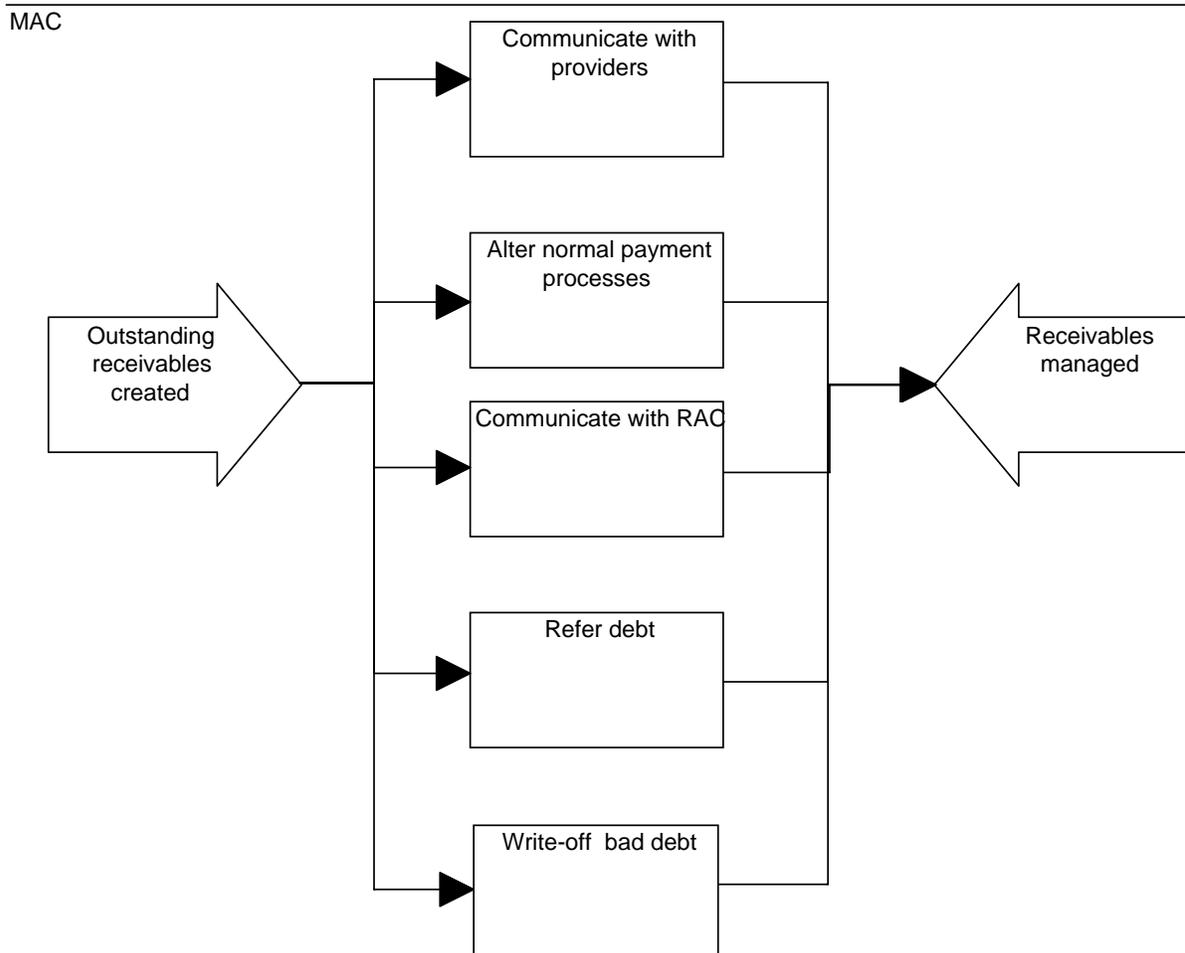
Record activity and status—MAC tracks the current balances and status of money owed CMS and creates and maintains the financial tracking information for the receivable and any adjustments, such as those from appeals. The MAC must maintain proper allowance for uncollectible accounts (that is, maintain the financial position to meet statutory requirements for uncollectible debts) and create and maintain all accounting transactions associated with receivables. MAC supports online queries on receivable and account information.

Results

Receivable updated—All financial, tracking, and history data for the receivable have been updated.

Manage Receivables (2.1.2.4)

The following description is a high-level view of how the receivables are handled by the MACs.



Events

Outstanding receivables created—Receivables that have been created, but not offset by AR/AP netting, require further action.

Process Steps

Communicate with providers—MAC periodically analyzes underpayments and overpayments to determine actions needed. MAC issues demand letters and Intent to Refer letters based on CMS standards.

Alter normal payment processes—MAC alters the standard payment processes to handle exceptional situations such as bankruptcies, extended repayment requests, provider suspensions, and Treasury collections.

Communicate with RAC—MAC communicates with the Recovery Audit Contractor (RAC), if one is involved, to develop and implement standards for communicating adjustments, collections, and processes with any recovery audit contractor in their jurisdiction.

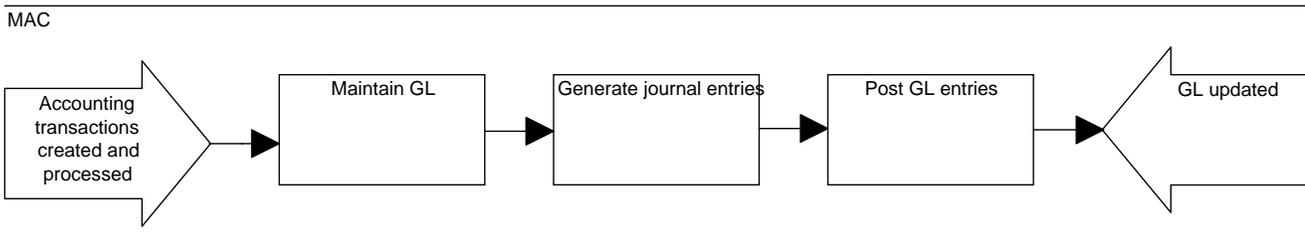
Refer debt—MAC implements CMS instructions and develops standard processes for referring debt to Treasury.

Write off bad debt—MAC implements CMS regulations for writing off bad debt.

Results

Receivables managed—MAC has taken action to recover outstanding receivables.

MANAGE CONTRACTOR GENERAL LEDGER (2.1.3)



Events

Accounting transactions created and processed—Financial records for all of the transactions and activities of managing finance are recorded and stored in the general ledger.

Process Steps

Maintain GL—MAC ensures that financial transactions can be captured, classified, processed, stored, and retrieved in a controlled, consistent manner. MAC also defines and maintains posting and editing rules for transactions, and maintains general ledger configuration of general and subsidiary ledger accounts,

summary accounts/periods, and calendar periods. The GL is maintained in HIGLAS.

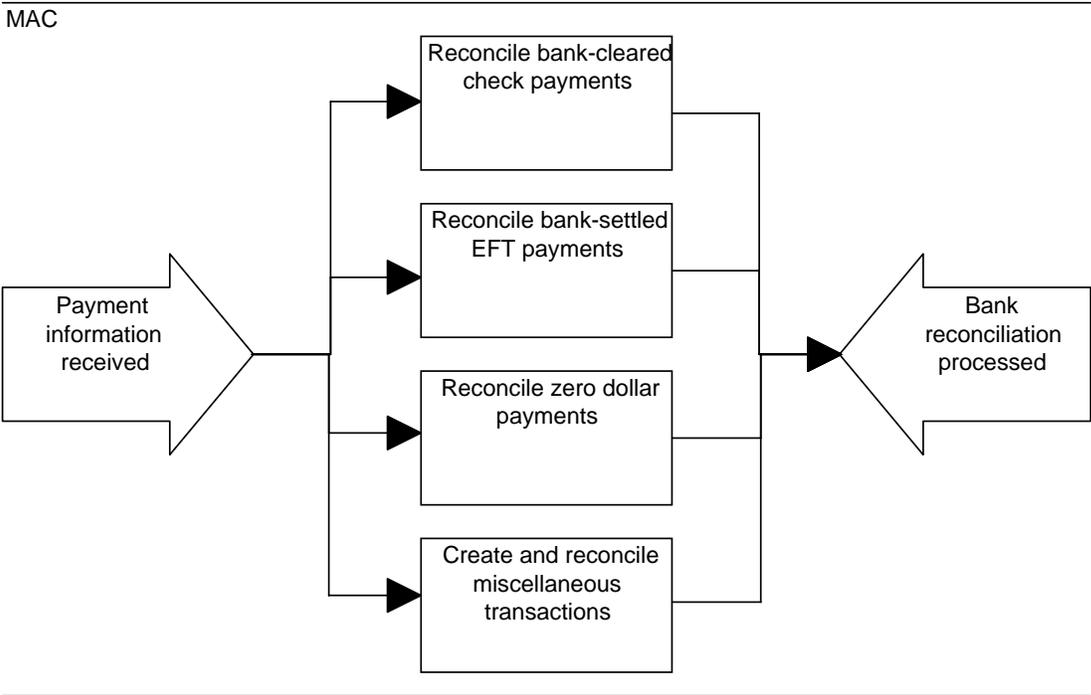
Generate journal entries—MAC imports posting and reconciliation of accounting transactions from the sub-ledger to GL (if sub-ledgers used), inputs recurring entries, and reconciles sub-ledgers.

Post GL entries—MAC enters various accruals, generates reversals automatically or manually, generates reports on journal activity, and updates balances in detail and summary accounts in the general ledger.

Results

GL updated—General ledger accurately reflects the financial status of the Medicare funds.

RECONCILE PAYMENTS (2.1.4)



Events

Payment information received—Financial institution reports processing of transaction.

Process Steps

Reconcile bank-cleared check payments—MAC updates transactions to show that payment has cleared the bank.

Reconcile bank-settled EFT payments—MAC updates transactions to show settled EFT payments.

Reconcile zero dollar payments—MAC completes special financial processing for proper netting of zero dollar payments.

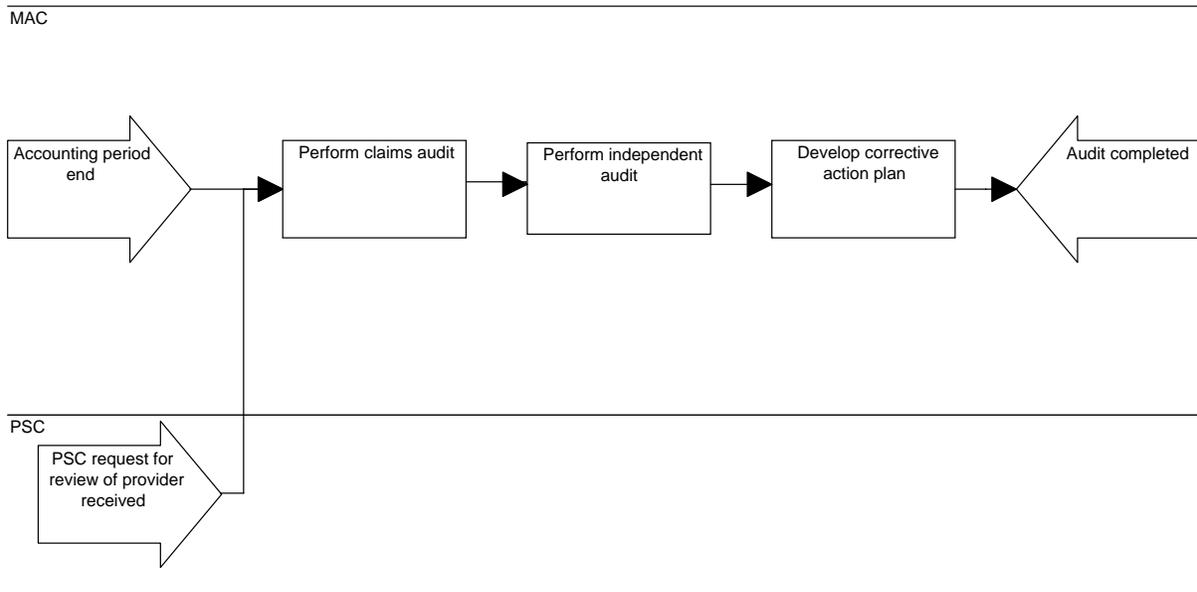
Create and reconcile miscellaneous transactions—MAC updates transaction status for miscellaneous transactions.

Results

Bank reconciliation processed—Check and EFT reconciliation has been processed and HIGLAS data have been updated.

Perform Fiscal Integrity Functions (2.2)

PERFORM AUDIT (2.2.1)



Events

Accounting period end—Routine or ad hoc audits are required.

Request for review of provider received—PSC receives a request to review a provider.

Process Steps

Perform claims audit—PSC audits claims. Claims audits can include special monitoring of types of codes or complex reviews of providers.

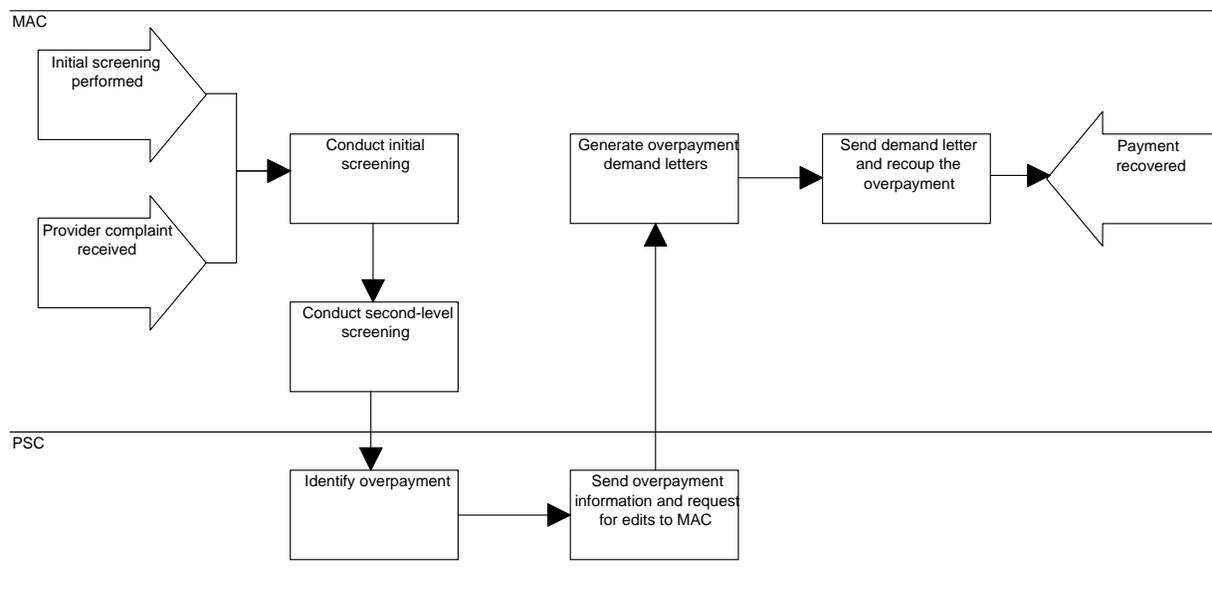
Perform independent audit—CMS CFO asks independent auditors to certify all aspects of claims processing to meet the laws and regulations pertaining to financial certification. MAC participates in these audits as needed.

Develop corrective action plan—MAC and/or CMS determine actions to respond to audit findings.

Results

Audit completed—Audits have been completed and results reported to MAC and CMS.

SCREEN COMPLAINTS (2.2.2)



Events

Initial screening performed—Inquiries are identified for resolution and/or referral of potential fraud and abuse complaints to second-level screeners.

Provider complaint received—MAC receives a complaint on provider.

Process Steps

Conduct initial screening—MAC resolves as many inquiries as possible in the initial screening with the data available. When the complaint or inquiry cannot be resolved, the issue is referred for more detailed second-level screening.

Conduct second-level screening—MAC performs more detailed screening, ordering medical records when necessary and performing a more thorough review. MAC immediately refers potential fraud and abuse complaints to PSC.

Identify overpayment—PSC discovers overpayment.

Send overpayment information and request for edits to MAC—PSC refers overpayment information to MAC.

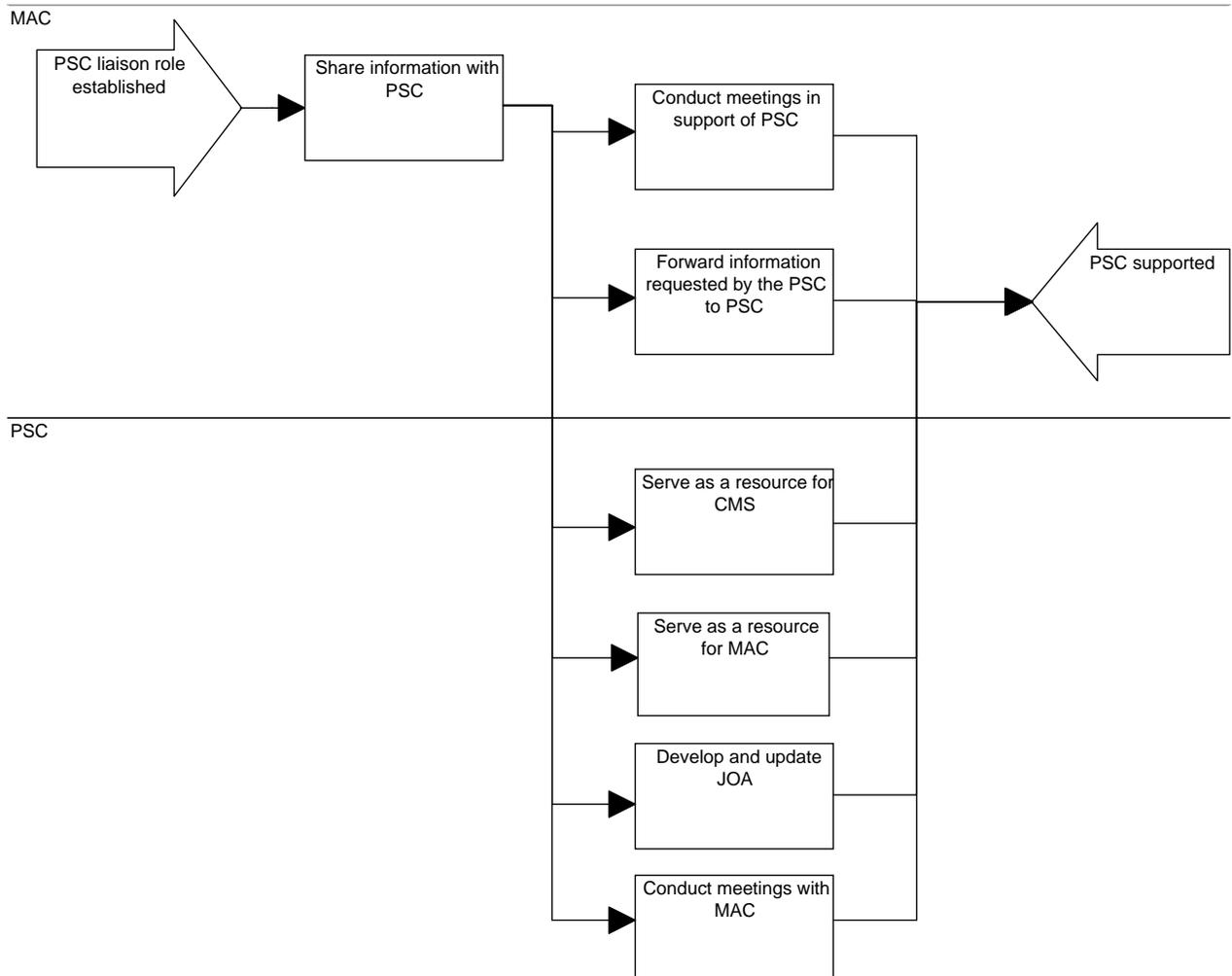
Generate overpayment demand letters—MAC generates a demand letter when an overpayment is identified by the PSC.

Send demand letter and recoup the overpayment—MAC sends the demand letter to recoup the overpayment.

Results

Payment recovered—Payments have been recovered through normal financial processing, and MAC has notified the PSC of the amount recouped, per the Joint Operating Agreement (JOA).

SERVE PSC LIAISON (2.2.3)



Events

PSC liaison role established—MAC has a specific PSC to work with.

Process Steps

Share information with PSC—MAC and the PSC routinely share information about potential benefit integrity claims.

Conduct meetings in support of PSC—MAC conducts meetings, provides training, and supplies additional documentation.

Forward information requested by the PSC to PSC—MAC responds to PSC requests.

Serve as a resource for CMS—PSC assists CMS as an expert in program integrity issues.

Serve as a resource for MAC—PSC assists MAC on program integrity issues.

Develop and update JOA—MAC and PSC use Joint Operating Agreements to establish roles and responsibilities.

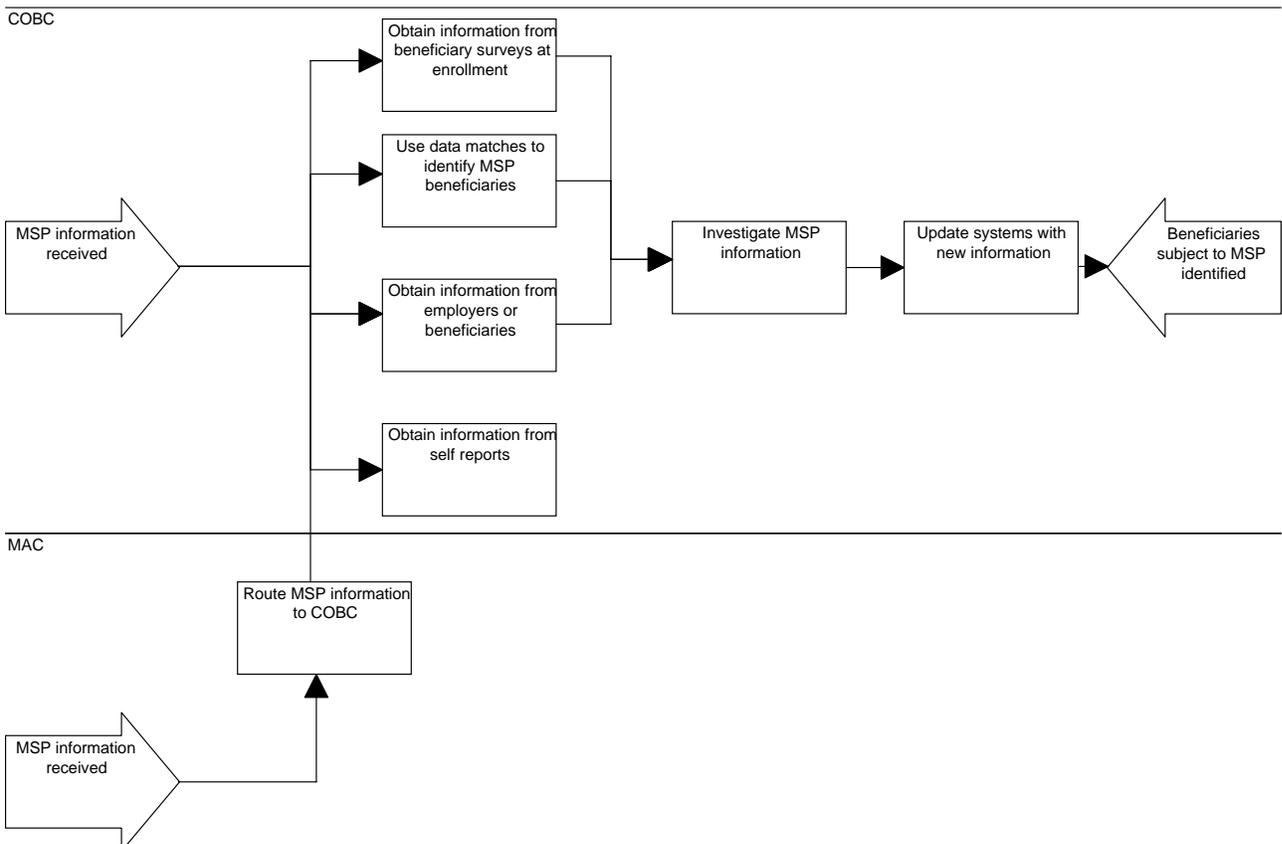
Conduct meetings with MAC—PSC leads meetings with MACs.

Results

PSC supported—Stakeholders are informed and supported in a variety of ways.

Perform MSP Processing (2.3)

CREATE AND UPDATE ELIGIBILITY INFORMATION (2.3.1)



Events

MSP information received—MSP information is received through the surveys provided from the initial enrollment questionnaire, voluntary data sharing, and self-reports.

Process Steps

Route MSP information to COBC—MAC forwards MSP information received as part of claim file to COBC.

Obtain information from beneficiary surveys at enrollment—MAC reviews initial enrollment application to determine MSP information.

Use data matches to identify MSP beneficiaries—COBC uses Recovery Management and Accounting System (REMAS) to identify MSP status.

Obtain information from employers or beneficiaries—Employers and beneficiaries provide information on MSP situations.

Obtain information from self-reports—Providers and beneficiaries provide information to the COBC.

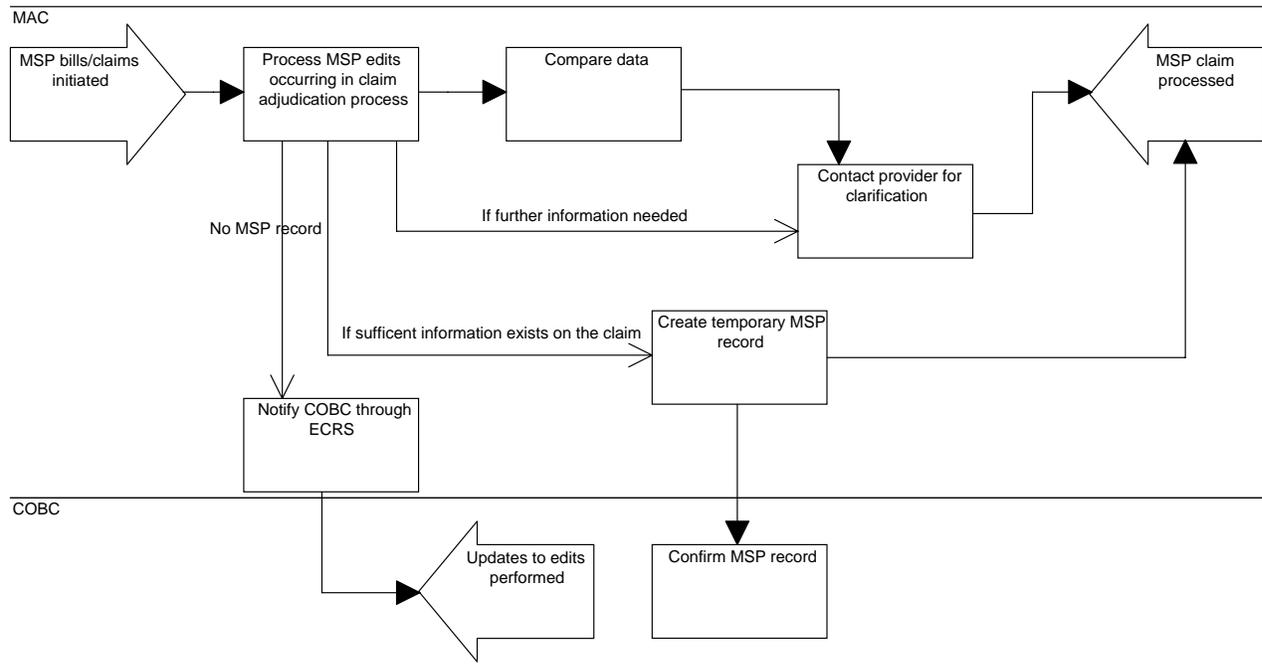
Investigate MSP information—COBC investigates MSP information and enters flags in CWF.

Update systems with new information—CWF, REMAS, and HIGLAS receive MSP status information.

Results

Beneficiaries subject to MSP identified—MSP flags have been set for proper processing of claims.

PROCESS MSP CLAIMS (2.3.2)



Events

MSP bills/claims initiated—Claims processing indicates potential or actual secondary payer.

Process Steps

Process MSP edits occurring in claim adjudication process—MAC verifies MSP information when edits indicate potential secondary payer.

Notify COBC through ECRS—MAC uses third-party system—Electronic Correspondence Referral System (ECRS)—to communicate with COBC.

Compare data—COBC performs data matches or employer searches to identify secondary payer information.

Create temporary MSP record—If it receives MSP information, MAC creates a temporary CWF record so that information can be processed.

Contact provider for clarification—MAC requests additional information where needed.

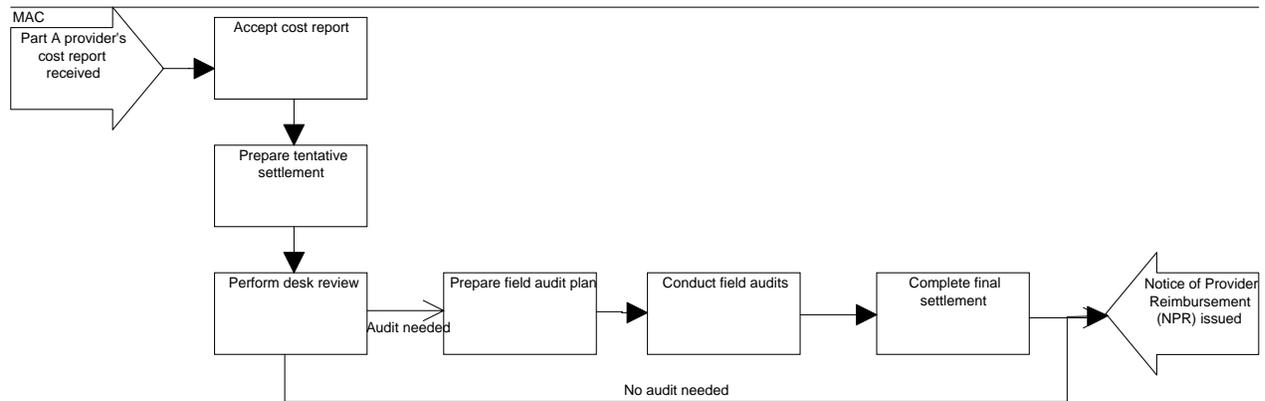
Confirm MSP record—COBC confirms temporary information and records permanent data.

Results

Edits updated—MSP edits have been updated.

MSP claim processed—Medicare responsibility on a claim has been completed.

Perform Cost Report Settlement (2.4)



Events

Part A provider's cost report received—Providers file a Medicare cost report within 5 months of their fiscal year end.

Process Steps

Accept cost report—MAC obtains and maintains CMS-approved Automated Data Reporting (ADR) software needed to retrieve, process, and recreate institutional cost reports. MAC resolves any problems in the transmission of the cost reports from the institutional provider. MAC verifies that the submitted cost report is timely and complies with CMS regulations.

Prepare tentative settlement—MAC prepares a tentative settlement—an initial retroactive settlement made by the MAC within 60 days of the acceptance of the cost report. MAC identifies the amount the provider is owed or owes Medicare at tentative settlement and makes payment to or takes money back from the provider where necessary. The adjustments are essential to ensure proper cash flow to providers.

Perform desk review—MAC performs desk review of institutional providers filing Medicare cost reports (except low/no Medicare utilization cost reports) to determine the adequacy, completeness, and reasonableness of the data in the reports utilizing the most current Uniform Desk Review (UDR) program.

Conduct field audits—MAC conducts field audits to provide greater assurance that program payments are based on Medicare reimbursement principles. MAC conducts field audits, if necessary, using Medicare audit programs and Medicare reimbursement principles.

Complete final settlement—MAC completes a final settlement and issues the Notice of Provider Reimbursement (NPR) for cost reports that do not require an audit within 12 months of the acceptance of a cost report in accordance with CMS regulations.

Prepare field audit plan—MAC develops an audit plan to identify cost reports to be audited and resources to be expended based on results of the desk review and/or the contractor's knowledge of the provider.

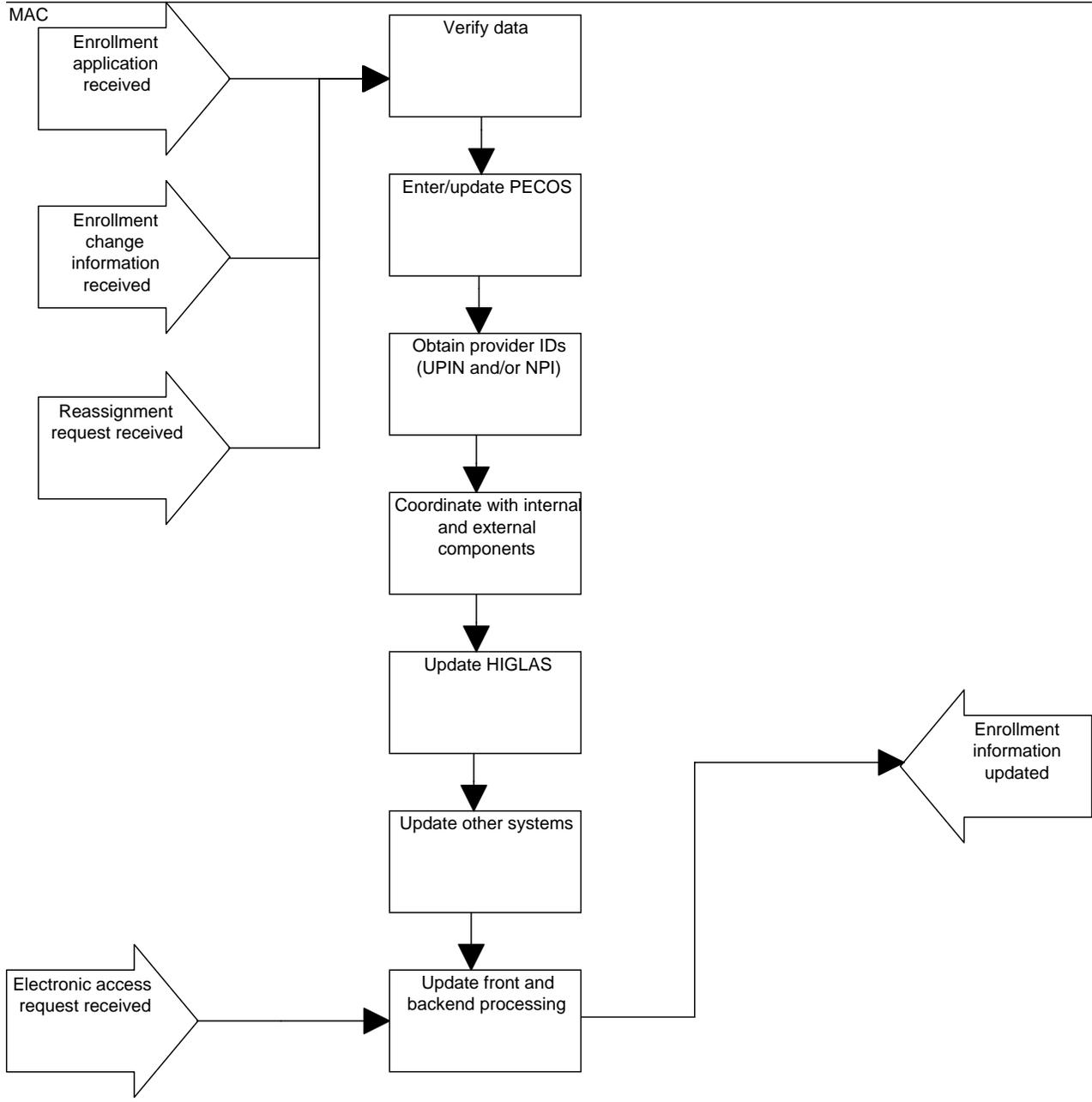
Results

Notice of Provider Reimbursement (NPR) issued—Final processing has been completed and the NPR issued. Cost report has been deemed “final settled.”

PROCESS MAPS: PROVIDE CUSTOMER SERVICE (3)

Manage Providers (3.1)

ENROLL AND UPDATE PROVIDER INFORMATION (3.1.1)



Events

Enrollment application received—MAC receives enrollment applications submitted on CMS or MAC websites or in hard copy. (MAC also can mail out applications to potential providers.)

Enrollment change information received—MAC receives changes to existing information submitted by a Part B individual practitioner or clinic.

Reassignment request received—MAC receives new billing information submitted by provider.

Electronic access request received—MAC receives request from provider (or agent of provider) to submit electronic claims and/or receive electronic funds transfer.

Process Steps

Verify data—MAC verifies and documents provider enrollment information, using tools such as Qualifier.Net.

Enter/update PECOS—MAC enters all new application information (e.g., for new providers or changes of information) into PECOS.

Obtain provider IDs (UPIN and/or NPI)—MAC obtains or validates provider's identification.

Coordinate with other internal and external components—MAC furnishes information, as necessary, to other MAC components, e.g., appeals, provider education, professional relations. MAC furnishes participation data to Railroad Retirement Board (RRB) and CMS.

Update HIGLAS—MAC updates EFT and payee information in HIGLAS.

Update other systems—MAC enters provider information, e.g., specialty codes, into shared systems or other common systems. Also, MAC enters information for special processing or claims payment adjustments, such as HPSA or PSA.

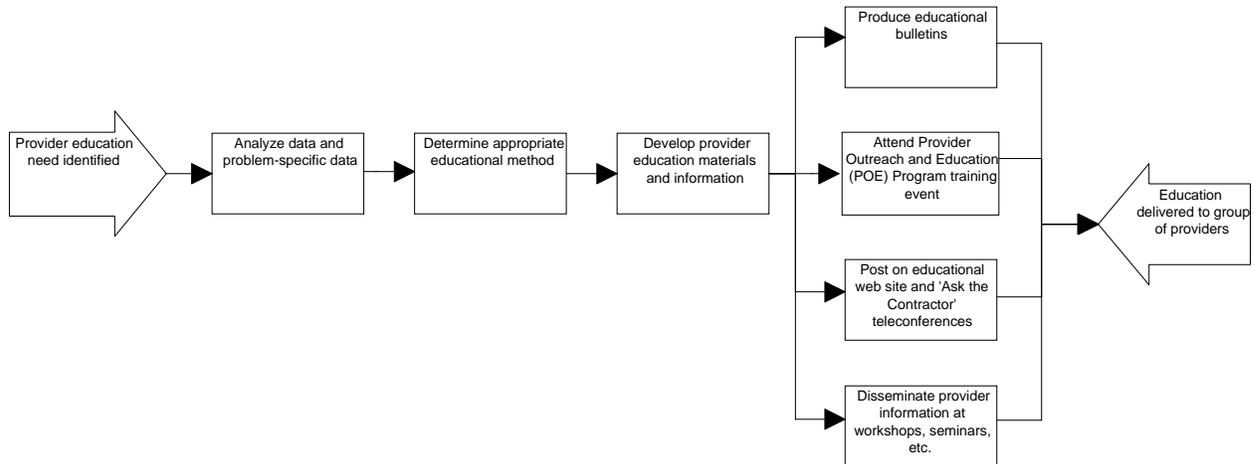
Update front- and back-end processing—MAC enrolls provider and provides information for EDI.

Results

Enrollment information updated—All relevant systems have been updated, and provider is able to submit and process claims.

PROVIDE EDUCATION TO PROVIDERS (AS GROUPS) (3.1.2)

MAC



Events

Provider education need identified—Providers need routine education, education as described in MAC’s Local Provider Education and Training (LPET) plan, or education due to policy changes or as a result of claims analysis.

Process Steps

Analyze data and problem-specific data—MAC educates providers based on CMS- and MAC-developed strategies or as a result of recurrent issues in processing claims, advice of other functional contractors such as the PSC, or provider inquiries and feedback. For example, both Part A and B providers will be notified of CERT issues. In addition, the MAC will notify providers of newly applicable limits and caps.

Determine appropriate educational method—MAC delivers education through websites, presentations, bulletins, mass mailings, bulletin boards, and seminars and any other appropriate delivery forum.

Develop provider education materials and information—MAC develops materials based on issue being addressed and on the delivery mechanism.

Produce educational bulletins—MAC publishes an educational bulletin.

Attend Provider Outreach and Education (POE) Program training event—MAC participates in provider communications (PCOM) training programs.

Post on educational website and ‘Ask the Contractor’ teleconferences—MAC uses website and teleconferences to disseminate information.

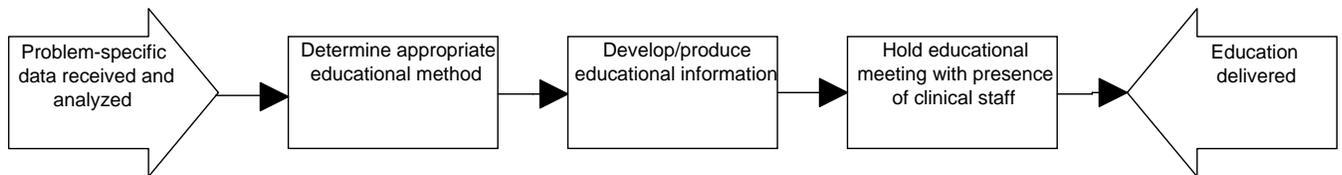
Disseminate provider information at workshops, seminars, etc.—MAC uses workshops and seminars to disseminate information.

Results

Education delivered to group(s) of providers—Providers have been educated in FFS topics.

PROVIDE EDUCATION TO INDIVIDUAL PROVIDERS (3.1.3)

MAC



Events

Problem-specific data received and analyzed—CERT data, edit data, or MR data indicates inappropriate billing practices by a provider.

Process Steps

Determine appropriate educational method—MAC tailors educational method for specific providers based on need. Examples of delivery methods are letters, e-mails, teleconferences, visits, and invitations to training.

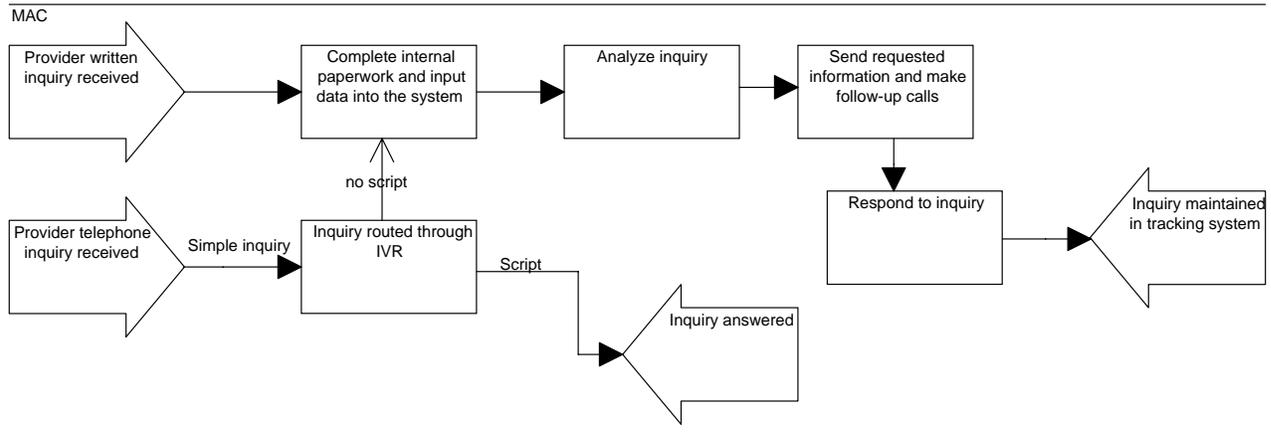
Develop/produce educational information—MAC produces and delivers education to the provider.

Hold educational meeting with presence of clinical staff—MAC trains provider staff.

Results

Education delivered—Provider improves FFS claims submissions.

PROCESS PROVIDER INQUIRIES (3.1.4)



Events

Provider written inquiry received—MAC CSR receives written inquiry.

Provider telephone inquiry received—MAC customer support representative (CSR) receives call.

Process Steps

Receive inquiry routed through IVR—MAC receives inquiry through Interactive Voice Response (IVR) equipment.

Complete internal paperwork and input data into the system—CSR records inquiry in MAC's tracking system.

Analyze inquiry—CSR determines information needed or researches problem. Provider relations research specialists review complex requests.

Send requested information and make follow-up calls—CSR sends written material, if requested, and follows up by phone, if needed.

Respond to inquiry—CSR responds to verbal questions.

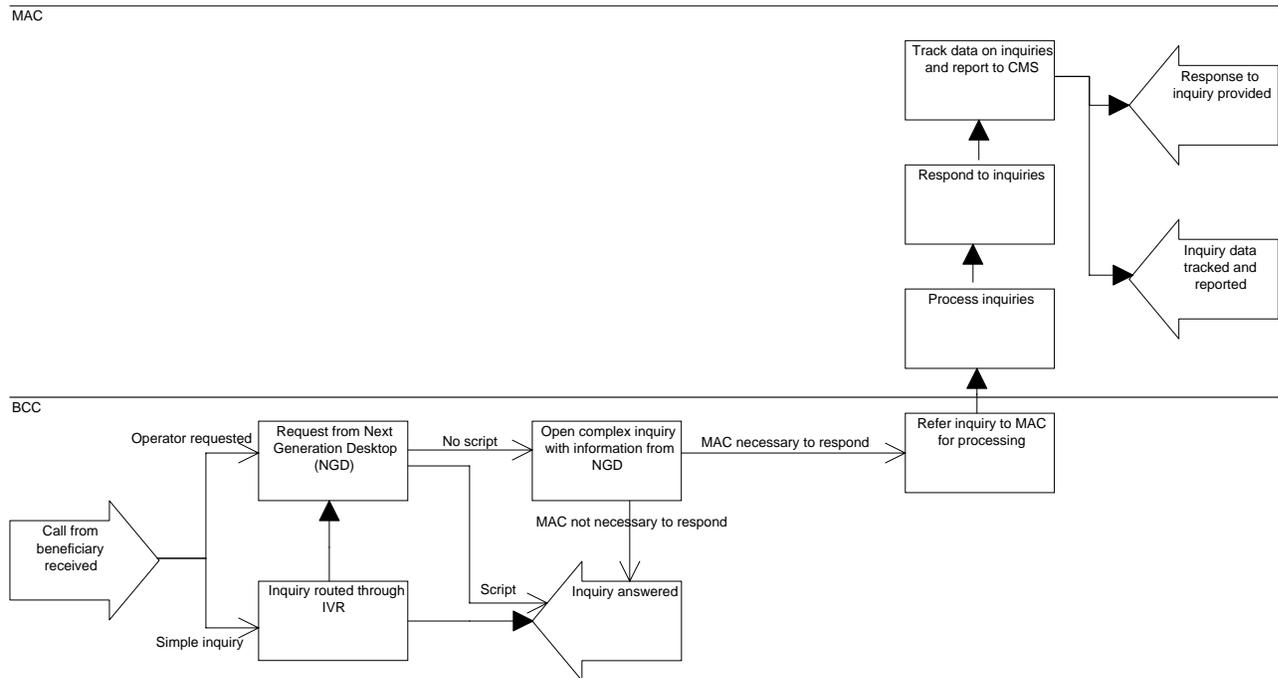
Results

Inquiry answered—Provider receives information.

Inquiry maintained in tracking system—Inquiry has been addressed and information about it recorded for further analysis.

Support Beneficiary Inquiries (3.2)

The BCC is responsible for almost all written and telephonic inquiries, and the MAC is responsible for complex inquiries that the BCC can not resolve. The MAC responds only to inquiries referred by the BCC.



Events

Call from beneficiary received—BCC receives written or telephonic inquiry.

Process Steps

Receive inquiry routed through IVR—BCC ensures that IVR inquiries are handled appropriately.

Receive request from Next Generation Desktop (NGD)—BCC receives inquiries from BCC through NGD.

Open complex inquiry with information from NGD—BCC or MAC opens complex inquiry.

Refer inquiry to MAC for processing—BCC refers complex inquiries to the MAC.

Process inquiries—MAC determines answer to inquiry. MAC also screens inquiries for potential fraud and abuse and refers them to the PSC or the Office of the Inspector General (OIG).

Respond to inquiries—MAC provides a response to the inquiry. This could trigger corresponding actions such as adjustments, appeals, or referrals.

Track data on inquiries and report to CMS—MAC tracks data on inquiries and reports data to CMS (daily batches summarized in monthly reports).

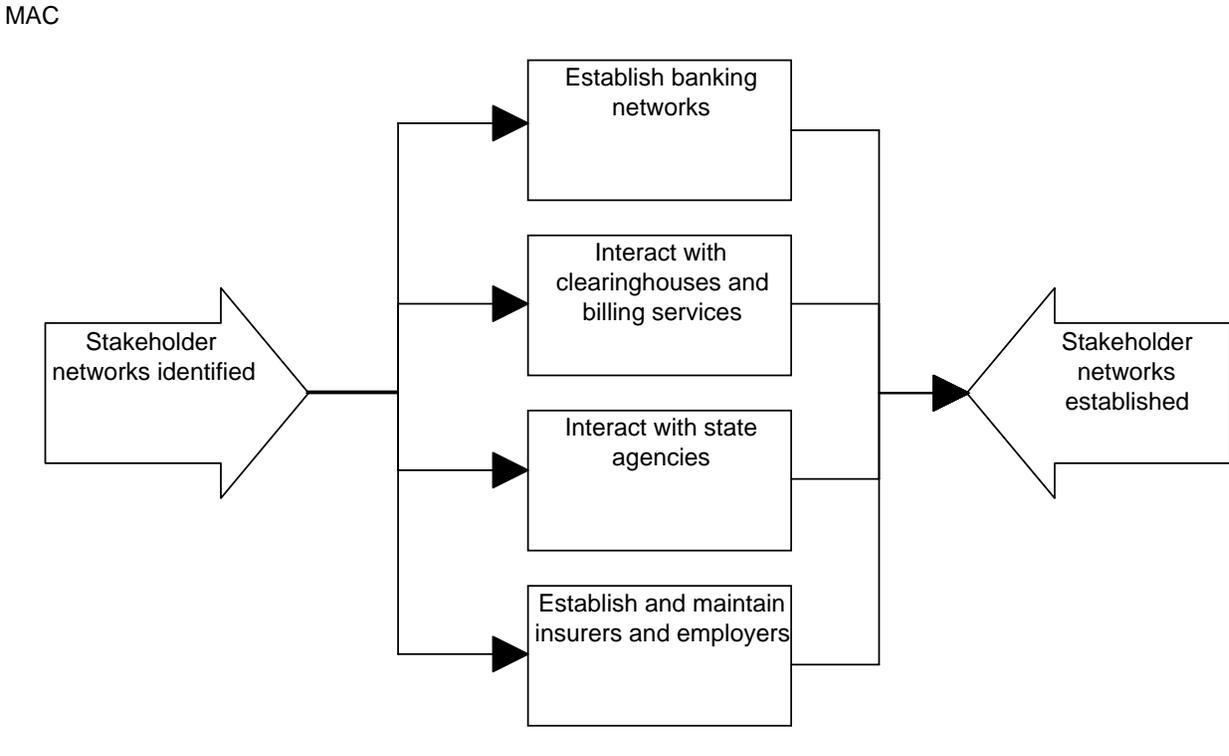
Results

Inquiry answered—BCC responds to inquiry.

Response to inquiry provided—Response to inquiry has been provided by the MAC claims processing contractor in writing unless otherwise specified.

Inquiry data tracked and reported—CMS receives reports on inquiries received and answered.

Manage Other Stakeholders (3.3)



Events

Stakeholder networks identified—MAC recognizes requirement to establish relationship with stakeholders.

Process Steps

Establish banking networks—MAC establishes financial arrangements for lock boxes, EFT transactions, and communications links for transmitting and receiving financial information.

Interact with clearinghouses and billing services—MAC establishes and manages relations with clearinghouses that serve as billing services or data consolidators for providers.

Interact with state agencies—MAC establishes relationships with state licensing authority, and other state agencies.

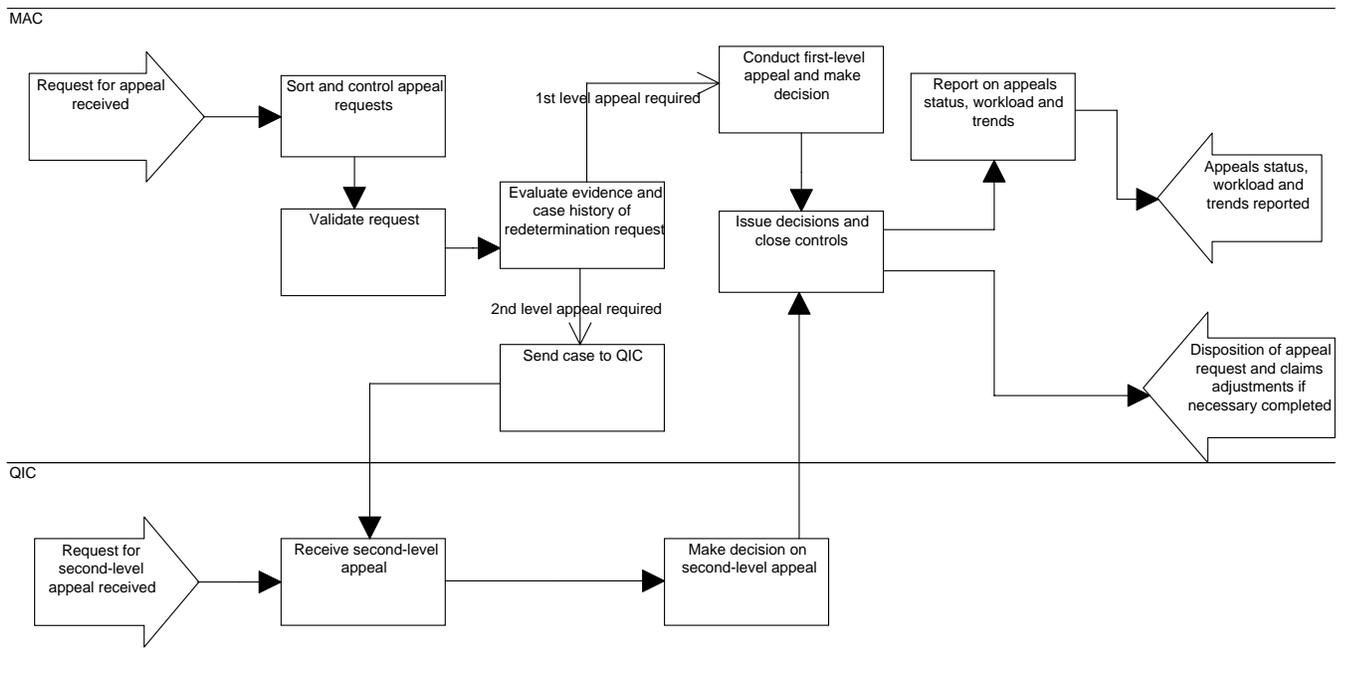
Establish and maintain insurers and employers—MAC establishes relations with insurers and employers that represent Medicare populations.

Results

Stakeholder networks established—Technical and organizational networks are established for the MAC.

Manage Appeals (3.4)

MANAGE CLAIMS APPEALS (3.4.1)



Events

Request for appeal received—MAC receives a request for a claim appeal.

Request for second-level appeal received—QIC receives a request for appeal.

Process Steps

Sort and control appeal requests—MAC sorts and controls appeal requests by logging them into a tracking system.

Validate request—MAC reviews request and associated Medicare records for timeliness, jurisdiction, etc.

Evaluate evidence and case history of redetermination request—MAC assesses validity of the request.

Conduct first-level appeal and make decision—MAC examines and makes a decision on the redetermination request.

Send case to QIC—MAC refers the case to QIC when a request for QIC reconsideration is received or if MAC is not appropriate venue and the request was misrouted or misfiled.

Receive second-level appeal—QIC receives appeals requests from the MAC, as well as from providers and beneficiaries.

Make decision on second-level appeal—QIC follows its appeals process and decides appeal.

Issue decisions and close controls—MAC issues a decision notice describing the decision. If adjustment is warranted, the claim goes through the regular adjustment process in order to issue revised payment. The outcome codes are recorded.

Report on appeals status, workload, and trends—MAC generates daily, weekly, and monthly reports on the status of pending and closed requests, workload, and trends of completed requests.

Results

Appeals status, workload, and trends reported—Status, workload, and trends on appeals requests have been reported.

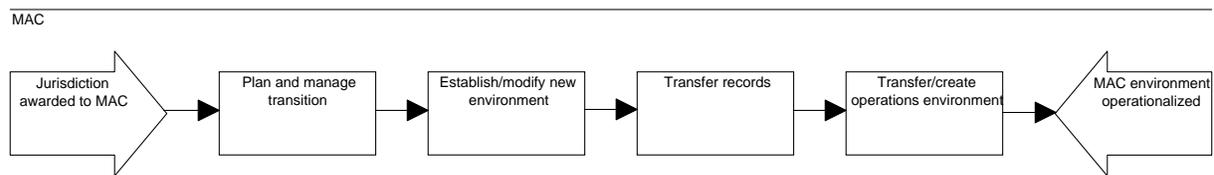
Disposition of appeal request and claims adjustments (if necessary) completed—Appeal request has been managed and disposition has been completed.

MANAGE COST REPORT APPEALS (3.4.2) (PART A ONLY)

For cost report appeals, the MAC will perform two functions: (1) process and adjudicate provider appeals under \$10,000 of Medicare reimbursement, and (2) process provider appeals through the Provider Reimbursement Review Board (PRRB) for Medicare reimbursement greater than \$10,000. The MAC will also be responsible for group appeals (providers that have the same issue that choose to form a group for one PRRB hearing) over \$50,000 in total Medicare reimbursement. The appeal process is based on implementing regulations, CMS rulings, PRRB instructions, or other authorities.

PROCESS MAPS: MANAGE FFS ENVIRONMENT (4)

Perform Transition Activities (4.1)



Events

Jurisdiction awarded to MAC—MAC wins one or more jurisdictions.

Process Steps

Plan and manage transition—MAC creates/modifies plans and reports on transition status as CMS requires.

Establish/modify new environment—MAC acquires physical plant, telecommunications capabilities, and data processing facilities needed for processing.

Transfer records—MAC receives, stores, and manages hard-copy and electronic records from the outgoing contractor. If necessary, MAC designs and implements conversion of electronic records and data in electronic systems.

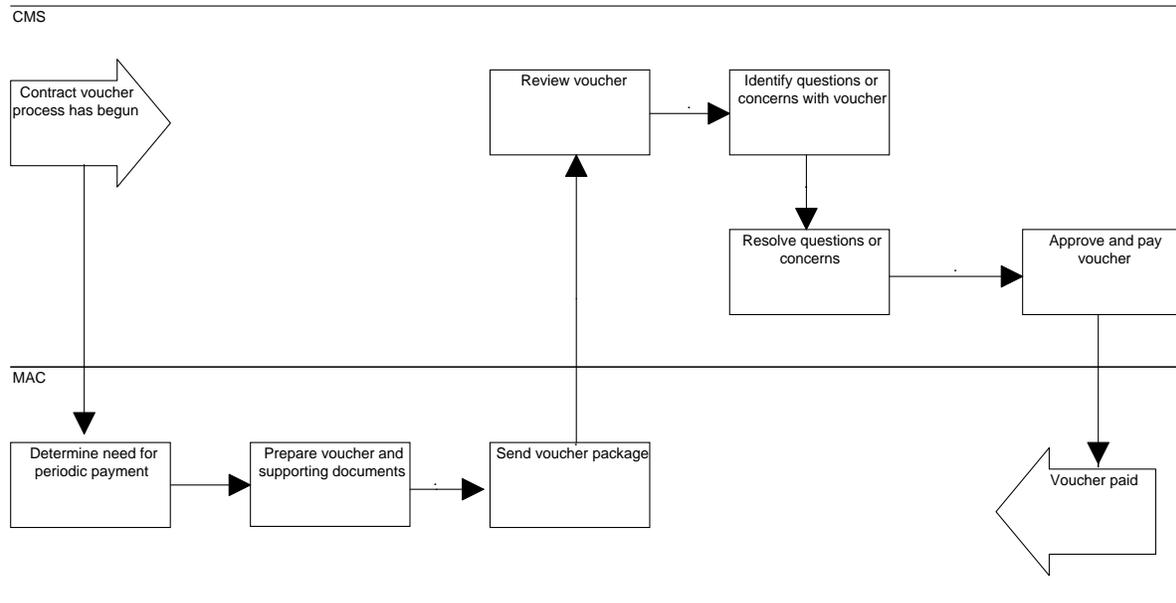
Transfer/create operations environment—MAC creates or incorporates data processing systems or extensions and customizations to GFE systems to match processing needs. MAC incorporates the equivalent of outgoing contractor's systems and extensions where needed.

Results

MAC environment operational—Transition is complete, and MAC is successfully processing FFS claims.

Manage Contracts (4.2)

MANAGE VOUCHERS (4.2.1)



Events

Contract voucher process has begun—MAC contract voucher process begun.

Process Steps

Determine need for periodic payment—MAC determines need for periodic payment of costs.

Prepare voucher and supporting documents—MAC prepares a voucher request and supporting documentation to claim reimbursement from CMS.

Send voucher package—MAC sends the voucher to CMS accounting for processing.

Review voucher—CMS reviews the submitted voucher and documentation in accordance with the contract terms. The review is led by the contract specialist and project officer.

Identify questions or concerns with voucher—CMS identifies any questions or concerns with the voucher that need resolution.

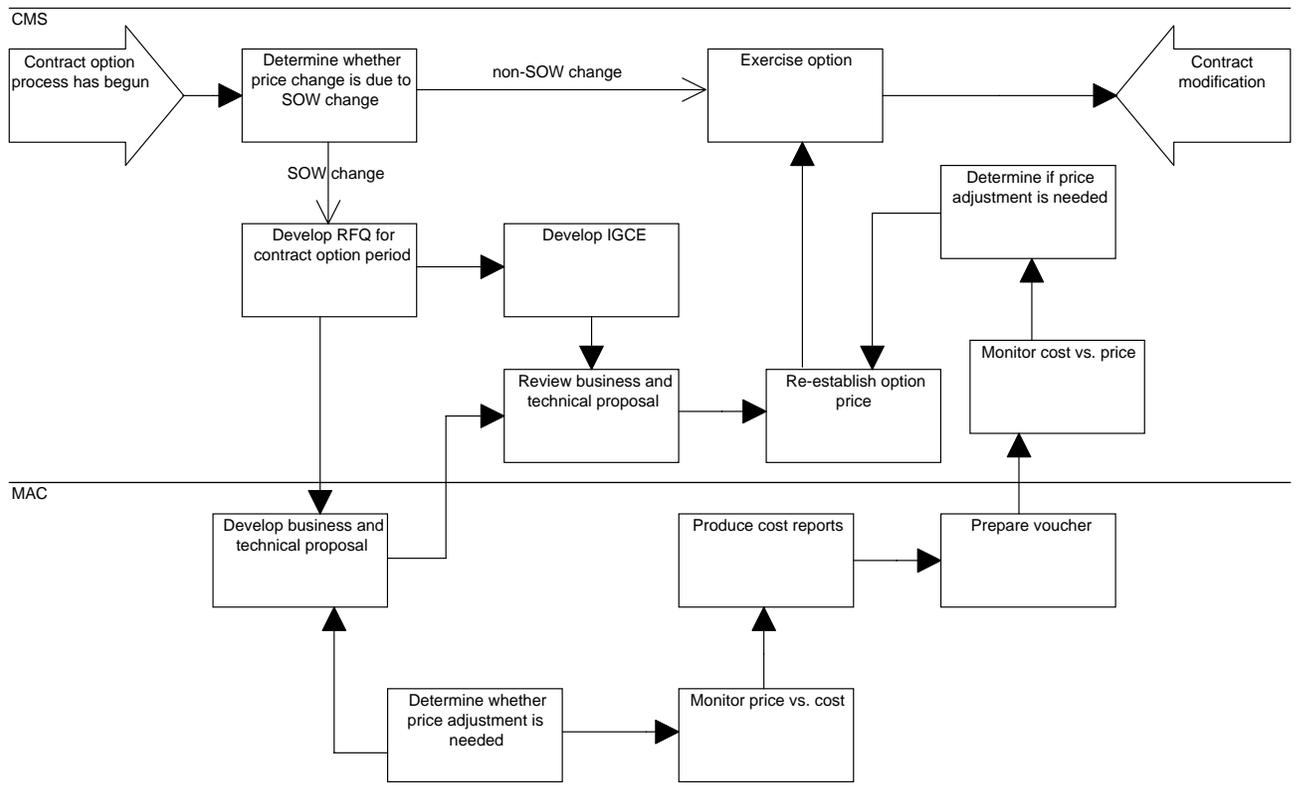
Resolve questions or concerns—CMS resolves with the contractor any questions or concerns that arise from the review of the submitted documentation.

Approve and pay voucher—CMS establishes the amount approved for payment and makes the payment to the MAC.

Results

Voucher paid—Voucher package has been compiled and voucher has been paid.

MANAGE CONTRACT MODIFICATIONS (4.2.2)



Events

Contract option process has begun—CMS begins the MAC contract option process.

Process Steps

Determine whether price change is due to SOW change—CMS assesses whether any statement of work (SOW) adjustments for the option period require a price adjustment.

Develop RFQ for contract option period—CMS develops the request for quotations (RFQ), if necessary, to request a new business and technical proposal for the option period.

Develop IGCE—CMS develops the independent government cost estimate (IGCE) based on the revised requirements.

Develop business and technical proposal—MAC develops its business and technical proposal based on the RFQ or on the need for additional funding for changes.

Review business and technical proposal—CMS reviews the MAC business and technical proposal.

Exercise option—CMS executes the option through the processing of a contract modification.

Reestablish option price—CMS and MAC negotiate to reestablish the option price.

Monitor price vs. cost—MAC monitors the costs compared to the established option price.

Produce cost reports—MAC submits periodic cost and performance reports.

Prepare voucher—MAC prepares voucher to request payment. (This process is described further in 4.2.1.)

Monitor cost vs. price—CMS monitors the costs compared to the established option price.

Determine whether price adjustment is needed—MAC determines if any adjustments are necessary. If the MAC determines an adjustment is necessary, the MAC submits notification to CMS.

Determine if price adjustment is needed—CMS determines if any adjustments are necessary. If CMS determines an adjustment is necessary, CMS begins negotiation discussions with MAC.

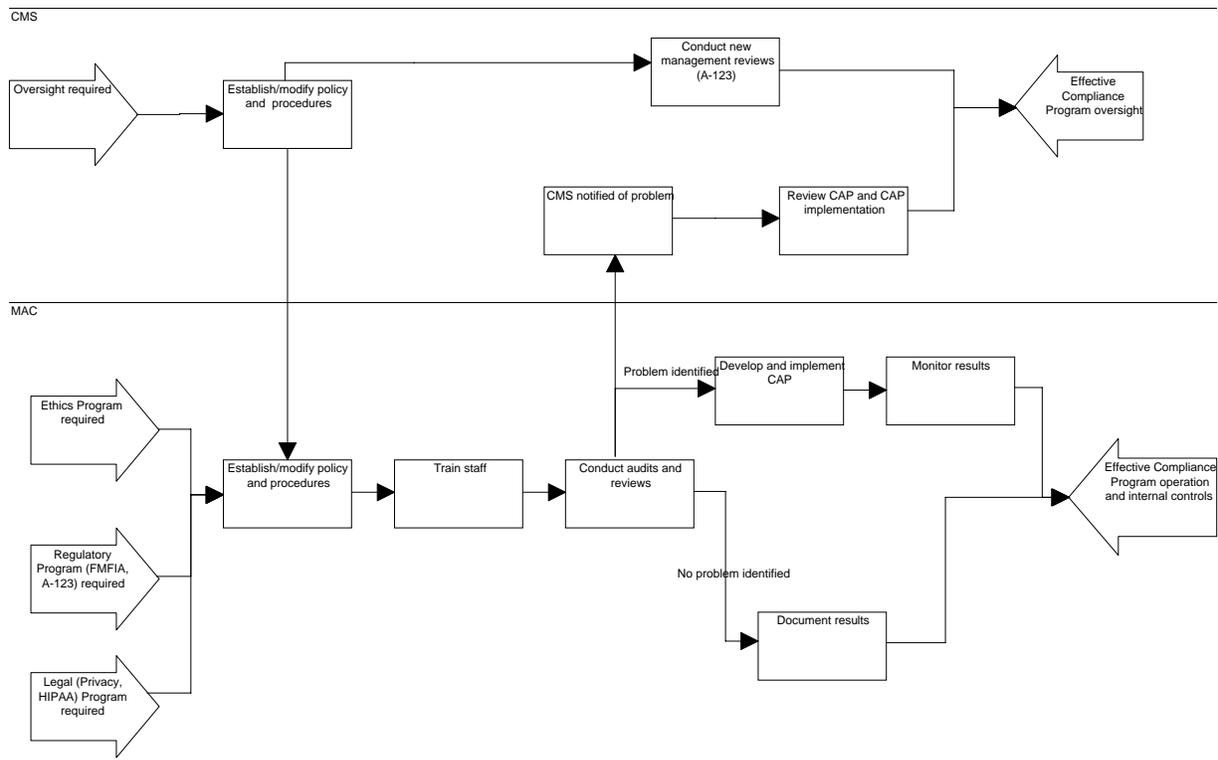
Results

Contract modification—Contract with MAC has been modified. Note: contract modifications may occur during the contract period. This process would follow an abbreviated version of the process above.

MANAGE CAS AND WBS (4.2.3)

CMS will define and update a work breakdown structure (WBS) for FIs and carriers that will determine the activities that should be reported. The MAC is required to track labor and other costs and report them to CMS by the appropriate categories. The WBS will be made available to the MACs.

MANAGE COMPLIANCE ACTIVITIES (4.2.4)



Events

Oversight required—CMS must ensure that FFS processing is performed correctly.

Ethics program required—CMS requires ethics program.

Regulatory program (FMFIA, A-123) required—CMS requires compliance from MACs with regulations such as Office of Management and Budget (OMB) Circu-

lar A-123, *Management's Responsibility for Internal Controls*, or the implementation instruction for the Federal Managers Financial Integrity Act of 1982.

Legal (privacy, HIPAA) program required—MACs must have active programs to meet government legal requirements.

Process Steps

Establish/modify policy and procedures (MAC)—MAC establishes internal programs to comply with each of the different types of compliance programs. The policy and procedures may range from training and monitoring of ethical issues to detailed internal control processes.

Establish/modify policy and procedures (CMS)—CMS defines or modifies the policies and procedures that the MAC needs to follow for each area of compliance.

Conduct new management reviews (A-123)—CMS conducts management certification reviews of the results of audits that are required by A-123 beginning June 2006.

Train staff—MAC trains staff in ethics and procedures required for proper Medicare management.

Conduct audits and reviews—MAC hires independent auditors to perform SAS70 reviews. MAC also conducts periodic internal reviews of the efficiency and effectiveness of compliance programs.

Document results—MAC maintains documentation of the results of audits and reviews, both positive and negative.

Develop and implement CAP—When problems are discovered, MAC develops a formal Corrective Action Plan (CAP) and modifies established policies and procedures where necessary.

Notify CMS of problem—MAC notifies CMS of problems identified during reviews and audits.

Review CAP and CAP implementation—CMS reviews and approves the MAC's CAP.

Monitor results—MAC tracks and reports on the results of the CAP.

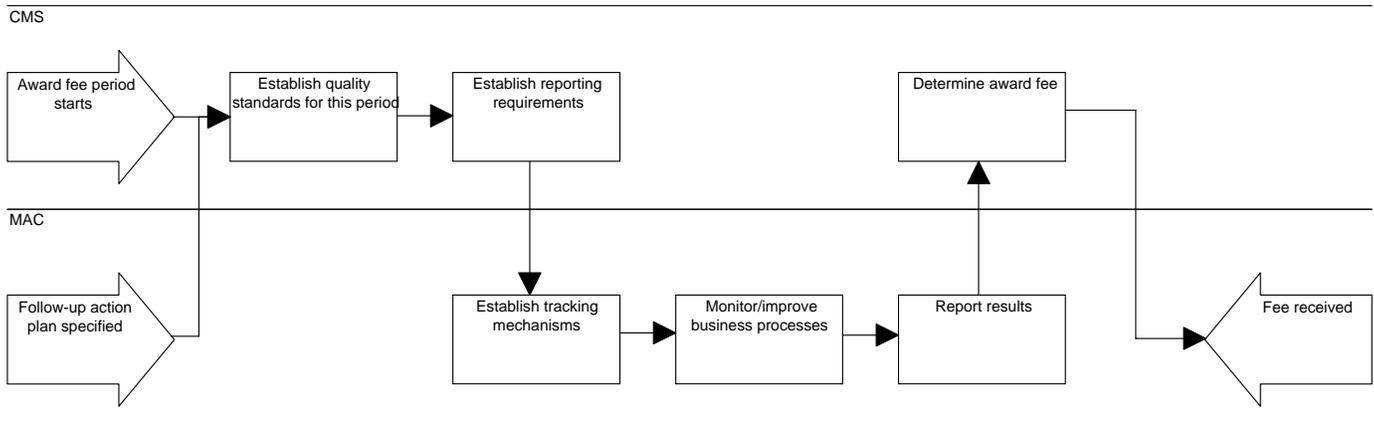
Results

Effective compliance program oversight—CMS ensures that MAC is following proper compliance procedures.

Effective compliance program operation and internal controls—MAC follows proper procedures for regulatory compliance.

Manage and Monitor MAC Performance (4.3)

MANAGE AWARD FEE PROCESS (4.3.1)



Events

Award fee period starts—New performance period begins.

Follow-up action plan specified—MAC describes corrective action needed based on performance reports.

Process Steps

Establish quality standards for this period—CMS determines which standards will be used for calculating award fee for a performance period.

Establish reporting requirements—CMS informs MAC of reporting requirements for the quality standards.

Establish tracking mechanisms—MAC establishes tracking mechanism for quality standards.

Monitor/improve business processes—MAC monitors and improves business processes to meet quality requirements.

Report results—MAC reports results to CMS at end of award fee period.

Determine award fee—CMS determines award amount.

Results

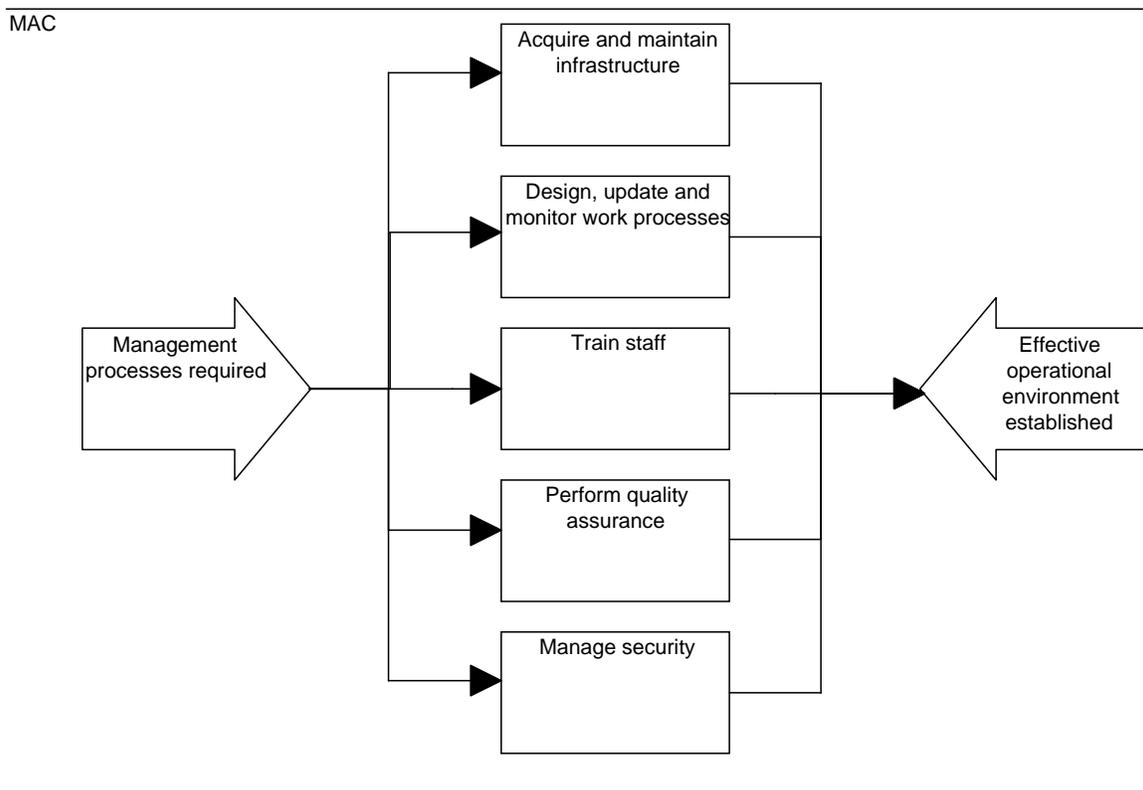
Fee received—MAC performance has been assessed and rewarded.

PERFORM CMS REPORTING REQUIREMENTS (4.3.2)

MACs prepare various reports for CMS, based on the business processes described in this document. Reports will cover claims processing, error rates, customer service indicators, and the like.

The actual list of reports and the use of computer applications that prepare reports will be detailed in the MAC SOW.

MANAGE OPERATIONS (4.3.3)



Events

Management processes required—FFS infrastructure or work processes need to be established or modified.

Process Steps

Acquire and maintain infrastructure—MAC provides or manages CMS GFE hardware, software, and telecommunications. MAC performs full testing services be-

fore implementing infrastructure into FFS processing. MAC participates in the CMS change control and testing processes for the shared systems.

Design, update and monitor work processes—MAC designs work processes to meet business requirements. MAC responds to audits or corrective action plans to improve process flow, as well as to improve productivity. MAC personnel adhere to all data processing protocols directed by the data center staff where processing is performed. MAC develops and implements disaster recovery and continuity of operations plans for their processing.

Train staff—MAC trains personnel in work processes and in the business and technical aspects of their jobs. This ranges from computer systems usage to implementation of medical policies.

Perform quality assurance—MAC implements a robust quality assurance plan covering all aspects of operations.

Manage security—MAC complies with federal and CMS security procedures and rules. MAC periodically assesses and reports to CMS on security issues.

Results

Effective operational environment established—MAC has established a cost-effective, well-managed claims processing environment.

Manage Interfaces and Interactions (4.4)

MANAGE ORGANIZATIONAL INTERACTIONS (4.4.1)

Table 2-1 identifies the types of interactions that will occur between the MACs and other organizations.

Table 2-1. Organizational Interactions

Type	Participant	Interactions
Other government	State Medicaid programs (SMAs, fiscal agents)	Submit claims for Medicare eligible beneficiaries.
	State survey and certification programs	Exchange information (through CMS) on providers.
	State licensing authorities	Issue licenses to providers and suppliers.
	Medicaid state agency, Medicaid fiscal agents, and Medicaid fraud control units	Exchange information on benefit integrity.
	Government Accountability Office	Audit or study aspects of CMS and MAC operations.
	Social Security Administration	Determine Medicare eligibility.
	Congressional personnel	Receive awareness training/education.

Table 2-1. Organizational Interactions

Type	Participant	Interactions
Other claims originators	Railroad Retirement Board	Receive data and information.
	Indian Health Service	Submit claims to a MAC.
	Medicare Advantage and Medicare+Choice	Submit certain types of claims for Medicare FFS processing.
Law enforcement	Department of Justice	Receive data and information.
	FBI	Receive data and information.
	Office of the Inspector General	Investigate providers referred by the PSC.
	Law enforcement health care task forces	Obtain and share information on health care issues. Attend health care task force meetings.
	All law enforcement participants	Receive training, data and, information.
CMS contractors	Other MACs	Meet to ensure that issues raised by providers are addressed through education. Share ideas with other MACs at national and CMD conferences and participate in national conference calls.
	Other functional or specialized contractors, e.g., PSCs, QIOs	Provide support services: ◆ Conduct meetings ◆ Prepare documentation. Coordinate with other specialized contractors.
	Technical support contractors, e.g., shared system maintainers	Provide support during new releases, testing, and installation of local modifications and edits. Provide feedback as needed.
Private parties	Professional societies	Attend PCOM Advisory Group meetings. Produce and disseminate PCOM Advisory Group information. Exchange information with MAC, particularly with respect to the development of new or revised contractor policies.
	Managed care organizations	Share information and maintain an ongoing dialogue.
	Independent diagnostic testing facilities (IDTFs)	Provide physiological testing to Medicare beneficiaries.

MANAGE TECHNICAL INTERACTIONS AND INTERFACES (4.4.2)

Technical interactions can primarily occur with functional contractors, other MACs, providers and their clearinghouses, HIGLAS, or potential standard front-end contractor(s).

In general, to enable access by MAC personnel to CMS GFE or GFF, the MAC will need to design, implement, and maintain an interface.

Chapter 3

Application Architecture

The application architecture identifies and describes applications and modules, as well as their relationships to business processes and other application systems and modules. Major influences on the application architecture include technologies employed, operations processes, and interface requirements. Analysis of current business applications forms the basis for identifying applications that better support the current and future business processes. Moreover, through analysis of each application vis-à-vis its business processes, an organization can determine the overall impact of changing any individual application.

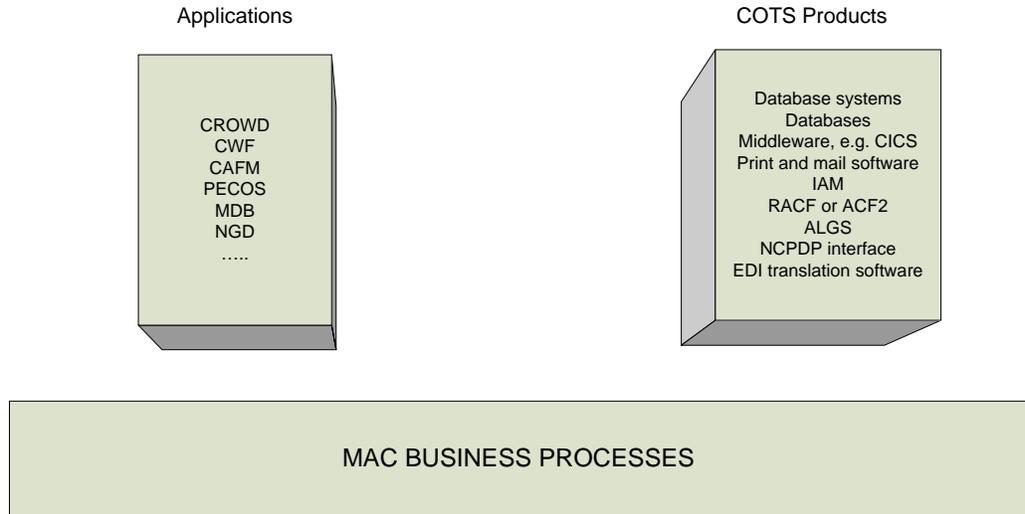
This chapter depicts and describes the application architecture for Part A/B claims processing. The chapter begins with an overview of the application architecture. It then presents an inventory of the applications used to perform the CMS Part A/B claims processing function and identifies the processes supported by the Part A/B claims processing applications. The last section addresses MAC-provided applications.

OVERVIEW

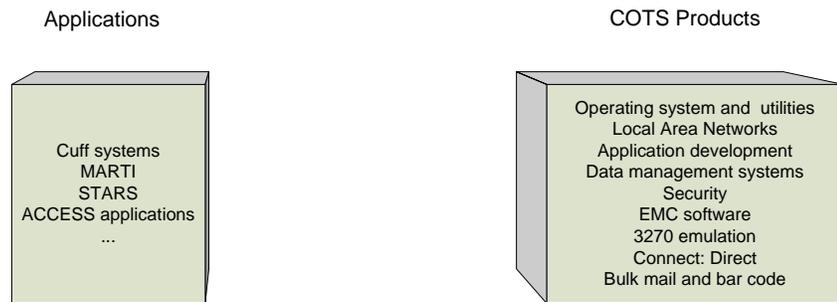
The applications used by the Part A/B MACs are either COTS products or specifically developed for Part A/B claims processing. Some of the applications will be provided by CMS as GFE or will be provided as part of the Enterprise Data Center (EDC) environment that supports claims processing. Because the carriers are given wide latitude by CMS in how they perform activities, the Part A/B MACs may also be using their own corporate systems or specially developed applications that supplement the CMS-provided software for functions that are not fully satisfied by the claims processing systems or software supplied by CMS. Examples include the M2 or Mercator EDI translators, MARTI or STARS for data analysis, and the numerous applications developed by contractors for a variety of functions using MS Access databases. Over time, CMS anticipates that for efficiency and security considerations, more and more applications will run within the EDCs. Figure 3-1 illustrates the mix of software and its sources.

Figure 3-1. Part A/B MAC Software Environment

GFE or Provided by Standard Front-End Contractor



Provided by MAC



The applications shown in the figure are illustrative. A more complete list of the applications provided to the Part A/B MAC is included in the remainder of this chapter. Because of the variety of Part A/B MAC processing environments, we have not attempted to exhaustively identify the applications that are the responsibility of the Part A/B MAC.

APPLICATION INVENTORY

A total of 90 applications support Part A/B claims processing. Table 3-1 provides a detailed inventory of these applications sorted by application abbreviation.

Table 3-1. Current FFS Applications

Abbreviation	Name	Description
AFS	Ambulance Fee Schedule	Maintains, updates, and disseminates Part B pricing data for services priced under ambulance fee schedule. Pricing is legislatively mandated.
ADR	Automated Desk Review	Supports the fiscal intermediaries in completing the cost report and settlement processes.
ALJTRACK	ALJ Tracking System	Tracks Administrative Law Judge (ALJ) Court of Appeals cases submitted by New York regional office staff and Empire Medical Services to support appeals processing.
AQM	Automated Quality Monitoring	Provides call center managers and CMS personnel with consistent, reliable, and efficient call monitoring technologies that continuously (24x7) and randomly capture customer interactions to be evaluated for quality monitoring, training, and continuous improvement opportunities.
ART	Voucher/financial management system	Supports submission of vouchers for contractor reimbursement.
ASCPRICER	Ambulatory Surgical Center Pricer	Generates allowables for Ambulatory Surgical Center claims.
ASM	Application Service Management	Ensures that defined service levels are being actively managed so that all call centers have ready and reliable access to any Virtual Call Center components.
BESS	Part B Medicare Extract and Summary System	Provides data used to evaluate Part B procedures, monitor contracting, allocate resources, prepare impact statements, and develop budget and legislative proposals, congressional reports, and medical reviews. Summarization of Part B data is based on procedure code and includes the number of procedures performed and the typical cost of procedures (e.g., number of claims filed in Ohio last year).
BISC	Beneficiary Integrity Support Center System	Provides monthly updates to a Program Integrity Contractor database. The database is used to identify fraud, waste, and abuse in the Medicare program.
CAFM	Contractor Administrative Budget and Financial Management System	Manages contractor reporting activities pertaining to planning and budgeting of administrative services and operational endeavors, expenditures of administrative and benefit funds, and reconciliation of planned-to-actual expenditures. Also tracks all benefit payments, banking issues, and CFO data, as well as historical budget data (prior to 1998).
CAPTS	Corrective Action Plan Tracking System	Tracks corrective action plans submitted by Medicare contractors and provides CMS management with CAP-related reports.
CASR	Contractor Audit and Settlement Reporting System	Tracks budgeted and incurred costs by type of activity and type of provider for Part A Medicare contractors. This is used for reporting the cost-effectiveness and savings of the audit and settlement functions. The contractors utilize the System Tracking of Audit and Reimbursement (STAR), a PC software package, to record a multitude of audit-related data. Subsets of the data that pertain to six CASR input forms are uploaded into the CASR database. Nineteen customized reports, an ad hoc reporting capability, are provided for analyses and monitoring.
CAST	Contractor Assessment Security Tool	Allows Medicare contractors to provide self-assessments of their procedures, policies, controls, and safeguards relating to the CMS core security requirements.
CCI	Correct Coding Initiative	Ensures that HCPCS is correct.

Table 3-1. Current FFS Applications

Abbreviation	Name	Description
CERT	Comprehensive Error Rate Testing	Supports assessment of the success of the work of CMS to pay providers accurately. The CERT program provides CMS and taxpayers with more useful information, and results in fewer hassles for physicians, providers, and their staffs. The process begins with a random sample of Medicare claims, which are subjected to medical records review by the CERT staff. The results from the medical review are used to calculate the paid claim error rates. The CERT program produces national, contractor-specific, provider type, and benefit-category-specific paid claim error rates. The error rates are then used to help CMS formulate corrective actions.
CHDS	National Charge Distribution System	Produces a report based on counts of the number of bills that fall into certain charge ranges (dollar amount ranges).
CIS	Customer Inquiry System	Tracks and manages correspondence from beneficiaries and other sources (customers). Includes a document management system.
CLFS	Clinical Laboratory Fee Schedule	Maintains, updates, and disseminates Part B pricing data for services priced under the clinical laboratory fee schedule. Pricing is legislatively mandated.
CMHS	Continuous Medicare History Sample System	Produces the CMHS file and report each year. Each year the system accumulates eligibility and demographic data as well as Part A and Part B utilization data for beneficiaries in a 5% sample. The resulting CMHS file contains (person level) beneficiary characteristics data linked with utilization data and annual summary information for the past 30 years. The CMHS evaluates the effectiveness of carrier claims processing performance and provides management information needed to improve the quality of claims processing on a person level.
CMIS	Contractor Management Information System	Supports timely identification of variances and monitoring of performance in Medicare's contractor-operated fee-for-service claims processing systems.
CROWD	Contractor Reporting of Operational and Workload Data System	Collects and reports on operational and contractor workload data and types of claims processed for Part A and Part B contractors. Data include types of claims, overall number of claims, and processing cost per claim.
CSAMS	Customer Service Assessment and Management System	Facilitates call center performance reporting. Contractors report performance on specified metrics by the tenth of each month. The CSAMS data provide the framework to assess contractor performance consistently relative to requirements as well as to each other on a comparative level.
CTI	Computer Telephony Integration	Passes caller information to the NGD, which opens the most appropriate screen so the agent can handle the call more efficiently.
CWF	Common Working File	Uses localized databases, maintained by host contractors, to validate pre-payment Medicare claims and to coordinate Medicare Part A and Part B benefits. Also provides contractors with beneficiary entitlement and utilization data.
DCS	Debt Collection System	Tracks and reports delinquent debt owed by DHHS to the Treasury Department via PSC, a collection agency.
DESY	Data Extract System	Creates extract files from CMS source data (e.g., National Medicare Utilization Database).
DPS	Demonstration Payment System	Serves as an umbrella for a number of demonstration payments systems: Community Nursing Organization, Staff Assisted Home Dialysis, Lifestyle Modification Program and Municipal Health Service Program demonstrations, etc.

Table 3-1. Current FFS Applications

Abbreviation	Name	Description
DSAF	Decision Support Access Facility System	Provides extract capability to a variety of Medicare enrollment and utilization data sources. DSAF provides data at a state-specific level.
eChimp	Electronic Change Information Management Portal	Maintains, updates, and disseminates Medicare change requests to all the Medicare fee-for-service contractors and stores all the comments received during point of contact (POC) review.
ECRS	Electronic Correspondence Referral System	Transmits Coordination of Benefits information. Used by fiscal intermediaries and carriers, the system supports all activities related to establishing MSP periods of coverage at CWF that result from MSP claim and non-claim development activities.
EDB	Medicare Enrollment Database Update	Supports Medicare enrollment and premium collection functions, through the maintenance of records for all individuals who are (or who were at some time) entitled to Medicare benefits.
FID	Fraud Investigation Database System	Supports fraud investigation tracking. When fraud is discovered, the information about the fraud case is entered into FID. CMS (mostly regional offices) investigates the alleged fraud and attempts to recover monies owed. FID tracks the entire process to the conclusion of the case, by CMS or by another agency. FID also tracks information about fraud type (such as overbilling of a certain procedure, or overbilling in a certain regional area) and frequency.
FISS	Fiscal Intermediary Standard System	Process Medicare claims related to medical care provided by hospitals and hospital-based physicians (Part A). The system is used by CMS contractors.
GROUPER	Grouper	Determines which DRG group each IDC9 code falls into. Used to determine next year's rates in PPS.
HCIS	Health Care Information System	Allows users to sift through summarized Medicare information, in predetermined views, and to focus analysis on areas of suspected fraud and abuse in the Medicare program. Subject areas available for analysis include Home Health Agency, Skilled Nursing Facilities, Hospice, Inpatient, Outpatient, Clinical Lab, and Durable Medical Equipment.
HCPCS	CMS Common Procedure Coding System	Contains all procedure codes used to bill physician and supplier services for Medicare.
HCRIS	Health Care Provider Cost Report Information System	Tracks the initial receipt and subsequent processing of all Medicare (Part A) cost reports of hospitals, independent end-stage renal disease facilities, skilled nursing facilities, home health agencies, and hospices. The system generates both routine and user-specific reports.
HGTS	Harkin Grantee Tracking System	Records and tracks the status and outcome of Medicare fraud and abuse complaints generated by the Association on Aging (AOA) Harkin Grantees. As Medicare contractors receive complaints directly from the grantees or Medicare beneficiaries (based on the Harkin Grantee educational initiative), they enter them into the HGTS along with any identifying information. Ensuing actions based on the complaints are also entered periodically. Semi-annual reports are generated based on data gleaned from the HGTS and are then distributed to Harkin project leads and other interested parties.
HIGLAS	Healthcare Integrated General Ledger Accounting System	Will support CMS's ability to collect and validate standardized accounting data for benefit payments, to improve Medicare contractor internal controls, and to acquire/maintain an unqualified (clean) opinion on CMS's financial statements. Also will improve accounting, financial management, and financial internal controls.

Table 3-1. Current FFS Applications

Abbreviation	Name	Description
HIPDB	Healthcare Integrity and Protection Databank	Supports effort to combat fraud and abuse in health care insurance and health care delivery. A national data collection program for reporting and disclosure of certain final adverse actions taken against health care providers, suppliers, or practitioners, HIPDB captures five types of adverse actions (described in CR 1554).
IDE	Investigational Device Exemption System	Tracks FDA information regarding investigational devices (e.g., hip replacement surgeries) to see if the number performed matches the number forecast. This information is transferred to CMS for distribution to carriers and fiscal intermediaries.
IRIS	Interns and Residents Information System	Collects and maintains intern and resident (IR) data files from each teaching hospital on a flow basis along with Medicare cost reports. The system produces reports of duplicate full-time equivalent (FTE) IRs for indirect medical education (IME) and direct graduate medical education (GME). The reports provide contractors with information to ensure that hospitals are properly reimbursed for IME and GME, and help eliminate duplicate reporting of IR counts that inflate payments.
IRP	Incentive Reward Program	Tracks payments for referral of potential fraud and abuse cases.
IRPTRACK	IRP Tracking System	Tracks complaints made by an individual, who may be eligible for a reward, provided certain eligibility criteria are met. The Incentive Reward Program was mandated by HIPAA.
MAS	Medicare Appeals System	Supports the appeal process by providing an efficient platform for tracking and resolving Medicare appeals. MAS will also provide operational and strategy-oriented data analysis and reporting capability. This user-friendly system will provide information and services from one centralized location, instead of scattered across many CBS contractors, as is the current situation.
MBD	Medicare Beneficiary Database	Supports maintenance of the subset of Medicare data that document both the insurance choices made by Medicare beneficiaries and demographic information about the beneficiaries themselves.
MBPRP	Monthly Bill and Payment Records Processing System	Processes the MQA 100% Intermediary claims and 100% Payment record files on a monthly basis. Creates a collection of output files for down-line analytical processing.
MCS	EDS Medicare Claims System	Is the target single standard Part B Medicare claims processing system to be used primarily by CMS contractors to process Medicare claims related to physician care (Part B).
MFSR	Medicare Focused Medical Review System	Monitors the success of Focused Medical Review activities of FIs, carriers, and DMERCS. Collects information on the sources and causes of inappropriate or unnecessary services billed to Medicare and on the contractor's handling of those problems.
MPARTS	Mistaken Payment Recovery Tracking System	Supports the IRS/SSA/CMS DataMatch efforts to identify situations in which another health care plan should be the primary payer of a Medicare beneficiary's health care claims and to recover mistaken Medicare payments from third-party payers.
MPFSDB	Medicare Physician Fee Schedule Data Base (MPFSDB) Fee Schedules/ Abstracts (part of the shared systems)	Supplies fee and payment policy information on services performed by physicians or practitioners. Produced and distributed by CMS, the file contains the new fees that are effective each year. Carriers receive the entire MPFSDB annually. Thereafter, carriers receive a quarterly update file that contains corrections only. Quarterly files are created and provided for MACs if needed. MACs receive subset extract files of the entire file annually via a recurring instruction.

Table 3-1. Current FFS Applications

Abbreviation	Name	Description
MPRS	Medical Policy Retrieval System	Houses local service area offices medical policies and allows carriers and FIs to view each other's policies. Maintains a database of all national and local medical (coverage) policy, allows real-time updates by users via modem, and contains draft policy writing tools. Never became fully operational.
MQSA	FDA Mammography Database	Manages mammography (equipment) certification data maintained by the FDA.
MRS	Medical Review System (also known as BMR and MRS1)	Collects data (interactive data entry) on carrier costs, workload, and savings for Part B and produces reports.
MSPLS	Medicare Secondary Payer Litigation Support System	Supports fraud and abuse recovery procedures. Assists FIs with identifying claims collections cases. The PORS is used to track collection cases.
MSPPAY	MSPPAY Part A and Part B Module	Prices claims when Medicare is a secondary payer.
NCH	National Claims History Statistical Tabulation System	Summarizes and computes Medicare statistical tabulations related to beneficiary utilization. Statistical tabulations are compiled quarterly and annually. The data concern reimbursements, charges, and length of stay. These tables provide a snapshot of the data with no detail.
NCHPR	National Claims History Processing Reports System	Contains a summary of Medicare reimbursement by type of service based on date of service period. The summary includes Part A/B, provider, and bill type breakdowns.
NCHQA	National Claims History Quality Assurance System	Performs statistical analysis of the NCH claims data. The focus of the analysis is on finding skewed values or anomalies in the claims (distributional analysis).
NCHSTS	National Claims History Statistical Tabulation System	Summarizes and computes Medicare statistical tabulations related to beneficiary utilization. Statistical tabulations are compiled quarterly and annually. The data concern reimbursements, charges, and length of stay.
NGD	Next Generation Desktop	Desktop application tool for use by Customer Service Representatives in answering public inquiries. The major feature of the desktop is its ability to integrate information from MCS, VMS, FISS, CWF, EDB/MBD so CSRs can answer all types of Medicare inquiries.
NMUD	National Medicare Utilization Database	System that supports access and analysis of national claims and encounter utilization data.
NPS	National Provider System	Will manage (assign and track) the identification numbers of each provider.
OPS	OverPayment Tracking System	Tracks overpayments.
OSCAR	Online Survey Certification and Reporting System	Provides intensive data-gathering capabilities during the survey phase of the certification process to identify and characterize participating Medicare and Medicaid health care providers. Includes CLIA, ODIE, FMS, and COMP subsystems. Provides national reporting on all aspects of provider survey and certification.

Table 3-1. Current FFS Applications

Abbreviation	Name	Description
PACEMKR	Pacemaker System	Collects performance data on pacemakers for FDA and supports quarterly reporting by intermediaries to HCFA and FDA covering every pacemaker insertion, replacement, and lead change.
PECOS	Provider Enrollment Chain Ownership System	Serves as a national database of Medicare provider data. The database contains information related to provider enrollment in the Medicare program, ownership, managing employees, billing arrangements, reassignment of benefits, practice locations, and related organizations.
PIMR	Program Integrity Medical Review System	Generates reports on workload and savings of Medicare medical review activities. The system also provides reports on the effectiveness, costs, and workload of Medicare medical review activities.
PNS	Provider Number System	Generates provider numbers (LAN-based).
POCI	Physician Ownership/ Compensation Interest System	Identifies physicians who refer patients to labs in which they have a financial or remuneration interest.
PORA	Part A Overpayments	Tracks Part A overpayments.
PORS	Provider Overpayment Recovery System	Identifies, monitors, and controls Medicare overpayments to providers and provides a statistical basis for analysis to determine if additional policy guidelines are needed in cost settlement and overpayment-recovery areas (Part A only). Allows CMS to monitor and account for dollars overpaid by Medicare providers and encourage recoupment of the overpayments.
PPD	Participating Physician Directory	Provides users (beneficiaries) with access to a searchable directory (interactive Internet database) that contains names, addresses, and specialties of Medicare participating physicians who have agreed to accept assignment on all Medicare claims and covered services.
PPRMS	Physician Payment Review Monitoring System	Produces national, regional, and carrier-level reports of allowed services and charges by various keys for selected code groupings.
PPS	Prospective Payment System	System that sets rate schedules for short-stay hospital reimbursement using diagnosis related groups (DRGs). The system uses hospital inpatient records and intermediary-supplied provider data to recalibrate annually the DRG weights and individual hospital case mix in the PPS.
PRICER	PPS Pricing Software for Inpatient Stays System	Is used by fiscal intermediaries to price inpatient hospital stays.
PS&R	Provider Statistical and Reimbursement System	Accumulates statistical and reimbursement data constructed from finalized Part A claims processed in the FISS claim system for each fiscal intermediary. The reports created must be accurate because they are used in the providers' cost reporting and settlement processes. The PS&R system is a key component in the Medicare payment cycle as it bridges the gap between claims processing and cost reporting. It summarizes the claims processing activities and payments made to Medicare providers by FIs for all Medicare covered services. PS&R data is subsequently utilized to effectuate final settlement of a provider's Medicare cost report. The PS&R system permits the FIs and providers to utilize the system-produced reports to accumulate statistical and payment data for hospitals, hospital complexes, skilled nursing homes, and home health agencies.

Table 3-1. Current FFS Applications

Abbreviation	Name	Description
PSOR	Physician and Supplier Overpayment Recovery System	Tracks Part B overpayments to physicians and suppliers. Enables CMS to ensure that it is collecting overpayments and the interest assessed on those overpayments.
PULSE	Medicare Contractor Process Counts Monitoring	Supports timely identification of variances and monitoring performance in Medicare's contractor operated fee-for-service claims processing systems.
QCM	Quality Call Monitoring	Enables contractors to enter and manage quality written correspondence monitoring data. The QCM chart generated from this online database is used to reduce the subjectivity of those reviewing the quality and accuracy of provider telephone responses. The QCM scorecard is used to review the quality and accuracy of provider telephone responses.
QWCM	Quality Written Correspondence Monitoring Database	Enables contractors to enter and manage quality written correspondence monitoring data. The QWCM chart generated from this online database is used to reduce the subjectivity of those reviewing the quality and accuracy of provider telephone responses. The QWCM scorecard is used to review the quality and accuracy of provider written responses.
REBUS	Renal Beneficiary and Utilization System	Contains demographic, medical, payment, and entitlement data on Medicare beneficiaries with end-stage renal disease (ESRD); certification and other information for Medicare-approved ESRD providers; and aggregate ESRD patient population information.
REMAS	MSP Recovery Management and Accounting System	Supports the management of all aspects of the Medicare secondary payer recovery case development and execution.
SNFPRICER	Skilled Nursing Facility Pricer	Supports per diem prospective payments for skilled nursing facilities covering all costs (routine, ancillary, and capital) related to the services furnished to beneficiaries under Part A of the Medicare program.
SSPAF	SNF Short Period ADJ Factor	Creates an adjustment factor for paying SNFs with a short fiscal period.
STAR	System Tracking Audit and Reimbursement	Tracks the receipt and subsequent actions taken on all providers' cost reports. This CMS owned system is maintained by Mutual of Omaha and used by fiscal intermediaries.
UARS	Undocumented Alien Reimbursement System	Supports reimbursement of health care providers (hospitals, physicians, ambulance providers, and Indian Health and tribal organizations) for the emergency treatment of undocumented aliens.
UDR	Uniform Desk Review	Supports the Uniform Desk Review (UDR) program.
UPIN	Unique Physician Identification Number System	Maintains a database of physician UPINs and the practice settings (offices) associated with each UPIN; used for ad hoc studies and UPIN validation.
WI	Wage Index System	Produces wage indices by urban and rural metropolitan statistical areas (MSAs) for non-federal short-term acute-care hospitals under the PPS and short-term acute-care hospitals in waiver states using wage data obtained from HCRIS. The wage index is defined as the ratio of the average hourly wage for an MSA to the national average hourly wage and is used to develop prospective payment rates and payments under the PPS.

PROCESSES SUPPORTED BY APPLICATIONS

An understanding of which applications support which business processes is important for determining whether current applications are meeting the needs of the stakeholders, for identifying redundancy in functionality, and for identifying missing functionality. Table 3-2 shows the number of applications supporting each claims process.

Table 3-2. Number of Applications Supporting FFS Claims

Manage FFS claims	Number of applications
1.0 Manage claims	46
1.1 Establish and maintain claims processing environment	24
1.2 Process claims	11
1.3 Support claims analysis and reporting	25
2.0 Manage Medicare finances	40
2.1 Manage claims expenditures	12
2.2 Perform fiscal integrity functions	26
2.3 Perform MSP processing	6
2.4 Perform cost report settlement	8
3.0 Provide customer service	26
3.1 Manage providers	11
3.2 Support beneficiary inquiries	8
3.3 Manage other stakeholders	0
3.4 Manage appeals	6
4.0 Manage the FFS environment	25
4.1 Perform transition activities	0
4.2 Manage contracts	5
4.3 Manage and monitor performance	19
4.4 Manage interfaces and interactions	4

Several applications support multiple processes and vice versa, so the total adds to more than 90, the number of different applications that support Part A/B claims processing.

Table 3-3 shows which specific applications support which Part A/B claims processes.

Table 3-3. Applications Supporting Part A/B Claims Processes

Application	1.0 Manage claims	1.1 Establish and maintain claims processing environment	1.2 Process claims	1.3 Support claims analysis and reporting	2.0 Manage Medicare finances	2.1 Manage claims expenditures	2.2 Perform fiscal integrity functions	2.3 Perform MSP processing	2.4 Perform cost report settlement	3.0 Provide customer service	3.1 Manage providers	3.2 Support beneficiaries inquiries	3.3 Manage other stakeholders	3.4 Manage appeals	4.0 Manage the FFS environment	4.1 Perform transition activities	4.2 Manage contracts	4.3 Manage and monitor MAC performance	4.4 Manage interfaces and interactions
AFS	X	X	X																
ADR					X				X						X		X		
ALJTrack										X				X					
AQM										X					X			X	
ART															X		X		
ASCPRICER	X	X	X												X		X		
ASM										X					X			X	
BESS	X			X	X		X												
BISC					X		X												
CAFM					X	X									X			X	
CAPTS															X			X	
CASR					X		X		X						X			X	
CAST															X			X	
CCI	X		X	X															
CERT					X		X								X		X	X	X
CHDS					X	X													
CIS										X		X							
CLFS	X	X	X																
CMHS	X			X	X														
CMIS										X					X			X	
CROWD	X	X	X	X	X	X	X	X		X				X	X			X	
CSAMS										X					X			X	
CTI										X	X								
CWF	X	X	X							X		X		X					
DCS	X			X	X	X													
DESY	X			X	X		X												
DPS	X	X																	
DSAF	X			X	X		X			X									
eChimp															X				
ECRS					X			X							X		X		
EDB										X		X							
FID					X		X			X	X								
FISS	X	X	X	X	X	X	X	X		X	X	X		X	X			X	X
GROUPER	X	X																	
HCIS	X			X	X		X												

Table 3-3. Applications Supporting Part A/B Claims Processes

Application	1.0 Manage claims	1.1 Establish and maintain claims processing environment	1.2 Process claims	1.3 Support claims analysis and reporting	2.0 Manage Medicare finances	2.1 Manage claims expenditures	2.2 Perform fiscal integrity functions	2.3 Perform MSP processing	2.4 Perform cost report settlement	3.0 Provide customer service	3.1 Manage providers	3.2 Support beneficiaries inquiries	3.3 Manage other stakeholders	3.4 Manage appeals	4.0 Manage the FFS environment	4.1 Perform transition activities	4.2 Manage contracts	4.3 Manage and monitor MAC performance	4.4 Manage interfaces and interactions
HCPCS	X	X																	
HCRIS					X		X		X										
HGTS					X		X												
HIGLAS	X		X		X	X				X	X				X				X
HIPDB					X		X			X	X								
IDE	X	X																	
IRIS					X				X										
IRP					X		X												
IRPTRACK					X		X												
MAS										X	X			X					
MBD	X			X						X		X							
MBPRP	X			X	X														
MCS	X	X	X	X	X	X	X	X		X	X	X		X	X			X	X
MFSR	X			X											X			X	
MPARTS	X			X	X	X	X	X											
MPFSDB	X	X																	
MPRS	X	X																	
MQSA	X	X																	
MRS															X			X	
MSPLS					X		X												
MSPPAY	X	X			X	X		X											
NCH	X			X															
NCHPR	X			X															
NCHQA	X			X															
NCHSTS	X			X															
NGD										X		X							
NMUD	X			X															
NPS										X	X								
OPS					X	X													
OSCAR	X	X																	
PACEMKR	X			X															
PECOS										X	X								
PIMR	X			X	X		X								X			X	
PNS										X	X								
POCI					X		X												
PORA					X		X		X										
PORS					X		X		X										

Table 3-3. Applications Supporting Part A/B Claims Processes

Application	1.0 Manage claims	1.1 Establish and maintain claims processing environment	1.2 Process claims	1.3 Support claims analysis and reporting	2.0 Manage Medicare finances	2.1 Manage claims expenditures	2.2 Perform fiscal integrity functions	2.3 Perform MSP processing	2.4 Perform cost report settlement	3.0 Provide customer service	3.1 Manage providers	3.2 Support beneficiaries inquiries	3.3 Manage other stakeholders	3.4 Manage appeals	4.0 Manage the FFS environment	4.1 Perform transition activities	4.2 Manage contracts	4.3 Manage and monitor MAC performance	4.4 Manage interfaces and interactions
PPD										X		X							
PPRMS	X			X	X														
PPS	X	X																	
PRICER	X	X																	
PS&R	X			X	X	X	X												
PSOR	X			X	X	X	X												
PULSE															X			X	
QCM										X					X			X	
QWCM										X					X			X	
REBUS	X	X		X															
REMAS					X	X	X	X											
SNFPRICE R	X	X	X																
SSPAF	X	X																	
STAR					X				X						X			X	
UARS	X	X																	
UDR					X				X										
UPIN	X	X	X		X		X			X	X								
WI	X	X																	

MAC-PROVIDED APPLICATIONS

The mix of applications that a MAC will need will depend on how the MAC chooses to perform and manage the work. Table 3-4 illustrates the types of MAC provided applications running at a representative current contractor. Although many of these applications appear to involve Government Furnished Equipment, often times a relatively minor application may be required to utilize the GFP. This list is only an example of kinds of “cuff systems” a MAC may need to utilize and is by no means meant to be required or comprehensive.

Table 3-4. MAC-Provided Modules

Type	Description or examples
Access to GFP	CERT, ECRS, HIGLAS, MARTI, Medicare Exclusion Database, NGD, PECOS,
Beneficiary eligibility	Beneficiary Eligibility
Case tracking	Case Tracking System
Claims processing	Ambulance Provider Mailing, Electronic Remittance Advice (ERA), Address Verification Releases, Transaction Logging
COB	COB Crossover, COB Eligibility, COB Provider Extract, COB Hardware Interface, COBC Communications, Provider Crossover Files
Correspondence	Correspondence Reports, Demand/Retro Letters, FOIA Provider File Extract, Automated Correspondence Systems
Edit	Complex Edit Effectiveness, Value Added Edits, HCPCS, Online Edit/Audit Verification Tools, Test Edits
Education	Fair Hearing Fact Sheets, Forms, Medicare Participating Physicians/Suppliers Directory (MEDPARD)
Enrollment	Annual Profile Build, Provider License Renewals, Provider Communications, Inventory Tracking
Fee schedule	Ambulance Fee Schedule/Zip Code File, Ambulance File for Intermediaries, ASC Fee, ASP Drug File, Clinical Lab Fee, Injection Intermediary Tapes, Mammography Cert Download, MFSDB, National Abstract File
Financial	1099 Feed, Adjustment Monitoring Report, Bank Issues, Voids and Clears, Bank Reports, CFO Reporting, DCIA Reports, EFT, EFT Reports, Financial File Maintenance/Problems/Support, Financial Reports, HPSA, Intent to Refer Report, Inventory Reports for Overpayments, SMART CFO Reconciliation, Under Tolerance Report
History	History File Maintenance/Problems/Support, History Purge, Name Changes
Infrastructure	Audio Response Unit Fax/Security/SPR, File Transfer Protocol, Provider ARU
Input processing	EDI Claim, Image Activations, Paper Claim Submitters, Document Control Number (DCN), Patient Care Form (PCF)
Maintenance	Client Server Maintenance/Updates, CWF 270/271 Query File, CWF File Layouts, CWF NDMs, CWF Release Installs, MCS Releases, Production EDI Extracts for Test
MSP	Auto Insurance File, Data Match Tapes, DCIA, MSP General, Universal Employer File
Operations	Automated Email Notification, CICS Interfaces, Duplex Printing, EMC Balancing, Utility Interfaces,, HotPrint, MARTI JCL, Printing/Mailing of System Output, RRB Files, User File Copies, Box Tracking
Provider tracking	PNUM (Provider Numeration), Provider Deactivations, PRRS Tracking Database, Sanction/Debar, Label
PSC	PSC ADS Envelope Inserts, PSC FPA Requests, PSC Monthly Extracts
Reports	Aged Claims Report, Automated Inventory Report, EMC Billers Report, FPA Reports, MCS Ad Hocs, Monthly OIG Extract, No UPIN File/Par Count Reports, Reports to Excel, Procedure Code Report, MR Complex Workload Reports

Chapter 4

Infrastructure Architecture

The infrastructure architecture identifies and describes the hardware, software, and communications network technologies required to manage business applications throughout the business enterprise. Influences include communications networks, equipment capacities, operational procedures, and technology capabilities. The purpose of documenting the infrastructure architecture is to identify the existing technologies used to carry out key activities—such as data security, preparation, storage, and retrieval—across functional, organizational, and geographic boundaries. The infrastructure architecture is documented using the conceptual representation of common services and interfaces found in the Technical Reference Model (TRM).¹

This chapter depicts and describes the infrastructure architecture supporting Part A/B claims processing. The chapter begins with an overview of the infrastructure architecture and a discussion of the Enterprise Data Centers (EDCs) to be implemented by CMS. It then presents an inventory of technology products supporting claims processing applications and identifies which applications the products support. Next, the chapter provides an inventory of technical operating locations of Part A/B claims processing applications. Finally, the chapter identifies the infrastructure required by the Part A/B MAC for processing claims.

OVERVIEW

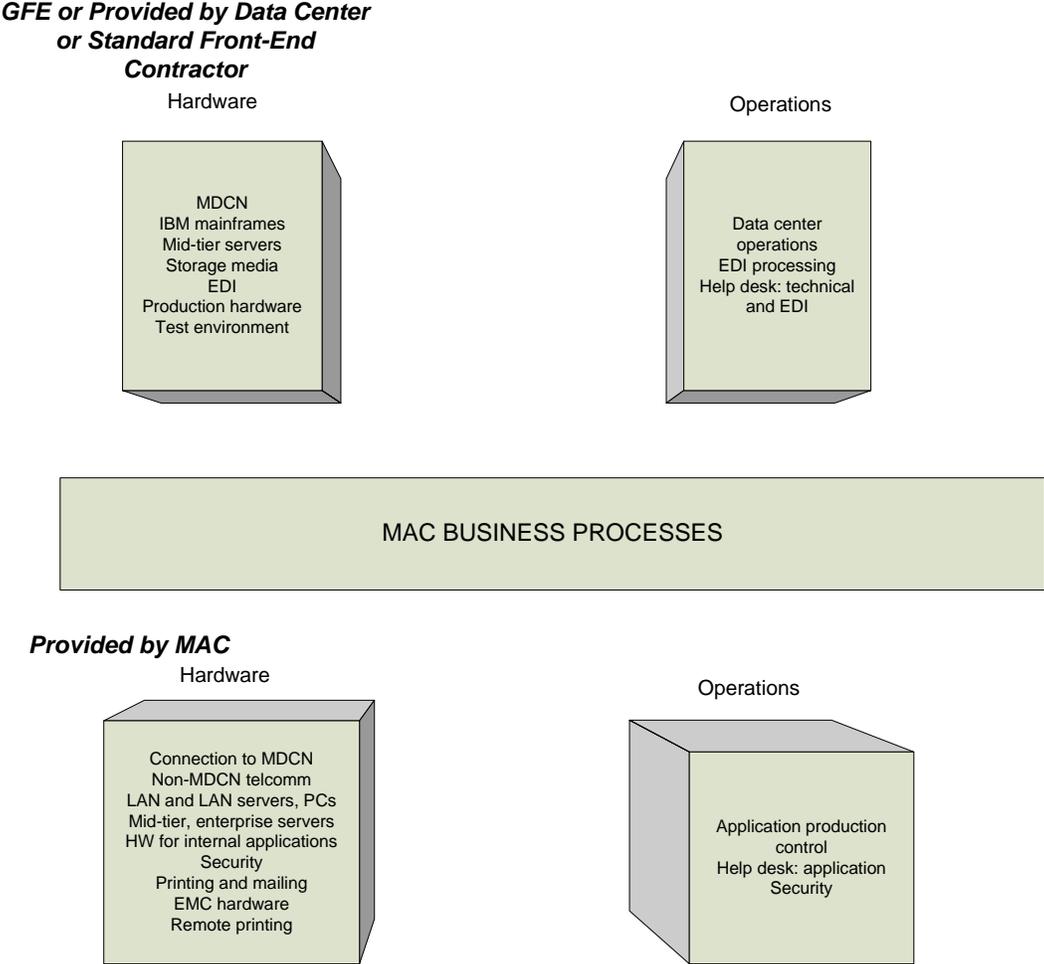
The infrastructure used in claims processing will come from CMS GFE, the EDC, the common front end, or the Part A/B MAC. Although responsibilities may change as the EDC operational environment matures, as of spring 2006, the Part A/B MAC will provide systems hardware for EDI processing, databases, database management systems, interactive response unit (IRU) systems, security management systems, websites, e-mail, and data communications functions.² The computing hardware utilized in performing these business functions varies from mainframes, such as IBM 9672s or zSeries 800s, to mid-tier servers, such as Sun Fire series or Fujitsu Primepower servers, in varying configurations. CMS is not prescribing the hardware to be used to carry out the business functions, beyond that which is needed to interface or operate the applications that CMS provides to the Part A/B MAC. Figure 4-1 illustrates the hardware needed and also identifies the split of roles and responsibilities between the data center and the Part A/B

¹ *HCFA IT Architecture, Version 2.0*, Volume 5, Section 5.5, November 1999.

² A contractor for the common front end may provide the systems hardware for EDI processing.

MAC. The products shown in the figure are illustrative; a more complete list is provided later in this chapter.

Figure 4-1. Part A/B MAC Infrastructure Environment



ENTERPRISE DATA CENTERS

In March 2006, CMS awarded three contracts to implement EDCs, which will provide services, equipment, and material required to support current and future operations. The following are among the services that the EDCs will provide:

- ◆ *Mid-tier Internet architecture managed applications hosting service.* The EDC will provide, configure, and maintain all managed mid-tier hardware servers and supporting software for CMS customers
- ◆ *Mainframe data center application services.* The EDC will provide hosting of mainframe data center services for applications requiring mainframe computing capabilities. The EDC will provide all hardware, software, ongoing maintenance, support, operation, and administration

required for managed mainframe servers, managed data storage, backup and recovery, managed local area networks, and data replication services.

- ◆ *Medicare fee-for-service claims processing services.* The EDC will provide all the necessary hardware, COTS software, labor, supervision, tools, materials (including manuals and schematics), documentation, parts, equipment, transportation, and supplies necessary to process Medicare claims, maintain the data center, and support any Medicare processing at the data center. The EDC environment will be dedicated to CMS.
- ◆ *Resource-based services.* The EDC will provide engineering and program management personnel to support CMS-specific activities.
- ◆ *Telecommunications services.* The EDC will provide telecommunications services, including the following:
 - Switched data services—hardware, software and operational services to provide switched data services between the Medicare Data Communications Network (MDCN) and the EDCs
 - Private line services—cross-connect setup and provision of the point-to-point connection from the EDCs to CMS business partners
 - Managed public Internet Protocol (IP) services—hardware, software, and operational services necessary for the provision of managed public IP services
 - Managed “private” network services—hardware, software, and operational services necessary for the provision of managed “private” IP services
 - Managed “secure” network services—hardware, software, and operational services necessary for the provision of managed “secure” IP services.

PRODUCTS INVENTORY

CMS identified a total of 23 products supporting Part A/B claims processing applications in four major service areas. The service areas and the number of products supporting them are as follows:

- | | |
|--------------------------|----|
| ◆ Application | 10 |
| ◆ Data management | 5 |
| ◆ Information processing | 7 |
| ◆ Middleware | 1 |

Table 4-1 provides a detailed inventory of products that have been used historically and thus are relevant to the Part A/B claims processing function. The products are sorted by major and basic service area.

Table 4-1. Products Inventory

Major service area	Basic service area	Product	Description
Application development	Application development tools	Access	Application development functionality of Microsoft Access. Access is a database program for Windows. Access is programmable using Visual Basic for Applications (VBA) and can read Paradox, dBASE, and Btrieve files. It uses ODBC, Microsoft SQL Server, SYBASE SQL Server, and Oracle data.
		CLIST	Programming language similar to or used in conjunction with Time Sharing Option (TSO).
		COBOL Compiler Optimizer	Software tool that improves the performance of COBOL Compiler.
		Cognos Query	Software that lets users directly access corporate data resources for real-time data exploration. Using only a web browser, users can navigate suites of published queries, saving and modifying them as required to meet their specifications.
		Microfocus COBOL	COBOL programming tools that enable both migrating from mainframe to client/server and developing on client/server platforms for the mainframe.
		Model 204 User Language	Integrated fourth-generation environment for building Model 204 applications.
		SAS	Statistical Analysis System. An integrated set of data management and decision support tools from SAS that runs on platforms from PCs to mainframes. It includes a complete programming language as well as modules for spreadsheets, CBT, presentation graphics, project management, operations research, scheduling, linear programming, statistical quality control, econometric and time series analysis, and mathematical, engineering, and statistical applications. It also provides multidimensional data analysis (OLAP), query and reporting, EIS, data mining and data visualization.
		TSO/ISPF Dialog Manager	Time Sharing Option/Interactive System Productivity Facility. Software that provides interactive communications for IBM's MVS operating system. It allows a user or programmer to launch an application from a terminal and interactively work with it and is used for writing application programs. Dialog Manager Services is used to develop dialogs for interactive terminal sessions.
		Visual Basic 6.0 Enterprise	Version 6.0 of the BASIC programming language from Microsoft specialized for developing Windows applications. It is widely used to write client front ends for client/server applications.
		Visual Basic Professional	Business version of Visual Basic.

Table 4-1. Products Inventory

Major service area	Basic service area	Product	Description
Data management	Data extraction	VSAM	Virtual Storage Access Method. An IBM access method for storing data, widely used in IBM mainframes. It uses the B+tree method for organizing data.
	Non-relational data management	Model 204	Mainframe database software.
		DB2	DATABASE 2. A relational DBMS from IBM that was originally developed for its mainframes. It is a full-featured SQL language DBMS that has become IBM's major database product. Known for its industrial strength reliability, IBM has made DB2 available for all of its own platforms, including OS/2, OS/400, AIX (RS/6000), and OS/390, as well as for Solaris on Sun systems and HP-UX on HP 9000 workstations and servers.
		Oracle	Database software that incorporates the SQL language. Is portable to a wide variety of platforms.
		SQL Server	Relational DBMS from Sybase that runs on OS/2, Windows NT, NetWare, VAX, and UNIX servers. It is designed for client/server use and is accessed by applications using SQL or via Sybase's own QBE and decision-support utilities.
Middleware	Transaction processing services	CICS	Customer Information Control System. A TP monitor from IBM that was originally developed to provide transaction processing for IBM mainframes. It controls the interaction between applications and users and lets programmers develop screen displays without detailed knowledge of the terminals used. It provides terminal routing, password security, transaction logging for error recovery, and activity journals for performance analysis.
Information processing	Desktop workstation	Desktop	Desktop computer. Refers to a personal computer such as a PC or Mac or to a workstation from Sun, IBM, etc. Whether in a horizontal case on top of the desk or in a tower under or at the side of the desk is not the issue. The term refers to a single-user computer in contrast to a server shared by multiple users and in contrast to a laptop, which provides portability.
	Enterprise server	Enterprise Server: large-scale mid-tier	Processing that takes place on an enterprise-wide application server that sits between the user's machine and the database server. The middle tier server performs the business logic.
		Enterprise Server: mainframe	Large computer system operating in the enterprise. There are small, medium, and large mainframes, handling from a handful to tens of thousands of online terminals. Large-scale mainframes support multiple gigabytes of main memory and terabytes of disk storage. Large mainframes use smaller computers as front-end processors that connect to the communications networks.
	Enterprise server operating system	UNIX AIX	Advanced Interactive eXecutive. IBM's version of UNIX, which runs on 386 and higher PCs, RS/6000 workstations, and 390 mainframes. It is based on AT&T's UNIX System V with Berkeley extensions.
UNIX Solaris		Multitasking, multiprocessing operating system and distributed computing environment for Sun's SPARC computers from SunSoft. It provides an enterprise-wide UNIX environment that can manage up to 40,000 nodes from one central station. Solaris is known for its robustness and scalability, which is expected in UNIX-based systems.	

Table 4-1. Products Inventory

Major service area	Basic service area	Product	Description
	Network computer	Windows NT Server	Windows New Technology. A 32-bit operating system from Microsoft for Intel x86 and Alpha CPUs. The server version referred to here includes Microsoft's web server (IIS). Like Windows 95/98, NT includes built-in networking and preemptive multitasking. It also includes the same user interface, but some dialogs are different and many are exclusive to NT. NT supports multiprocessing systems, adds extensive security and administrative features, and offers a dual boot capability. Designed for enterprise use, each application can access 2 GB of virtual memory. NT 4 Server, Enterprise Edition supports clustering and failover in the event of system failure.
	Workgroup server	Workgroup Server	Enterprise device (server) that facilitates electronic sharing of data among several thousand computers.

APPLICATIONS SUPPORTED BY PRODUCTS

An understanding of which products support which applications aids in identifying those products most commonly used to support CMS Part A/B claims processing and in identifying applications that will be affected by changes in the infrastructure and vice versa. Table 4-2 shows the number of applications supported by each product.

Table 4-2. Number of Claims Applications Supported by Products

Major service area	Product
Application development	Access
	CLIST
	COBOL Compiler Optimizer
	Cognos Query
	Microfocus COBOL
	Model 204 User Language
	SAS
	TSO/ISPF Dialog Manager
	Visual Basic 6.0 Enterprise
	Visual Basic Professional
Data management	VSAM
	Model 204
	DB2
	Oracle
	SQL Server
Middleware	CICS (Transaction Processing Services)

Table 4-2. Number of Claims Applications Supported by Products

Major service area	Product
Information processing	Desktop
	Enterprise Server: large-scale mid-tier
	Enterprise Server: mainframe
	UNIX AIX
	UNIX Solaris
	Windows NT Server
	Workgroup Server

TECHNICAL OPERATING LOCATIONS OF APPLICATIONS

The technical operating locations relevant to claims processing applications are as follows:

- ◆ Part A/B MAC desktop—Part A/B MAC desktop computers located in MAC offices
- ◆ Part A/B MAC mainframe—CMS Data Center mainframe
- ◆ Part A/B MAC mid tier—CMS Data Center mid-range server operating environment (processing takes place on an application server that sits between the user's machine and the database server)
- ◆ Internet—public Internet
- ◆ MDCN—CMS Medicare Data Communications Network (provides connectivity between CMS locations and among the various entities that access Medicare data or support system operations, including claims processing contractors, fraud detection organizations, and state agencies)
- ◆ Mobile—distributed laptop or PDA.

INFRASTRUCTURE REQUIRED FOR PROCESSING CLAIMS

Table 4-3 shows the hardware and software components that are required for the Part A/B MACs to process claims.

Table 4-3. Infrastructure Required by Part A/B MACs for Claims Processing

Required hardware/ software	Description
IBM-compatible CPU	Desktop computer. Refers to a personal computer, whether in a horizontal case on top of the desk or in a tower under or at the side of the desk. The term refers to a single-user computer in contrast to a server shared by multiple users and in contrast to a laptop, which provides portability.
IBM-compatible direct access storage devices	Magnetic disk normally found in mainframe and minicomputer environments. The direct access refers to the fact that all data can be accessed directly instead of being read sequentially.
Communications controller to interface with MDCN	Hardware to provide connectivity to the Medicare Data Communications Network, which provides connectivity between the CMS locations and among the various entities that access Medicare data or support system operations.
Communications network for Part A/B MAC staff	Provides connectivity for staff of the Part A/B MAC to facilitate the processing of claims.
3270 emulation software on PCs	Software that allows a remote terminal such as a Windows workstation to communicate with an IBM or IBM-compatible mainframe.
Communications link with corporate systems, such as finance	Combination of hardware and software to provide connectivity with internal (to the Part A/B MAC) systems.
Security hardware, such as penetration monitoring	Hardware to provide security services for the IT resources located at the Part A/B MAC. This may include tools for monitoring attempted security breaches from external sources.
Communications hardware and software for linking with providers	Combination of hardware and software that allows for connectivity via standard protocols with providers.
COBOL compiler	Tool for creating executable code from source code.
Software used to connect to MDCN	Software used to provide communications protocol for use in connecting to the Medicare Data Communications Network.
VSAM data compression tool	Software used to compress data and make optimal use of disk space.
Security tools for use in the mainframe environment	Tools designed to prevent unauthorized access to information on a mainframe.
Commercial translation software	ETL (extract, transform, load) tool used to migrate data from one database to another, to form data marts and data warehouses, or to convert databases from one format or type to another.
Third-party letter generator software	Tool that takes information from a specified source and generates form letters based on established criteria.
Bulk mailing support tool	Software for ensuring that addresses are properly formatted to support bulk mailing.

Note: This may not be a complete inventory of all required hardware and software.

In addition to the infrastructure shown in Table 4-3, CMS expects Medicare contractors (or a standard front-end contractor) to have the following:

- ◆ Data communications portals for connectivity with Medicare business partners via conventional telephone lines, leased T1 lines, and secured private networks (such as AGNS) for the receipt of electronic data interchange (EDI) transactions; DDE connectivity; and submitter/receiver

connectivity to enable downloading of Medicare transactions by business partners.

- ◆ Security hardware and software, together with internal and external controls and procedures, that fully meet all CMS security requirements and privacy responsibilities to protect against the access of unauthorized entities into the Medicare systems environment either by online connectivity or the submission of EDI transactions.
- ◆ Data stamping processes and emergency procedures to ensure that electronic media claims (EMCs) are given correct receipt dates as required by law.
- ◆ Hardware, software, and procedures to ensure that all Medicare EMCs are copied as received and retained to fully comply with the CMS data retention requirements for EMCs as received, i.e., prior to translations and editing.
- ◆ Processes to ensure that EDI transactions received from clearinghouses, billing services, data and telecommunications service providers, and others are accepted only for Medicare providers from whom the contractor has received written authorization to submit or receive EDI transactions on their behalf.
- ◆ A single validation translator, for inbound and outbound HIPAA transactions, that uses only the standard CMS flat files to interface with Medicare standard claims processing systems.
 - Editing of all EDI transactions should ensure the following:
 - Each HIPAA transaction meets all syntax requirements.
 - Each HIPAA transaction meets the HIPAA implementation guide requirements.
 - Each HIPAA transaction meets the CMS-specific companion guide requirements.
 - Editing of all EMC transactions is done against the following:
 - All, and limited to, Medicare “pre-screen” edits, e.g., the Medicare “return as unprocessable” edits
 - All, and limited to, HIPAA medical and non-medical code sets utilized in health care transactions.
 - Reports to providers on the status of their EDI transactions, including the X12N 997 Functional Acknowledgements and the X12N 824 Ap-

plication Advice transaction set, contain application-level errors or a comparable EDI front-end edit report if the X12N 824 is not yet available.

- ◆ A vigorous reporting system to provide a full range of routine and ad hoc reports for managing all aspects of EDI operations and for providing timely information to CMS regarding provider and submitter transaction and version utilization data, edit exceptions, transmission and receipt problems, changes in transaction utilization patterns, etc.
- ◆ An EDI help desk to provide information and assistance to all Medicare EDI business partners.
- ◆ A test environment for trading partners and EDI transactions and for testing new hardware and new software releases and fixes prior to their being put into production (may be provided by VMSDME).
- ◆ Full documentation on the initial hardware and software for the EDI processing system as well as ongoing documentation of all changes to the hardware environment and system software throughout the length of the contract.
- ◆ Backup, risk mitigation, and disaster recovery plans to ensure minimal disruption to the receipt, processing, and return of Medicare EDI transactions throughout regularly scheduled business hours. Special attention should be given to plans for continuing receipt of incoming Medicare transactions in the event of a data communications failure and to the correct dating of Medicare claim receipts in the event of a failure or slowdown of the EDI processing system.

Appendix A

Glossary of Key Terms

This glossary defines key terms and abbreviations related to Part A/B claims processing. Additional definitions are available at www.cms.hhs.gov.

Acceptable Quality Level (AQL)	Minimum level of (expected) performance that is acceptable. Failure to achieve this level of performance renders the service being provided by the contractor unacceptable.
Activity	Unit or description of work usually done by one or more people belonging to the same office, branch, or other small group.
Adjudicate	Processing of a claim to a finalized status. Adjudicate also means the process of rendering a decision on a pending appeal. Sometimes the term is used to refer to making a decision on an issue/question that does not have administrative appeal rights.
Administrative Requirement	General requirement related to the overall management and administration of the entity's contract with CMS (e.g., internal controls, systems security) and can be driven by agency requirement, contractual clause, contractual amendment, or legislation.
Administrative Qualified Independent Contractor (AdQIC)	Contractor that supports a QIC with training and data analysis.
American National Standards Institute (ANSI)	Organization that accredits various standards-setting committees and monitors their compliance with the open rule-making process that they must follow to qualify for ANSI accreditation. HIPAA prescribes that the standards mandated under it be developed by ANSI-accredited bodies whenever practical.
Appellant	Beneficiary, assignee, or other person or entity that has filed an appeal concerning a particular initial determination.
Assignee	Provider, physician, or other supplier that furnishes items or services to a beneficiary and has accepted a valid assignment of a claim or an appeal executed by the beneficiary.

Beneficiary Contact Center (BCC)	Customer service center handling telephone and written inquiries from Medicare beneficiaries and other authorized people.
Benefit Account Balance	Any daily collected balance (positive or negative) that may exist in the benefits account after all items presented for payment have been cleared. The earnings or loss resulting from any such balances will be included in the quarterly computation to adjust the Federal Health Insurance (FHI) time account.
Bill	See “claim.”
Billing Error	Error that prevents a claim or bill from being properly adjudicated.
Change Request (CR)	Proposed or required change to CMS (or contractor) policy or procedures.
Claim	Transaction submitted by a provider or beneficiary that meets all the requirements in 42 CFR 424.30–424.44. (See also “recovery claim.”)
Claims-Related Transaction	Transaction, other than a claim, that the contractor must process. This includes HIPAA-related transactions and Method Selection forms for home dialysis.
Clean Claim	Claim that does not contain a defect requiring the MAC to investigate or develop prior to adjudication. Clean claims must be filed within the timely filing period (see 42 CFR 424.30–424.44).
Closeout Period	Time between the award of a jurisdiction to a new MAC and the end of the contract for the incumbent contractor (FI, carrier, or MAC).
Common Working File (CWF)	Medicare prepayment validation and authorization system that forms the cornerstone for Medicare transactions processing. It is the single data source that verifies beneficiary eligibility and provides prepayment review and approval of claims.
Complaint	See “fraud and abuse complaint” and “supplier complaint.”
Complex Inquiries	Inquiries (telephone or written) from Medicare beneficiaries that cannot be resolved by the Beneficiary Contact Center because further research is required or no desktop scripting exists addressing the issue.

Compliance Error Rate	Rate based on how the claims looked when they first arrived at the contractor, before the contractor applied any edits or conducted any reviews. The provider compliance rate is a good indicator of how well the contractor is educating the provider community because it measures how well providers prepare claims for submission. This error rate is based on dollars.
Comprehensive Error Rate Testing (CERT)	CMS program to produce national, contractor-specific, and service-specific paid claim error rates.
Cutover	Actual point at which the outgoing contractor ceases Medicare operations and the new contractor begins to perform its Medicare functions.
Days	Federal business days, unless otherwise specified.
Denied Claim	Claim that has been fully adjudicated. The contractor determines that the claim will not be paid, either in full or in part. Denials are made based on Medicare rules and regulations.
Determination	See “initial determination” or “determination of program eligibility.”
Determination of Program Eligibility	CMS action that determines whether a prospective provider that must execute a health insurance benefits agreement meets all federal requirements necessary for participation in the Medicare program and is eligible to submit claims for covered services furnished to Medicare beneficiaries. A determination of program eligibility is based on satisfactory completion of the provider enrollment process, a certification of compliance, and a civil rights clearance.
Developing Claims	Claims for which the contractor must seek information (exclusive of MSP data) from external sources, such as beneficiaries and providers, in order to adjudicate a claim.
Effectuate	Process to pay for an item or service after an initial determination has been reversed on appeal or administrative law judge (ALJ) decision.
Field Audit	Performance of prescribed procedures in the examination and verification of data maintained by the provider. It encompasses a written record of the work performed and the results.
Finalized Status	Final decision to pay, pay in part, or deny a claim.

Fraud and Abuse Complaint	Statement, oral or written, alleging that a provider, supplier, or beneficiary received a Medicare benefit of monetary value, directly or indirectly, overtly or covertly, in cash or in kind, to which he or she is not entitled under current Medicare law, regulations, or policy. Included are allegations of misrepresentation and violations of Medicare requirements applicable to people or entities that bill for covered items and services.
Function	Unique operation, which is separately identifiable, such as claim or bill payment, appeals, or medical review. Functions consist of a series of activities.
Functional Requirement	Requirement that is part of the Medicare operations process such as bills payment, appeals, and medical review. Each functional area represents a unique operation consisting of activities driven by agency requirements outlined in the Medicare manuals.
Good Cause	Legally sufficient ground or reason to take a specific action, principally in the claim appeals process.
Health Insurance Claim Number (HICN)	Number assigned by the Social Security Administration to an individual identifying him/her as a Medicare beneficiary. This number is shown on the beneficiary's insurance card and is used in processing Medicare claims for that beneficiary.
Healthcare Integrated General Ledger Accounting System (HIGLAS)	CMS integrated general ledger accounting system to account for Medicare payments. HIGLAS will replace the accounting systems currently used by Medicare contractors.
Implementation	Period of time beginning with the award of the MAC contract and ending with the operational date of the MAC. During this period, the MAC performs all of the activities specified in its implementation project plan to ensure the effective transfer of Medicare functions from the outgoing contractor. See "workload transition."
Implementation Guide (IG)	Document explaining the proper use of a standard for a specific business purpose. The X12N HIPAA IGs are the primary reference documents used by those implementing the associated transactions and are incorporated into the HIPAA regulations by reference.
Incomplete/Invalid Claims	Claims that are missing critical information (e.g., HICN, procedure code) and therefore do not meet the definition of a claim. Such claims are returned to the provider and may be corrected and resubmitted, but do not have appeal rights.

Inherent Reason- ableness (IR)	Authority granted to CMS whereby excessively high or low fee schedule amounts can be adjusted to more fairly represent the market.
Initial Determination	Decision made to pay in full, pay in part, or deny a claim. However, other actions are also considered initial determinations and specific regulatory provisions define what constitutes an “initial determination for purposes of fee-for-service administrative appeal rights attaching.” See 42 CFR 405.924 and 405.926.
Interface	Entity with which the contractor must interact to ensure consistency of Medicare program operations.
Interface Requirement	Requirement that necessitates a mechanism—e.g., contract clause, Joint Operating Agreement (JOA), or Service Level Agreement (SLA)—to address ongoing activities contractors must conduct and entities they must interact with to ensure consistency of Medicare program operations. When there are interdependencies, these requirements serve to ensure that all parties understand their respective responsibilities.
Joint Operating Agreement (JOA)	Agreement between two or more contractors working for CMS who must interact with each other.
Jurisdiction	Geographic territory that the MAC will serve, types of services that a contractor processes, or both.
Jurisdiction Opera- tional Start Date	Date that the MAC contractually assumes the Medicare functions from all outgoing carriers/intermediaries in its jurisdiction.
Letter of Credit	Legal reservation of funds on deposit in the Federal Reserve Bank (Standard Form 1193) that covers payments that the contractor has contracted to pay by issuing checks and authorizing electronic funds transfer.
Limitation of Liability (LOL)	Restriction on liability for payment protecting either Medicare beneficiaries or providers based on Sections 1870 and 1879 of the <i>Medicare Prescription Drug, Improvement, and Modernization Act</i> .
Local Coverage Determination (LCD)	Determination made by the PSC as to whether a particular item or service is reasonable and necessary.
Local System Edits	Adaptations to the shared system, approved by CMS and made by the MAC or PSC, to communicate with providers via remittance advice and with beneficiaries via Medicare Summary Notice (MSN), to implement local coverage determinations, and to work around shared system limitations.

Material Weakness	Failure to meet a control objective due to a significant deficiency in the design or operation of internal control policies and procedures.
Medicare Reimbursement Principles	Medicare cost reimbursement principles as set forth in 42 CFR 412.113.
Medicare Secondary Payer (MSP)	Series of statutory provisions that require other payers (including those that are self-insured) to make payment before Medicare pays when certain specific conditions are satisfied.
Medicare Summary Notice (MSN)	Monthly notice that a beneficiary receives once a claim has been filed for either Part A or B services with the MAC. It provides an explanation of what the provider billed for, how much Medicare paid, and how much is the responsibility of the beneficiary.
MSP Claims Determination	Determination to deny payment or to pay conditionally due to an MSP situation.
MSP Settlement	In the context of MSP appeals, the trigger event for an MSP recovery claim.
National Provider Identifier (NPI)	Standard unique identifier for providers. The NPI is a numeric 10-digit identifier adopted by DHHS as the standard identifier for health care providers. The NPI is scheduled to replace the UPIN in 2007.
Next Generation Desktop (NGD)	Government-furnished, web-based customer service desktop application.
Other Than Clean Claims	Any claim that does not meet the definition of clean claim above. These are complete claims that require manual intervention on the part of the contractor to be adjudicated. (These are sometimes also called “dirty claims.”)
Paid Claims Error Rate	Rate that is based on dollars paid after the contractor made its payment decision on the claim/admission. It excludes any claim or admission that the contractor completely disallowed (CMS has reviewed the impact of these exclusions and determined that they have a negligible effect on the error rate). The paid claims error rate is the percentage of dollars that the contractor erroneously allowed to be paid and is a good indicator of how claim errors in the Medicare FFS program impact the trust fund. This error rate is based on dollars.
Performance Measure	Clearly defined qualitative or quantitative method for determining the level of performance that a contractor has actually achieved.

Performance Requirement	Clear and concise statement of a desired outcome.
Performance Standards	Defined level of (expected) performance against which the quality of the contractor's services can be determined.
Periodic Review	CMS review conducted at times determined to be appropriate for the circumstances.
Post-Cutover Period	MAC's first 3 months of Medicare operations, during which workload and performance are monitored and any problems with the implementation are resolved.
Program Safeguard Contractor (PSC)	Contractor that performs specific program integrity functions under Section 1893 of the <i>Medicare Prescription Drug, Improvement, and Modernization Act</i> such as audit, medical review, and potential fraud and abuse investigations and case referrals, and some specialty functions (CERT, DAVE, etc.).
Prospective Payment System (PPS)	Method of reimbursement in which Medicare payment is made for certain institutional benefits based on a predetermined, fixed amount. The payment amount for a particular service is derived based on the beneficiaries illness and the procedures performed.
Provider	Any organization, institution, or individual (hospital, skilled nursing facility, home health agency, outpatient physical therapy, comprehensive outpatient rehabilitation facility, end-stage renal disease facility, hospice, physician, non-physician provider, laboratory, supplier, etc.) that provides medical services covered under Medicare Part B.
Provider Contact Center (PCC)	Customer service center responding to telephone and written provider inquiries.
Qualified Independent Contractor (QIC)	Contractor that performs reconsiderations of the contractor's initial determinations and redeterminations of Medicare claims.
Quarterly Releases	Software releases (generally released on the first Monday of the calendar year quarters) used to implement changes to the shared systems and the CWF.
Reconsideration	Second level of the Medicare fee-for-service claims appeals process. It is an independent review of the redetermination decision, including the initial determination, and is conducted by a Qualified Independent Contractor (a separate entity from the Medicare agency and the Medicare contractor). The person conducting the reconsideration must not have been involved in either the initial determination decision or the redetermination decision.

Recovery Claim	Certain debt (particularly Medicare secondary payer debt) owed to the Medicare program.
Red Book	List of drugs on the market. Drugs are listed by product name, manufacturer, generic and brand name drugs, NDC codes, and direct price.
Redetermination	First level of the Medicare fee-for-service claims appeals process. It is an independent review of the initial claims determination and is conducted by the Medicare contractor. The individual conducting the redetermination must not have been a part of the initial determination decision. A redetermination decision is considered to be part of the initial determination.
Regional Home Health Intermediary (RHHI)	Business entity that contracts with Medicare to pay home health and hospice bills and to check on the quality of home health and hospice care.
Returned Claim	Claim that is returned to the provider without the contractor making a determination to pay or deny the claim. There are no appeal rights.
Service Level Agreement (SLA)	Documentation of agreements between a provider of a service (e.g., data center, cable company, telecommunication company) and its customer about the quality, quantity, and timeliness of the delivery of the product or service the customer is buying.
Services Processed Error Rate	Rate that is based on services processed and measures whether the contractor made appropriate payment decisions on claims. All sampled claims are included (whether the contractor paid or denied them). This is a gross rate in which the number of services overpaid is added to the number of services underpaid. The services processed error rate is a good indicator of how well the contractor is doing overall at finding and preventing claim errors.
Shared System (previously known as standard system)	System provided by CMS to process Medicare claims. For professional claims (e.g., physician claims), the system is Multi Carrier System (MCS); for institutional providers (e.g., hospital nursing homes), the system is the Fiscal Intermediary Standard System (FISS).
Skilled Nursing Facility (SNF)	Facility that meets specific regulatory certification requirements and that primarily provides inpatient skilled nursing care and related services to patients who require medical, nursing, or rehabilitative services. An SNF does not provide the level of care or treatment available in a hospital.

Small Provider	Provider of services with fewer than 25 full-time-equivalent employees or a supplier with fewer than 10 full-time-equivalent employees.
Stakeholders	Beneficiaries, caregivers, beneficiary family members, advocacy groups, providers, insurers, Medicare contractors, industry associations, employers, other third-party administrators, other third-party payers, data users, standards-setting organizations, CMS, Medicaid, DHHS, DHHS Office of the Inspector General, other government agencies, Government Accountability Office, Congress, and taxpayers.
Supplier	Provider that generally provides supplies (e.g., DMEPOS, pharmacy) or specific medical services (e.g., independent diagnostic testing facility, laboratory services, or ambulance services). The term “provider” encompasses “supplier.” See “provider.”
Suspended Claim	Claim that is flagged by the claims processing system and must be resolved before the claim can be processed to completion.
System Development Life Cycle (SDLC)	Information systems development process, including investigation of the need, requirements analysis, design, testing, and implementation. SDLC is also known as application development process.
System Security	Protection of federal information and information systems, including IT systems, from unauthorized access, use, disclosure, disruption, modification, or destruction.
Technical Advisory Group (TAG)	Workgroup containing experts in the subject area and generally including personnel from the contractor, CMS Central Office, CMS regional offices, other MACs, and the shared systems maintainers.
Transition Requirements	Requirements that encompass all of the tasks an incoming contractor must perform to assume, from a current contractor, all aspects of its Medicare fee-for-service claims processing operation.
Unique Physician/Practitioner Identification Number (UPIN)	Unique identifier for each physician, practitioner, or group practice that provides services for which Medicare payment is made. Currently, the UPIN is scheduled to be replaced by the NPI in 2007.
Workload Transition	Entire scope of activities associated with moving Medicare functions from one, or several, Medicare contractors to another. See “implementation.”

Appendix B

Abbreviations

ADR	Automated Data Reporting
ALJ	Administrative Law Judge
AMA	American Medical Association
AP	Accounts Payable
AR	Accounts Receivable
BCC	Beneficiary Contact Center
CAP	Corrective Action Plan
CAS	Cost Accounting Standards
CERT	Comprehensive Error Rate Testing
CFO	Chief Financial Officer
CMD	Carrier Medical Director
CMS	Centers for Medicare and Medicaid Services
COB	Coordination of Benefits
COBC	Coordination of Benefits Contractor
CPT	Current Procedural Terminology
CSE	Claims Submission Errors
CSR	Customer Support Representative
CWF	Common Working File
DDE	Direct Data Entry
DRG	Diagnosis Related Group
ECRS	Electronic Correspondence Referral System
EDI	Electronic Data Interchange
EFT	Electronic Funds Transfer
EOMB	Explanation of Medicare Benefits
FBI	Federal Bureau of Investigation
FFS	Fee-for-Service
FI	Fiscal Intermediary
FISS	Fiscal Intermediary Standard System

FMFIA	Federal Manager's Financial Integrity Act
FOIA	Freedom of Information Act
GFE	Government-Furnished Equipment
GFF	Government-Furnished Facility
GFI	Government-Furnished Information
GL	General Ledger
HIGLAS	Healthcare Integrated General Ledger Accounting System
HIPAA	Health Insurance Portability and Accountability Act
HPSA	Health Professional Shortage Area
ICR	Intelligent Character Recognition
IDTF	Independent Diagnostic Testing Facility
IGCE	Independent Government Cost Estimate
IRS	Internal Revenue Service
IVR	Interactive Voice Response
JOA	Joint Operating Agreement
LCD	Local Coverage Determination
LPET	Local Provider Education and Training
MAC	Medicare Administrative Contractor
MCD	Medicare Coverage Database
MCS	Multi-Carrier System
MEDIS	Medicare Electronic Data Interchange System
MR	Medical Review
MSN	Medicare Summary Notice
MSP	Medicare Secondary Payer
NCD	National Coverage Determination
NGD	Next Generation Desktop
NOC	Not Otherwise Classified
NPI	National Provider Identifier
NPR	Notice of Program Reimbursement
OCR	Optical Character Recognition
OIG	Office of the Inspector General
OMB	Office of Management and Budget

PCOM	Provider Communications
PIP	Periodic Interim Payment
POE	Provider Outreach and Education
PRRB	Provider Reimbursement Review Board
PSA	Physician Scarcity Area
PSC	Program Safeguard Contractor
QIC	Qualified Independent Contractor
QIO	Quality Improvement Organization
RAC	Recovery Audit Contractor
REMAS	Recovery Management and Accounting System
RFQ	Request for Quotations
RRB	Railroad Retirement Board
SMA	State Medicaid Agency
SOW	Statement of Work
TEFRA	Tax Equity and Fiscal Responsibility Act
UDR	Uniform Desk Review
UPIN	Unique Physician Identification Number
WBS	Work Breakdown Structure

