CHAPTER 3

Medicare payment operations and their role in identifying improper payments

CHAPTER 3

Medicare payment operations and their role in identifying improper payments

Chapter summary

The Department of Health and Human Services' annual agency financial report for fiscal year (FY) 2025 stated that Medicare was responsible for an estimated $56.7 billion in improper payments, including $28.8 billion from fee-for-service (FFS) Medicare, $23.7 billion from Medicare Advantage (MA), and $4.2 billion from Medicare Part D. Improper payments include overpayments, underpayments, payments for ineligible services or recipients, and payments lacking sufficient documentation to determine appropriateness. These payments are not necessarily fraudulent but represent a significant challenge to program integrity.

CMS processes FFS Medicare claims with the assistance of Medicare administrative contractors (MACs), which are private entities assigned to geographic jurisdictions. In FY 2023, CMS reported that MACs processed over 1.1 billion claims, totaling $431.5 billion. MACs process claims with multitiered verification, including "front-end" edits for completeness and duplicate detection and edits for applicable coverage policies. Claims are verified, removing identified duplicate claims and using national correct-coding-initiative edits, which include procedure-to-procedure, medically unlikely, and add-on code edits. Claims may be screened for medical necessity and other statutory and regulatory requirements using applicable national and local coverage determinations. MACs must

In this chapter

- How FFS Medicare pays for items and services under Part A and Part B
- Identifying and reducing improper FFS Medicare payments
- Assessing and reducing improper payments in Medicare Advantage and Part D
- Fraud prevention, detection, and prosecution

pay clean claims within 30 days of receipt. After payment, MACs conduct postpayment reviews to identify improper payments and initiate recovery efforts. (Other contractors may also perform postpayment audits.)

In addition to the pre- and postpayment reviews conducted by the MACs, CMS employs limited prior authorization, targeted preclaim and prepayment reviews, and postpayment audits to reduce improper payments. These tools target services with high risk for unnecessary utilization, such as cosmetic procedures, spinal surgeries, and nonemergency ambulance transports. Currently, CMS is testing preclaim reviews with expanded use of its Fraud Prevention System models and in two limited demonstrations for home health agencies and inpatient rehabilitation facilities in specified states. Among other goals, the demonstrations aim to reduce the number of provider and beneficiary appeals and improve provider compliance with Medicare program requirements. The Wasteful and Inappropriate Service Reduction (WISeR) Model started in 2026 and is using artificial intelligence and data analytics to test new prior authorization for selected services. Participating data companies conduct medical reviews and will be rewarded for reducing unnecessary spending.

CMS engages three types of contractors to identify and recover improper payments. Unified program-integrity contractors investigate suspicious claims and refer cases to law enforcement. Recovery audit contractors perform targeted audits. A supplemental medical review contractor conducts medical record reviews for CMS and other agencies. The Comprehensive Error Rate Testing Program measures the improper-payment rate in FFS Medicare, which was 6.55 percent in FY 2025, representing $28.8 billion in improper federal payments. Most errors stem from insufficient documentation, especially in skilled nursing facilities and outpatient settings.

Medicare makes capitated monthly payments to MA plans for their Medicare enrollees. Those payments are risk adjusted using demographic and diagnostic information to account for differences in enrollees' expected costliness. CMS estimated that 6.1 percent of payments to MA plans were improper in FY 2025, representing $23.7 billion. That estimate was based on a review of diagnosis codes that plans submitted for enrollees. CMS's primary corrective action for MA improper payments is the MA risk-adjustment data-validation (RADV) audits, which review medical records to validate diagnosis codes used for risk-adjustment purposes. Recent audit results indicated that medical-record discrepancies, including documentation not submitted,

accounted for 85 percent of all improper payments in MA, but more results are expected this year. CMS plans to expand RADV audits and apply extrapolation to recover MA overpayments.

In Part D, payments are reconciled based on prescription drug event records. CMS estimated a 4.0 percent Part D payment error rate in payment year 2023, representing $4.2 billion in improper federal payments, mostly due to missing documentation. Medicare drug integrity contractors investigate potential improper payments and conduct audits of plan sponsors.

Across the Medicare program, most improper payments are due to lack of documentation or other errors, but some result from fraud, which is intentional deception or misrepresentation of the information submitted on claims. Within CMS, the Center for Program Integrity (CPI) has the lead in preventing and detecting fraudulent activities. The CPI has a broad range of responsibilities for both Medicare and Medicaid. The Department of Health and Human Services Office of Inspector General has responsibility for investigating and detecting fraud and for provider exclusions, barring an individual or entity from billing Medicare. The Department of Justice investigates and prosecutes fraud. Fraudulent activities have more than financial implications: Beneficiaries who are victims of Medicare fraud may experience real harm in addition to their own financial losses. ■

Improper payments are payments that should not have been made or were made in the incorrect amount. The term generally includes overpayments or underpayments such as payments to an ineligible recipient, payments for an ineligible good or service, duplicate payments, payment for a good or service not received, and payments that do not account for credit for applicable discounts (Government Accountability Office 2025). Improper payments are payments for items and services that do not conform to Medicare policies or payments when the information is insufficient to determine whether a payment was proper. Not all improper payments represent fraud or abuse. The Department of Health and Human Services' annual agency financial report for fiscal year (FY) 2025 stated that Medicare was responsible for an estimated $56.7 billion in improper payments that year, including $28.8 billion from fee-for-service (FFS) Medicare, $23.7 billion from Medicare Advantage (MA), and $4.2 billion from Medicare Part D (Department of Health and Human Services 2026).

In this chapter, we review how CMS pays for items and services under the FFS Medicare program and the roles of different entities in making those payments, including the various contractors that are responsible for certain payment operations. We then provide an overview of CMS's program-integrity efforts, including those related to improper payments in FFS Medicare, MA, and Part D.

How FFS Medicare pays for items and services under Part A and Part B

To be paid by FFS Medicare, a provider must first enroll in Medicare by completing an application process that may include requirements for accreditation. The enrollment process and requirements vary by type of provider. Most providers that are enrolled in Medicare bill FFS Medicare directly for the items and services they provide and agree to accept Medicare payments as payment in full, billing beneficiaries for the statutorily allowed deductibles and copayments (referred to as "accepting assignment"). The share of physicians who accept assignment varies by specialty.

FFS Medicare payments are generated from claims submitted by enrolled providers. To pay FFS claims, CMS relies on Medicare administrative contractors (MACs)—private entities that have been awarded a contract to process Medicare Part A and Part B medical or durable medical equipment, prosthetics, orthotics, and supplies (DMEPOS) claims submitted by providers or entities in a specified geographic jurisdiction for services or items delivered to FFS beneficiaries. In FY 2023, CMS reported that the 16 MACs processed more than 1.1 billion FFS claims and paid out approximately $431.5 billion (Centers for Medicare & Medicaid Services 2024i). By law, MACs must pay "clean" claims within 30 days of receipt. MACs use a multitiered process to verify claims before making payment. Claims first undergo "front-end" edits to verify the basic accuracy and completeness of information on the claim and then undergo a second stage of review to ensure against duplicate claims. Claims are then screened to check for items or services that should not be billed together and, when applicable, evaluated for compliance with Medicare coverage and payment policies.

Provider enrollment in Medicare

To enroll in Medicare, all providers (including institutions like hospitals, individual clinicians, and suppliers) must provide a national provider identifier (NPI) from the National Plan and Provider Enumeration System (NPPES) and complete an enrollment application on the Medicare Provider Enrollment, Chain, and Ownership System (PECOS).[1] The PECOS application requests information about any adverse actions (e.g., suspensions or revocation of license, conviction of felonies, or revocation of privileges from billing Medicare or other federal or state health care programs) and electronic fund transfer documentation. MACs review applications for practitioners and suppliers (applications from suppliers of DMEPOS are reviewed by the DME-MAC) and have the authority to approve enrollment (Centers for Medicare & Medicaid Services 2024f).

DMEPOS suppliers are required to obtain accreditation from a CMS-approved organization before they can enroll in Medicare using PECOS. One of the DME–MACs reviews the application information, but before completing enrollment, the provider is required to post a surety bond (Centers for Medicare & Medicaid Services 2025d).

For Part A providers (such as hospitals and skilled nursing facilities) seeking to enroll in Medicare, applications are first reviewed by MACs and then are referred to the appropriate state survey agency to check the facility's licensure and conduct a survey to assess the facility's compliance with the applicable Medicare conditions or requirements of participation. Part A providers can opt to substitute certification from a CMS-approved accrediting organization rather than use the state survey agency. Once accreditation is achieved, a provider's application is reviewed again by the designated MAC and then by CMS, which assigns a certification number and effective date, executes the provider agreement, and updates the national database. The designated MAC then issues the final approval notification (Centers for Medicare & Medicaid Services 2025e).

Once enrolled in Medicare, any providers (whether paid under Part A or Part B) that experience a change in their ownership structure are required to notify CMS of the identity of the old and new owners, how the new entity will be organized, and when the change will take place (Centers for Medicare & Medicaid Services 2025h). They are also required to report any adverse legal actions or a change in practice location.

Not all providers that are enrolled in Medicare bill FFS Medicare directly for the items and services they provide, but most do. In Medicare Part B, participating providers agree to accept Medicare payments as payment in full and can bill beneficiaries for the statutorily allowed deductibles and copayments, an arrangement referred to as "accepting assignment." These providers bill Medicare and receive the payment directly from Medicare. Nonparticipating providers do not agree to accept Medicare payment as payment in full. Instead, a nonparticipating provider can charge up to 115 percent of the Medicare payment amount, referred to as the "limiting charge." Medicare pays nonparticipating providers 5 percent less than the amount allowed for participating providers, and the beneficiary is responsible for paying the balance, which may be up to 35 percent of the amount that the nonparticipating provider charges (Centers for Medicare & Medicaid Services 2025c, First Coast Service Options Inc. 2026).[2] Nonparticipating providers may bill Medicare directly, though some require beneficiaries to submit the claim to Medicare themselves (Centers for Medicare & Medicaid Services 2025c, Medicare Rights Center 2025).

Providers who choose not to enroll in Medicare are considered to have opted out. Opt-out providers bill the beneficiary directly without any restriction on the fee, and the service is considered by all participants not covered by Medicare.[3] Providers can change their status every two years.

Ninety-eight percent of nonpediatric physicians are enrolled in and participate in the Medicare program (that is, accept assignment), and 1.3 percent have opted out, but these shares vary by specialty and location. As of November 2024, 8.1 percent of psychiatrists, 4.5 percent of plastic and reconstructive surgeons, and 3.2 percent of neurologists had opted out of Medicare. In contrast, less than 0.1 percent of emergency medicine physicians, oncologists, radiologists, and pathologists had opted out (Cottrill et al. 2025). Some practitioners, such as physician assistants, nurse practitioners, and clinical psychologists, are required to accept assignment for their services (Centers for Medicare & Medicaid Services 2025h, Novitas Solutions 2024).

Providers bill FFS Medicare using standardized claims formats

In FFS Medicare, payments are generated from claims submitted by the providers.[4,5] Claims are designed to provide the information a payer needs to know—what the beneficiary received and how much to pay. In addition to information about the beneficiary and the provider, claims contain dates of service or delivery of the item, description of the item or service, and the reason for the service (diagnosis) using standardized medical code sets.[6] Other information about the service is conveyed in modifier codes, type-of-bill codes, condition codes, occurrence codes, and revenue codes (Noridian Healthcare Solutions 2025c).[7,8] Claims forms started as paper forms and continue to be known colloquially by their paper-form names.[9,10] Claims are now transmitted electronically, and the formats are dictated by the relevant standard for the electronic transaction.[11] Some providers use clearinghouses or billing services to facilitate their claims submissions to check the information on claims and ensure that it is complete before submission to Medicare and other payers or plans.

The structure of claims is not determined by CMS. The Health Insurance Portability and Accountability Act of 1996 (HIPAA) established an administrative process for developing consensus among stakeholders for health care transactions, including claims forms. The same basic claims format is used by all insurers and payers. In addition, some Medicare payment systems require additional information to be submitted on patient-assessment forms.[12]

Medicare administrative contractors process FFS claims

Providers send almost all Part A and Part B claims to a MAC using electronic data interchange (EDI) software.[13] MACs are private entities that have been awarded a contract to process Medicare Part A and Part B medical or DMEPOS claims for FFS beneficiaries in specified jurisdictions.

CMS relies on MACs as the primary operational contacts between Medicare's FFS program and the health care providers enrolled in the program. Currently, there are 12 A/B MACs (4 of which function as the home health and hospice MACs) and 4 DME-MACs. In FY 2023, CMS reported that MACs collectively served more than 1.2 million health care providers enrolled in FFS Medicare, processed more than 1.1 billion FFS claims (including approximately 192 million Part A claims and 950 million Part B claims), and paid out approximately $431.5 billion (Centers for Medicare & Medicaid Services 2024i). Beyond paying claims, MACs have additional responsibilities. They enroll providers (as discussed above), audit cost reports, develop local coverage determinations, educate providers on Medicare policies, respond to provider inquiries, and handle first-level claims appeals. Figure 3-1 (p. 110), Figure 3-2 (p. 111), and Figure 3-3 (p. 112) show the MAC jurisdiction regions (Centers for Medicare & Medicaid Services 2024i).

To process a FFS Medicare claim, a MAC must receive it within one year after the item or service has been furnished. By law, if the claim is "clean," it must be paid within 30 days of receipt, or the MAC must pay interest to the provider. A clean claim is one that complies with all Medicare policies, without errors, omissions, or discrepancies, and requires no additional investigation by the MAC.

Verifying FFS claims for payment

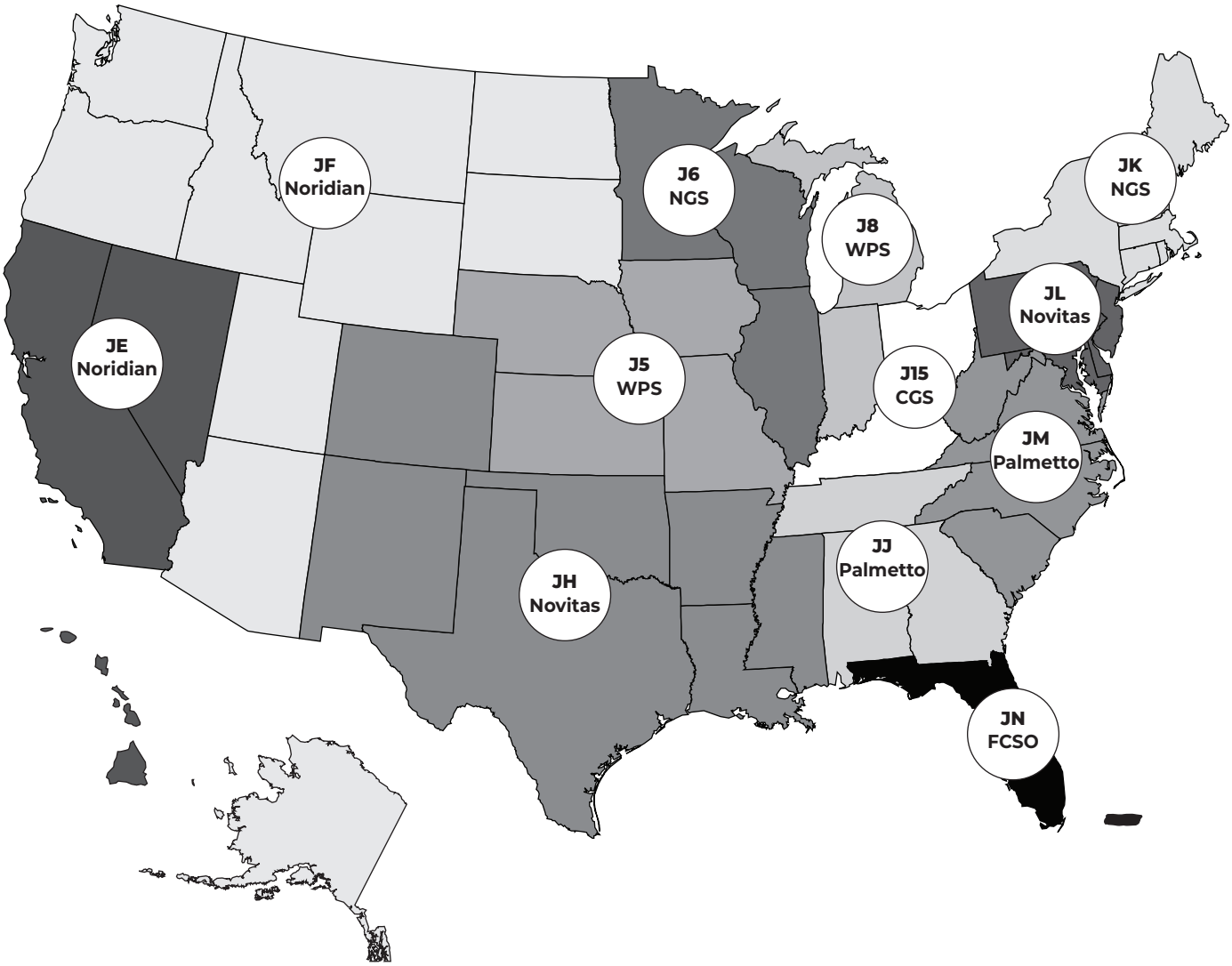
MACs depend upon a multitiered process to verify claims before making payments. The beneficiaries' enrollment is verified, and claims undergo front-end edits, which check that the information on the claim is complete and verify basic information such as provider and beneficiary information and claim dates.

The second stage of review includes "implementation guide" edits, a more detailed and situation-specific examination of the elements on the submitted claim. At this stage, the claim is checked for duplicate claims or for a prior-authorization number, if one is required. To detect duplicate claims, comparisons are made with prior paid or pending claims. All exact duplicate claims or claim lines are rejected or may be auto-denied by the programmed edits.[14,15] Suspected duplicate claims (or claim lines) are matched on beneficiary information, provider identification, and approximate dates. Suspected duplicates are then submitted to more complex edits and/or manual review by a MAC to determine whether to pay or deny the claim(s). Some claims that appear to be duplicates on initial check may have additional information that on closer examination identifies them as separate items or services. For example, a claim may have matching beneficiary, date, providers, and service, but another claim element called a modifier could be used to provide additional information that distinguishes the services, such as that the same procedure was performed on the right and left sides of the patient, as shown by the modifiers "RT" and "LT."[16] Claims are also checked for other elements such as bill type or condition codes that could distinguish a service from another service with similar claim elements. For example, an institutional claim may contain a bill-type code showing that the claim is a correction of an earlier claim, thereby indicating that the claims-processing software should replace the claim rather than pay it as a duplicate.

In the third stage of review, claims are evaluated for Medicare coverage and payment policies. Claims for practitioner and outpatient services and DMEPOS are screened using over 4.5 million National Correct Coding Initiative (NCCI) edits. NCCI edits check for items or services that should not be billed together. There are three main categories of these code-to-code edits, which are updated quarterly: procedure-to-procedure edits, medically unlikely edits, and add-on-code edits. A procedure-to-procedure edit might

FIGURE 3-1

Part A/B MACs, by jurisdiction



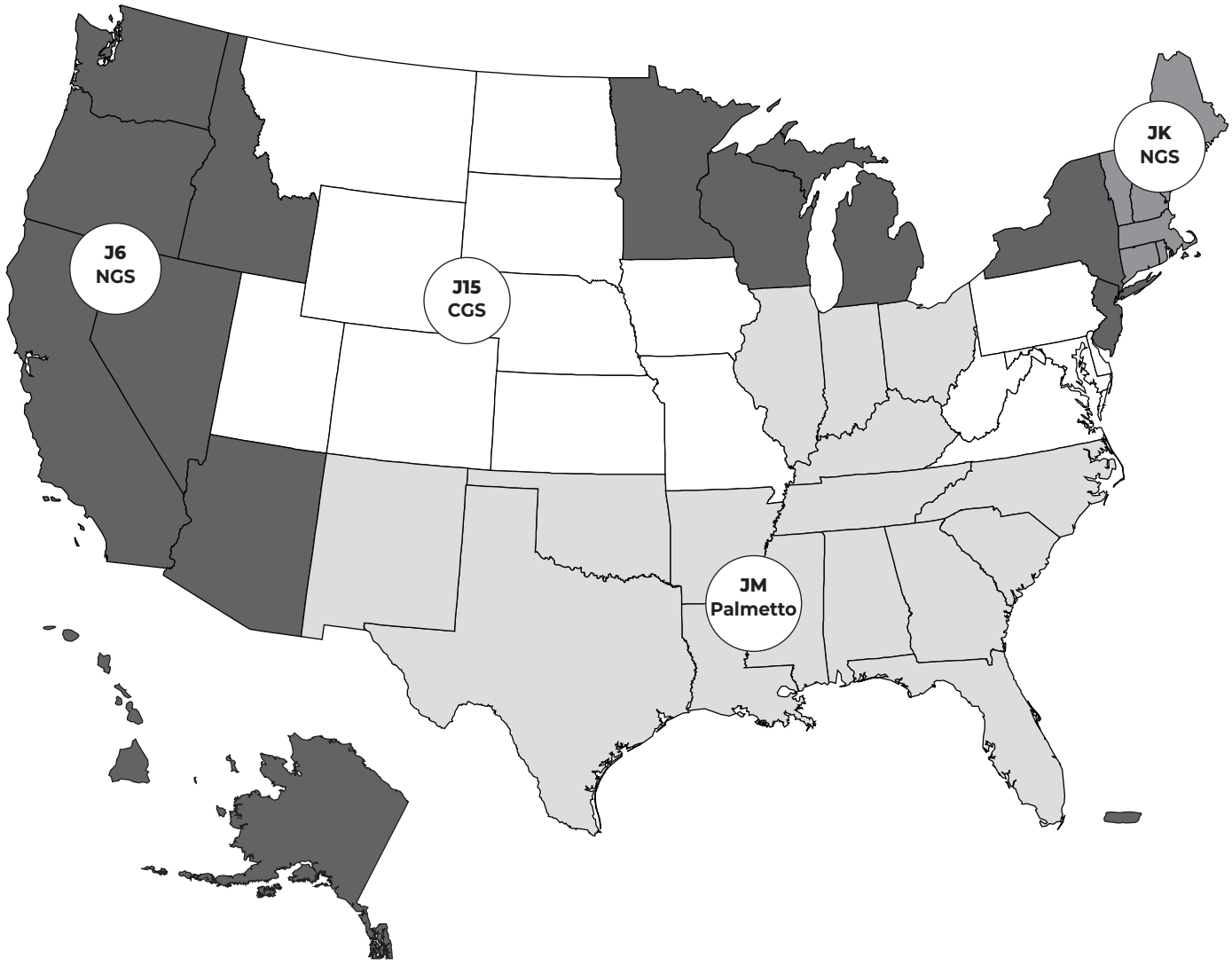
Note: MAC (Medicare administrative contractor). MACs are private entities that have been awarded a contract to process Medicare claims for fee-for-service beneficiaries in specified jurisdictions. There are 12 Part A/B MAC jurisdictions, denoted by number or letter such as J5 or JL. As this report went to press, the following entities were under contract to process Part A and Part B medical claims: CGS Administrators; First Coast Service Options (FCSO); National Government Services (NGS); Noridian Healthcare Solutions; Novitas Solutions; Palmetto GBA; and Wisconsin Physicians Service Government Health Administrators (WPS).

Source: https://www.cms.gov/files/document/ab-jurisdiction-map03282023pdf.pdf.

screen out a heart rhythm strip that is billed with a full 12-lead electrocardiogram (ECG); these services cannot be billed together because the rhythm strip is one part of the 12-lead ECG. Medically unlikely edits screen out claims with medically improbable unit numbers, such as a claim for trimming 13 toenails. Add-on-code edits check whether any add-on codes are accompanied by the correct primary codes: For example, this type of edit might screen out a claim for spine surgery that has a primary code for a disc removal in the lower spine and an add-on code that is intended to be used with a procedure on the vertebra rather than on the disc.

FIGURE 3-2

Home health and hospice MACs, by jurisdiction



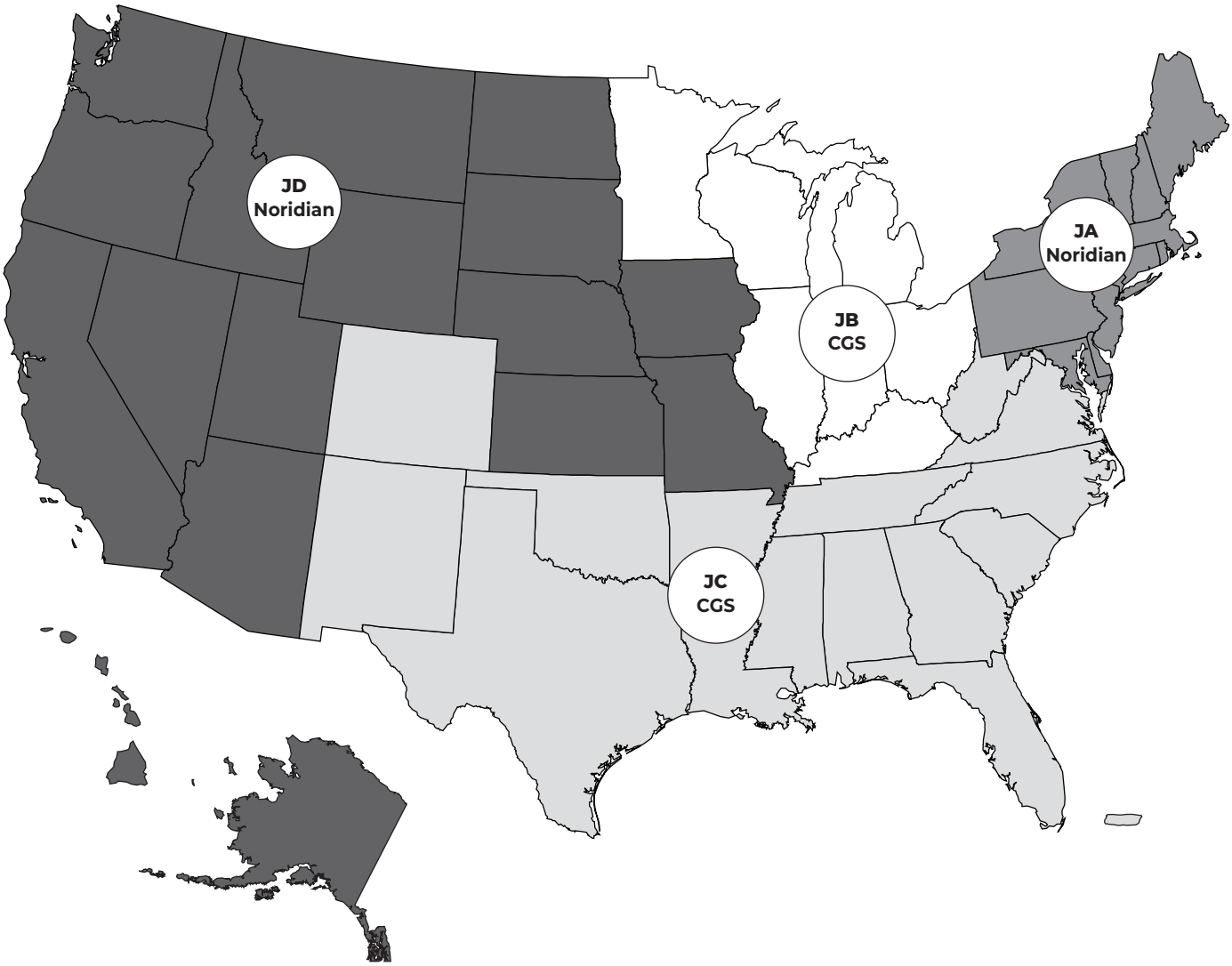
Note: MAC (Medicare administrative contractor). MACs are private entities that have been awarded a contract to process Medicare claims for fee-for-service beneficiaries in specified jurisdictions. There are four home health/hospice MAC jurisdictions, denoted by number or letter such as J6 or JK. Jurisdictions may include noncontiguous areas. As this report went to press, the following MACs were under contract to process home health and hospice claims: CGS Administrators, National Government Services (NGS), and Palmetto GBA.

Source: https://www.cms.gov/files/document/hhh-jurisdiction-map03282023pdf.pdf-0.

Claims can be checked to determine whether the item or service is reasonable and necessary for the treatment of illness or injury and therefore is covered by Medicare. Coverage determinations are made through national coverage determinations (NCDs) by CMS, local coverage determinations (LCDs) by MACs, or on a case-by-case basis by a MAC. The claims-processing software checks for compliance with NCDs and LCDs. If there is an NCD or LCD, the claims system will typically include an edit to flag whether specific diagnoses and other procedures meet the coverage requirements. MACs can also develop other

FIGURE 3-3

DME MACs, by jurisdiction



Note: DME (durable medical equipment), MAC (Medicare administrative contractor). MACs are private entities that have been awarded a contract to process Medicare claims for fee-for-service beneficiaries in specified jurisdictions. There are four DME jurisdictions, denoted by letters A, B, C, and D. As this report went to press, the following MACs were under contract to process DME, prosthetics, orthotics, and supplies claims: CGS Administrators and Noridian Healthcare Solutions.

Source: https://www.cms.gov/files/document/dme-jurisdiction-map03282023pdf.pdf-0.

local edits that they add to their claims-processing systems. Case-by-case reviews affect only a small number of claims that undergo manual review. MACs have the option to request additional documentation to demonstrate that the items or services on such claims are medically necessary (Centers for Medicare & Medicaid Services 2024e).

MACs identify some claims for postpayment review, the traditional method of identifying whether a claim should not have been paid. These postpayment reviews examine whether an item or service should not have been covered (was not medically necessary) or was billed incorrectly (for coding, setting, or duplicate services). If the review identifies an

improper payment, the MAC must try to recoup the overpayment from the provider; this process is often referred to as "pay and chase."

If a claim is denied, providers and beneficiaries have the right to appeal. In 2024, the FFS claims initial-denial rates for Part A, Part B, and DMEPOS were 8 percent, 10 percent, and 14 percent, respectively (Centers for Medicare & Medicaid Services 2026m). FFS Medicare beneficiaries and providers wishing to appeal a claims denial have five escalating levels of appeal open to them (Centers for Medicare & Medicaid Services 2026e).

Identifying and reducing improper FFS Medicare payments

CMS has developed new tools to decrease improper payment of FFS claims. To identify and reduce improper payments before they are made, MACs now perform limited prior authorization and preclaims reviews, focusing on services that are less likely to be medically necessary. Prior authorization and preclaim review are similar but differ in the timing of the review and when services can begin. Under prior authorization, the provider submits the prior-authorization request and receives the coverage decision before services are rendered. Under preclaim review, the provider or supplier submits the preclaim review request and receives the decision before claim submission; however, the provider or supplier can render services before submitting the request.

Recently, CMS has begun receiving FFS claims early in the reviewing process, which provide information before MACs pay the claim. CMS uses the Fraud Prevention System (FPS) edits on these claims, described later, to identify suspicious billing patterns and potentially fraudulent activities before payment is made (Centers for Medicare & Medicaid Services 2026f).

CMS has established nationwide prior-authorization requirements for certain services and items. In addition, CMS recently launched a new initiative, the Wasteful and Inappropriate Service Reduction (WISeR) Model, in selected states to test a new prior-authorization process using artificial intelligence and machine learning for specified services. Other CMS demonstrations in specified states are testing preclaim and postpayment review for services provided by home health agencies (HHAs) and inpatient rehabilitation facilities (IRFs). CMS has also expanded prepayment review of newly enrolled hospices' claims.

Finally, beyond the immediate payment process, CMS engages several contractors other than MACs to analyze paid claims data to further identify and recover improper payments. In FY 2025, the improper-payment rate in FFS Medicare was estimated at 6.6 percent (equivalent to about $29 billion in improper payments) (Centers for Medicare & Medicaid Services 2026n).

Prior authorization review for certain services

CMS has established nationwide prior-authorization requirements for certain hospital outpatient department (HOPD) services, certain DMEPOS items, and repetitive, scheduled nonemergent ambulance transport. Prior authorization in FFS Medicare has been used:

- For services that are often cosmetic (and therefore not covered), including eyelid surgery (blepharoplasty), botulinum toxin injections, removal of excess skin from the lower abdomen (panniculectomy), nose reshaping (rhinoplasty), and treatment of varicose veins (vein ablation), beginning in 2020. CMS estimated that requiring prior authorization resulted in a 21 percent decrease in payments for these services between 2020 and 2024 (Centers for Medicare & Medicaid Services 2025m).
- For selected services that have experienced large increases in volume. In 2021, CMS required prior authorization for implanted spinal neurostimulators (for the treatment of back and leg pain) and for cervical fusion with disc removal (for the treatment of neck and arm pain); in 2023, prior authorization was required for facet-joint injections (for the treatment of neck and back pain). Between 2021 and 2024, payments for implanted spinal neurostimulators and cervical fusions decreased by 29 percent; between 2023 and 2024, facet-joint injections decreased 18 percent (Centers for Medicare & Medicaid Services 2025m).
- For many DMEPOS items that have frequently been subject to unnecessary utilization. For these items, a face-to-face encounter and a clinician's written order are now required for 62 Healthcare

Common Procedure Coding System codes, including pressure-reducing support systems, power wheelchairs, lumbar-sacral orthoses, knee orthoses, and other arm and leg orthoses (braces). Preauthorization began in 2017 with a limited number of items and has been expanded and modified. Payments for orthoses decreased 85 percent between 2021 and 2024 (Centers for Medicare & Medicaid Services 2025m, Centers for Medicare & Medicaid Services 2016).

- For ambulance providers for repetitive, scheduled nonemergent transports. CMS has implemented "voluntary" prior authorization for such services, which are often used to transport patients to dialysis treatments. If the ambulance supplier opts not to seek prior authorization, claims for these services are subject to prepayment medical review. Payments for these services decreased 79 percent between 2014 and 2024 (Centers for Medicare & Medicaid Services 2025m).

Under the new WISeR Model, data companies with expertise in artificial intelligence and machine learning will conduct medical reviews and validate coverage determinations to test whether using enhanced technology provides an improved and expedited prior-authorization process for FFS Medicare. CMS believes this model could help reduce inappropriate utilization, lower spending in FFS Medicare, expedite decision-making, and ease provider administrative burden (Centers for Medicare & Medicaid Services 2025i).

Data companies participating in WISeR were chosen to operate in selected regions in Arizona, New Jersey, Ohio, Oklahoma, Texas, and Washington.[17] FFS Medicare providers in those areas are given the option to submit a prior-authorization request for the model's selected items and services or go through a postservice review before payment to ensure that the delivered item/service met Medicare coverage, coding, and payment criteria (Centers for Medicare & Medicaid Services 2025i). The model focuses on items and services that (1) may pose concerns related to patient safety if delivered inappropriately; (2) have existing publicly available coverage criteria; and (3) may involve prior reports of fraud, waste, and abuse. Examples of such services are skin and tissue substitutes, electrical nerve-stimulator implants for a variety of indications, epidural steroid injections for pain management, percutaneous vertebral augmentation for vertebral compression fractures, cervical fusions, diagnosis and treatment of impotence, knee arthroscopy for knee osteoarthritis, and potentially other items and services as well. The model excludes services provided only to inpatients, emergency services, and services that would pose a substantial risk to patients if significantly delayed. Participating data companies will receive a percentage of the expenditures associated with averted wasteful, inappropriate care as a result of their reviews. The percentage will be adjusted based on the participant's performance on measures related to the process, including provider experience. The model is expected to end on December 31, 2031 (Centers for Medicare & Medicaid Services 2025i).

Preclaim and prepayment review

Currently, MACs are testing preclaim reviews in two limited demonstrations in specified states, one for HHAs and another for IRFs. The HHA Review Choice Demonstration began in 2016 in Illinois and has expanded to Florida, North Carolina, Ohio, Oklahoma, and Texas. Initially, HHAs in the specified states choose between 100 percent preclaim review or 100 percent postpayment review; the majority have chosen preclaim review. After six months, if HHAs demonstrate compliance with the Medicare rules through either preclaim review or postpayment review, compliant HHAs can choose from continued preclaim review, "spot checks" on 5 percent of prepayment review, or selective postpayment review of a random sample of claims (Centers for Medicare & Medicaid Services 2025k). If an HHA choosing preclaim reviews does not submit the preclaim review and the claim is payable, it will be paid with a 25 percent reduction of the full claim amount. The demonstration's goal is to reduce the number of Medicare appeals and improve provider compliance with Medicare program requirements without delaying care to beneficiaries or altering the home health benefit (Centers for Medicare & Medicaid Services 2025k). Although payments for home health services have declined during the demonstration, other changes have occurred in the home health payment system, so the decrease cannot be attributed to the demonstration.

The IRF Review Choice Demonstration began in 2023 in Alabama and was expanded to Pennsylvania in 2024, with plans to extend the demonstration to California

and Texas. As with the HHA demonstration, initially IRFs in the specified states choose between 100 percent preclaim review or 100 percent postpayment review; 94 percent have chosen preclaim review. After six months, if IRFs demonstrate compliance with the Medicare rules through either the preclaim review or postpayment review, compliant IRFs can choose from continued preclaim review, "spot checks" on 5 percent of prepayment review, or selective postpayment review of a random sample of claims. The goal is to test improved methods for the identification, investigation, and prosecution of potentially medically unnecessary admissions and to decrease appeals. From 2023 to 2024, only a 4 percent change in the amount paid to IRFs in the two states has been observed (Centers for Medicare & Medicaid Services 2025m).

Because of concerns about the rapid growth in new hospices, CMS began expanded prepayment review of newly enrolled hospices' claims in September 2024 in Arizona, California, Georgia, Nevada, Ohio, and Texas (Centers for Medicare & Medicaid Services 2026b). CMS authorized this review as a provisional period of enhanced oversight of new providers, which can last between 30 days and one year.[18] As of June 2025, 668 hospices have been subjected to medical review, and CMS has revoked the enrollment of 122 of these hospices (Centers for Medicare & Medicaid Services 2025j).

Unified program-integrity contractors conduct postpayment review of suspicious FFS claims

MACs refer claims suspected of representing improper payments to the unified program-integrity contractors (UPICs). The five UPICs are responsible for detecting and deterring improper Medicare and Medicaid payments in specific geographic areas. The UPICs investigate Part A, Part B, and DMEPOS claims and identify improper payments that MACs can recoup. They conduct medical-record reviews, data analysis, and investigations (including onsite visits and interviews with beneficiaries, complainants, or providers). The goal is to identify postpay overpayments, as well as the need for payment suspensions, prepayment or auto-denial edits, and enrollment revocations. Many of the UPIC investigations focus on improper payments related to credible allegations of fraud, which are referred to law enforcement for consideration of civil or criminal prosecution. UPICs also support victims of Medicare identity theft (Centers for Medicare & Medicaid Services 2024i).

Many of the UPICs' investigations are initiated by referrals from the Fraud Prevention System (FPS), developed in 2011 and run by CMS's Center for Program Integrity (CPI). The FPS is designed to detect and prevent improper payments, using predictive analytics and data-analysis techniques. The FPS identifies suspicious billing patterns and potentially fraudulent activities. FPS models search for aberrant billing patterns in claims data. When FPS models identify egregious, suspect, or aberrant activity, the system automatically generates and prioritizes leads for further review and investigation. The FPS leads are referred to CMS's contractors for investigation, and FPS identifies edits that can be added to the claims-processing systems to reject and deny claims before they are paid (Centers for Medicare & Medicaid Services 2026k).

Recovery audit contractors (RACs) perform targeted postpayment reviews to identify improper payments for recoupment. Four RACs identify and correct improper payments made under Medicare Part A and Part B, and a fifth RAC reviews DMEPOS, home health, and hospice claims. The RACs receive contingent fees from a portion of their overpayment recoveries to fund their activities, though they also identify underpayments. CMS specifies the audit topics addressed by the RACs. Current audit topics are well defined, including nonphysicians billing without a correct assistant-at-surgery modifier, drugs and biologics in multidose vials, and hip orthoses within the reasonable useful lifetime or excessive units (Centers for Medicare & Medicaid Services 2024b). The RACs request documentation from providers to support their audit efforts and conduct postpayment audits to identify a wide variety of improper payments. In FY 2024, RACs identified $227.8 million in savings (Centers for Medicare & Medicaid Services 2025p).

The supplemental medical review contractor conducts medical records review

The supplemental medical review contractor (SMRC) conducts record reviews for CMS, as well as for the Department of Health and Human Services (HHS)

Office of Inspector General (OIG) and the Government Accountability Office (GAO) (Noridian Healthcare Solutions 2024). The SMRC conducts nationwide medical reviews of Medicaid, FFS Medicare Part A and Part B, and DMEPOS claims to determine whether claims follow coverage, coding, payment, and billing requirements. The SMRC reviews medical records and related documents from providers. The medical reviews may be prepayment or postpayment (Centers for Medicare & Medicaid Services 2024h). Some examples of prior projects are nonemergency ambulance transport, spinal-cord stimulators, outpatient hyperbaric oxygen, and therapeutic shoes for diabetics (Noridian Healthcare Solutions 2025a). Current projects include reviews of hyperbaric oxygen, vertebral kyphoplasty, and total knee arthroplasty (Noridian Healthcare Solutions 2025b, Noridian Healthcare Solutions 2024).

Comprehensive Error Rate Testing measures improper payments

Each year, CMS is required by law to report the magnitude of improper payments.[19] To measure the improper-payment rate in FFS Medicare, CMS conducts Comprehensive Error Rate Testing (CERT). The CERT Program reviews a random sample of FFS Medicare claims—in 2025, approximately 37,500 claims—to determine whether the claims were properly paid (Centers for Medicare & Medicaid Services 2024c). In FY 2025, the FFS Medicare improper-payment rate was 6.6 percent (equivalent to $28.8 billion in federal payments), down from a high of 12.7 percent in FY 2012 (reported in 2014) (Centers for Medicare & Medicaid Services 2026a). While the improper-payment rate for FFS Medicare has generally declined, the expenditures on improper payments have increased because Medicare spending has increased over this period. The error rate is higher for DMEPOS suppliers (24.2 percent) and Part B providers (8.4 percent) and lower for inpatient prospective payment systems hospital providers (3.2 percent). In FFS Medicare, insufficient or missing documentation was the most common reason for improper payments, accounting for 68 percent of improper payments. Services in skilled nursing facilities were associated with the largest share of improper payments, followed by payments in hospital outpatient departments, IRFs, and hospices (Centers for Medicare & Medicaid Services 2025a).[20]

Assessing and reducing improper payments in Medicare Advantage and Part D

In Medicare Part C and Part D, CMS makes payment to MA and Part D plans rather than to providers; plans are then responsible for paying providers. As a result, the processes for determining whether MA and Part D payments are improper differ from the processes used in FFS Medicare. CMS generally does not assess specific items or services in MA but examines the inputs used to determine the payments to the plans. In Part D, CMS assesses the accuracy of prescription drug event (PDE) data.

Assessing improper payments in MA

The MA program (Medicare Part C) gives Medicare beneficiaries the option of receiving benefits from private plans rather than from traditional FFS Medicare. Medicare pays insurers offering MA plans a monthly capitated amount that is risk adjusted using demographic and diagnostic information to account for differences in MA enrollees' expected spending. The demographics for each enrollee are gathered by CMS, while the diagnostic information flows from diagnosis codes included in encounter data that are submitted by plans. (Diagnostic information can also flow from MA plan-initiated "chart reviews" that identify diagnoses not captured through encounter data.[21]) Those diagnosis codes are aggregated into CMS hierarchical condition categories (CMS–HCCs) by the risk-adjustment model. (For more information on Medicare's payments to MA plans, see MedPAC's Medicare Advantage *Payment Basics*.)

The Medicare Part C improper-payment measurement (IPM) measures the improper-payment rate in MA by assessing whether diagnosis codes submitted by MA plans for a random sample of enrollees are supported by medical-record documentation. Based on a sample of 930 beneficiaries, CMS estimated a 6.1 percent error rate in Medicare payments to MA plans in payment year 2023, representing $23.7 billion in improper federal payments (Centers for Medicare & Medicaid Services 2026c).[22]

These estimates of improper payments in MA are conceptually different from estimates of the effects of higher coding intensity in MA, but there is likely overlap

between the two estimates. Higher coding intensity in MA is driven by several factors, including MA plans documenting diagnoses more comprehensively than providers in FFS Medicare do, submitting incorrect or fraudulent diagnostic data, applying different clinical discretion to diagnostic coding, and other reasons (Medicare Payment Advisory Commission 2026).[23] The diagnosis codes that contribute to higher coding intensity in MA may or may not be supported by medical-record documentation. Only the diagnosis codes that are not supported by medical-record documentation are considered improper. Although there is some overlap between improper payments and coding intensity, the two concepts are sufficiently different that we do not expect estimates of improper payments in MA to match estimates of higher MA coding intensity.

CMS also conducts risk-adjustment data-validation (RADV) audits, which are conceptually similar to the estimates of improper payments but have some important differences in their purpose and implementation. Similar to the IPM, the RADV audit program addresses the diagnostic data underlying the CMS–HCC component of a risk score and does not address the data underlying the demographic components within selected MA contracts (Medicare Payment Advisory Commission 2019).

RADV audits of MA contracts have been limited, and reporting of results from audits that have occurred has been delayed. CMS initiated RADV audits of MA contracts in payment years 2011 to 2015, 2018, and 2019, and it plans to continue audits on an expedited basis until all remaining audits after payment year 2018 are completed. For RADV audits through payment year 2017, CMS used a protocol that audited roughly 5 percent of MA contracts per year; used a sample of 201 enrollees in each contract across three strata of beneficiaries with low, medium, and high risk scores; calculated an error rate for the sample population; and then calculated the overpayment amount for the sample of audited beneficiaries (that is, findings were not extrapolated to a larger population). Audits of 2007 risk-adjustment data identified diagnoses that did not meet risk-adjustment criteria and determined that average overpayment rates were well over 10 percent for most contracts under audit (Schulte 2016). CMS recovered $13.7 million in overpayments from audits of 37 contracts, based on overpayments for only the 7,437 beneficiaries included in the audit sample (Medicare Payment Advisory Commission 2019). No audits were conducted for payment years 2008, 2009, or 2010. For 2011, 2012, and 2013 payment years, CMS audited 30 contracts in each year and identified annual overpayments of between $3.3 million and $5.7 million (Centers for Medicare & Medicaid Services 2026h). For 2014 and 2015 payment years, CMS audited about 200 contracts and identified annual overpayments of $13.5 million and $11.2 million, respectively (Centers for Medicare & Medicaid Services 2026h). Recent audit results indicated that medical-record discrepancies, including documentation not submitted, accounted for 85 percent of all improper payments in MA (Centers for Medicare & Medicaid Services 2025n).

For audits that will be conducted for payment years 2018 and later, CMS finalized an audit method that would allow CMS to recover overpayments by extrapolating the error rate of the sampled enrollees to a larger population of audit-eligible enrollees in the contract. The majority of MA enrollees would be eligible for audit since nearly 70 percent of MA enrollees had at least one HCC in 2022, and only a small fraction of these enrollees would be excluded from the audit sample for other reasons (Medicare Payment Advisory Commission 2025b). However, in November 2024, CMS released a guidance document restricting the audit-eligible population to a much narrower set of enrollees in a given contract. Audits of 2018 data will focus on only two sets of beneficiaries: beneficiaries in the top decile of a contract's enrollees based on the greatest expected reduction in their risk score resulting from a RADV audit (based on CMS's improper-payment prediction model) or contract enrollees who had all their HCCs supported only by chart reviews. The first group of beneficiaries is roughly one-tenth of the beneficiaries who would have been audit eligible under methods applied to pre-2018 data. For the second group, between 2 percent and 3 percent of all MA enrollees (or between 3 percent and 4 percent of MA enrollees with at least one HCC) had all of their HCCs supported by only chart reviews,[24] and those enrollees had an average of 1.5 HCCs (Medicare Payment Advisory Commission 2025b).[25]

While progress has been made initiating audits for more recent years, recoveries had not yet been made

by FY 2024 (Office of Inspector General 2025b). On May 21, 2025, CMS announced plans to increase both the speed and the scale of the RADV audits "to obtain more reliable findings that can be appropriately extrapolated." CMS further specified that all plans will be audited annually, reviewing between 35 and 200 beneficiaries per contract, and audits of payment years 2018 to 2024 would be completed by early 2026 (Centers for Medicare & Medicaid Services 2025b). For audits of 2019 and 2020 data, CMS published methods that will focus on a contract's enrollees based on the greatest expected reduction in their risk score resulting from a RADV audit. Audits will include the top decile of such beneficiaries for 2019 data and the top quartile of such beneficiaries for 2020 data (Centers for Medicare & Medicaid Services 2026h). CMS also published a schedule for initiating audits of 2020 through 2025 data by April 2027, which would essentially eliminate the backlog of RADV audits (Centers for Medicare & Medicaid Services 2026h).

Assessing improper payments in Medicare Part D

Under Part D, Medicare pays monthly capitated payments as well as cost-based reimbursements to private plans to administer the outpatient prescription drug benefit. (For more information on Medicare's payments to Part D, see MedPAC's Part D *Payment Basics* (Medicare Payment Advisory Commission 2025a).)

The monthly capitated amounts are calculated based on plan bids that reflect plans' expected costs and are risk adjusted using demographic and diagnostic information to account for differences in Part D enrollees' expected spending. Similar to the CMS–HCC model used under the MA program, the demographics for each enrollee are gathered by CMS, while the diagnostic information flows from physician, inpatient hospital, and outpatient hospital records in FFS claims data or MA encounter data; that is, the sources of diagnostic information used in Part D's prescription drug HCC model and the CMS–HCC model are the same, and there is substantial overlap in the diagnoses used in the two models.

Part D differs from MA in that Medicare bears some of the risk of enrollees' spending by making (and receiving) additional payments to plans in addition to the risk-adjusted monthly capitated amounts. There are two types of risk-sharing arrangements: individual cost-based reinsurance and risk-corridor protection. Through reinsurance, Medicare shares the insurance risk for individuals with very high spending by paying a portion of those enrollees' spending over a threshold amount. Using risk corridors, Medicare shares the risk that plans bear for drug spending. When the actual drug spending amount differs from the drug spending that plans anticipated when they submitted their bids (and that is reflected in their capitated payments), risk corridors limit plans' losses and profits (above and beyond those assumed in their bids).

CMS makes interim monthly capitated and cost-based payments to Part D plans and then reconciles those payments with plans' actual spending after the end of the benefit year.[26] For the capitated payments, the reconciliation process may result in risk-corridor payments from Medicare to plans (for a portion of losses incurred by plans) or from plans to Medicare (for a portion of profits earned by plans) when losses or profits exceed risk-corridor thresholds. For the cost-based reinsurance payments, the reconciliation process allows Medicare to make payment adjustments to ensure that the interim payments align with actual spending; those adjustments result in payments from Medicare to plans or vice versa.

Because the reconciliation payments are based on costs computed from PDE records, inaccurate information in those records can affect Medicare spending. The Part D IPM estimates improper Medicare payments to Part D plans due to inaccurate PDE records, such as inconsistencies between information reported in PDEs and medication orders submitted by plans as supported documentation (Centers for Medicare & Medicaid Services 2026l). HHS reviews sampled PDEs to determine drug cost errors and uses that information to simulate improper payments for a representative sample of beneficiaries; the estimate of Part D improper payments was based on a randomly selected 5 percent sample of the Part D beneficiaries. These simulated improper payments are extrapolated to the entire Part D population to produce the overall Part D improper-payment estimate (Centers for Medicare & Medicaid Services 2026g).

In payment year 2023, the error rate on Part D program payments was estimated to be 4.0 percent of

program outlays, representing $4.2 billion in improper payments (Centers for Medicare & Medicaid Services 2026d, Centers for Medicare & Medicaid Services 2026l). Insufficient or missing documentation was the most common reason for Medicare Part D improper payments, at 75 percent in payment year 2023 (Centers for Medicare & Medicaid Services 2026l).

Medicare Part D is also reviewed by the Medicare Drug Integrity Contractors (MEDICs), which are entities contracted by CMS to detect and prevent fraud, waste, and abuse in Medicare Part C and Part D. Currently, the MEDICs consist of two contracts—the Investigations (I)–MEDIC and the Plan Program Integrity (PPI)–MEDIC. For example, the I–MEDIC may conduct investigative activities and referrals to law enforcement and analyze data to identify fraud and abuse among high-risk prescribers or pharmacies. In FY 2024, the I–MEDIC generated 989 investigations of complaints submitted to the I–MEDIC about alleged fraud, waste, and abuse in Part C and Part D and 132 law enforcement referrals (Centers for Medicare & Medicaid Services 2025g).[27] The PPI–MEDIC, on the other hand, is primarily focused on regulatory compliance and audits of Part C and Part D plans (Centers for Medicare & Medicaid Services 2025g). MEDICs thus differ from RADV contractors, who are focused on ensuring the accuracy of diagnosis codes submitted by MA organizations to determine the appropriateness of risk-adjusted payments under Part C.

Part D payments could also be affected by improper diagnosis codes. However, unlike in MA, where improper diagnoses can increase Medicare spending, any impact of improper diagnoses in Part D is expected to be budget neutral. In Part D, risk scores affect the relative payments to different plans but not the overall level of Medicare's payments. CMS's estimate of improper payments for Part D does not measure the effect of diagnosis codes.

Fraud prevention, detection, and prosecution

Improper payments have many sources. Many are due to lack of documentation or other errors. However, some improper payments result from intentional deception or misrepresentation of the information submitted on claims; these actions are termed "fraud." Several organizations focus on fraud because fraud prevention and detection are critical to reducing the overall amount of improper payments. Within CMS, CPI has the lead in preventing and detecting fraudulent activities. CPI is responsible for the various contractors described above who investigate improper payment. The HHS–OIG has responsibility for investigating and detecting fraud and excluding providers from billing Medicare. OIG and CPI also work with the Department of Justice (DOJ), which prosecutes fraud, at times with the assistance of the investigative capacity of the Federal Bureau of Investigation (FBI). The Health Care Fraud and Abuse Control (HCFAC) Program coordinates antifraud activities across agencies. Two groups also support the antifraud activities, the Health Care Fraud Prevention Partnership and the Senior Medicare Patrol.

CPI administers the contractors and programs described in the previous section (pp. 115–116) and is responsible for preventing, detecting, and combating fraud, waste, and abuse, which may include improper payments. CPI has a broad range of responsibilities for both Medicare and Medicaid, including provider-enrollment policy, data analysis, developing the FPS, managing contractors, and coordinating partnerships. CPI recommends modifications to programs and operations as necessary and cooperates with OIG, the DOJ, and law enforcement (Centers for Medicare & Medicaid Services 2024a).

OIG performs broad investigations and evaluations as well as targeted ones. OIG also has the authority to issue provider exclusions, which can last three to five years, barring an individual or entity from participating in any federally funded health care program, and can impose a civil penalty on anyone hiring an excluded individual or entity. In FY 2025, OIG excluded 2,839 individuals and entities from participation in Medicare, Medicaid, and other federal health care programs. Among these were exclusions based on criminal convictions for crimes related to Medicare, Medicaid, or other health care programs, for beneficiary abuse or neglect, and for state health care licensure revocations (Office of Inspector General 2025c, Office of Inspector General 2025d). CMS can issue payment suspensions to providers to block them from receiving Medicare payments after consulting with OIG and, if appropriate,

the DOJ, when there is a credible allegation of fraud. OIG also reviews and approves "safe harbor" relationships that are designated not to violate the anti-kickback statute.[28] OIG has reported that, in FY 2025, its investigations resulted in 701 criminal actions against individuals or entities that engaged in crimes related to Medicare and Medicaid and 876 civil actions, which include false claims, unjust-enrichment lawsuits filed in federal district court, and civil money penalty settlements. During FY 2025, OIG reported that its activities resulted in more than $19 billion in expected recoveries and receivables, $5.7 billion in investigative receivables, and $533 million in audit receivables (Office of Inspector General 2025c, Office of Inspector General 2025d).

The DOJ's main statutory authorities with respect to Medicare are the False Claims Acts (civil and criminal false-claims statutes), the anti-kickback statute, and the physician self-referral law. Some investigations are initiated by the organizations described above, but others come from whistleblower (or *qui tam*) complaints. The DOJ has reported that, in FY 2025, its activities recovered more than $6.7 billion from the health care industry, including managed care providers, hospitals and other medical facilities, pharmacies, pharmaceutical companies, laboratories, and physicians (Department of Justice 2026b). There were 641 new health care–related false-claims cases in FY 2025; that same year, 194 persons were charged with criminal health care fraud (Department of Justice 2025b). The FBI often participates in health care fraud investigations by the Criminal Division of the DOJ (Department of Justice 2025c).

The Health Care Fraud and Abuse Control (HCFAC) Program, established by HIPAA, is a comprehensive cross-agency program to combat fraud against all public and private health plans. Jointly directed by the Attorney General and the Secretary of Health and Human Services (HHS) (acting through the HHS OIG), it is designed to coordinate federal, state, and local activities. HCFAC has dedicated funding that is used to support fraud activities in the various agencies, and it produces an annual report showing expenditures on health care fraud activities and reports the accomplishments and activities of the participant organizations (Department of Justice 2025c, Office of Inspector General 2024).

Two other groups contribute to identifying and combating fraud. The Health Care Fraud Prevention Partnership, sponsored by CMS, is a national partnership of about 310 members, including private payers; federal, state, and local agencies (Medicare, Medicaid, and other programs); law enforcement agencies; and health care fraud associations (Centers for Medicare & Medicaid Services 2024a). The members share data, analytics, and discussions of results and strategies to identify potential vulnerabilities. They combine analyses of clinician, institutional, and pharmacy claims from public and private payers, which are shared through a portal and in public white papers (Centers for Medicare & Medicaid Services 2024a).

The Senior Medicare Patrol (SMP) is a program that provides funding to groups to identify fraud. There are 54 projects funded by grants from the Administration for Community Living in HHS. SMP projects use outreach and education to train older adults and other community members to prevent; recognize; and report health care fraud, waste, and abuse (Office of Inspector General 2025a).

In addition to financial implications for patients and the Medicare program, fraudulent activities could directly cause harm. Some recent convictions have included:

- A very-high-billing Michigan oncologist who provided cancer medications, including chemotherapy, to Medicare beneficiaries who did not have cancer. Patients suffered from the adverse effects of the medications as well as psychological trauma (Schecter et al. 2015, Tycko & Zavareei Whistleblower Practice Group 2022).
- A portable X-ray supplier in Maryland that prepared and billed for X-ray interpretations for patients in nursing homes by an unlicensed and unqualified reviewer. The supplier billed using identifiers of physicians not involved in the care or interpretation. These false reports resulted in two patient deaths due to missed diagnoses of conditions that could have been treated (Federal Bureau of Investigation 2016).
- An Alaska rheumatologist who administered and billed for injectable treatments that were expired, marked "not for administration," or did not contain the active medication. Records showed the physician purchased 369 units of medications but

billed for 4,829 units, resulting in patients being undertreated (Department of Justice 2026a, Erb 2026, Kuhn 2026).

- Practitioners in Arizona and Nevada who applied and billed for unnecessary expensive amniotic allografts for wounds without proper treatment for infections (Department of Justice 2025c).
- Cardiologists who performed invasive coronary and peripheral vascular procedures in patients who did not require that treatment (Carlson 2013, Carlson 2011, Department of Justice 2021, Department of Justice 2016, Department of Justice 2015, Department of Justice 2014a, Department of Justice 2014b, Newett 2025, U.S. Attorney's Office 2011).
- A manufacturer of knee prosthetic implants used in total knee arthroplasties that continued to sell implants that it knew were defective (Department of Justice 2025a).

In a paper published in 2020, researchers used Medicare data to compare beneficiaries who received medical treatment by providers who were later excluded from Medicare for fraud, patient harm, or a revoked license, referred to as fraud and abuse perpetrators (FAPs), with a large, random selection of FFS beneficiaries not treated by a FAP. All FAP-treated beneficiaries experienced higher mortality and emergency-hospitalization rates, even after risk adjustment and propensity-score weighting. The FAP-treated beneficiaries were more likely to be dually eligible for Medicare and Medicaid and disabled (Nicholas et al. 2020). ■

Endnotes

1 Applications are submitted either online or on paper mailed to the MAC.

2 Some Medigap plans and other secondary payers may cover the additional coinsurance and additional charges.

3 This arrangement is also referred to as "private contracting." Medicare will pay in emergency situations as described in the *Medicare Benefit Policy Manual*, Chapter 15, Sec. 40.28.

4 Technically, providers who submit Part B claims are called "suppliers," but for this chapter, the term "provider" will include both providers and suppliers. The word "provider" in this chapter refers to physicians and other practitioners, suppliers of DMEPOS, laboratories, and others providing Part B services as well as hospitals, nursing homes, home health agencies, and hospices, which provide Part A services.

5 Rarely, claims are submitted by beneficiaries that are still paper claims but are processed by the MACs by the same process as electronic claims after the information is entered into the claims-processing system.

6 For Part B claims, the procedure code sets are the Healthcare Common Procedure Coding System (HCPCS) developed by CMS and Current Procedural Terminology (CPT) developed and owned by the American Medical Association. Initially developed by the World Health Organization, the diagnosis code set is the International Classification of Diseases (ICD)-10-Clinical Modification (CM) as modified by the Centers for Disease Control and Prevention (CDC) for use in the U.S., and the Part A procedure code set is the ICD-10-Procedure Coding System (PCS) as developed by CMS and the CDC. Medicare payment systems may pay for items and services on a "bundled" basis; for example, most hospitals are paid on the basis of a diagnosis-related group that includes most items and services furnished by the hospital during an inpatient stay.

7 There are 382 modifiers that are two characters; four modifiers can be listed on each claim line. They specify information such as which side of the body or which finger or toe, if an assistant at surgery is billing, or if the service is not related to hospice diagnosis. Type-of-bill codes have four characters and describe the type of facility (e.g., hospital, skilled nursing facility, ambulatory surgery center), type of care (e.g., rural health center, comprehensive outpatient rehabilitation facility), and frequency (e.g., interim first claim, late-charge only, replacement of prior claim). Condition codes are two characters (e.g., to identify a second or subsequent interim claim by inpatient prospective payment systems hospitals, when a from or through date is changed, or other characteristics, such as the patient being homeless or treatment for a nonterminal condition for a hospice patient). Occurrence codes are two characters (e.g., to identify accident/medical coverage, date of hospice certification or recertification, date that cost-outlier status begins). Revenue codes are four-character codes that describe the type of care or resources used (e.g., semiprivate psychiatric bed, surgical intensive care, chest X-ray diagnostic radiology, pharmacy generic drugs).

8 Claims also include information about whether another payer should have responsibility for the payment.

9 For example, Form 1500 for clinician claims and the UB-04 for institutional claims.

10 Separate formats exist for certain types of claims, such as pharmacy and dental claims.

11 For example, the Health Care Claim Transaction Set (837).

12 Until 2023, CMS also required certificates of medical necessity for certain types of medical equipment.

13 Providers use EDI software to submit claims to the MAC portals or their clearinghouse. Some versions of this software are free. Some electronic health records seamlessly integrate with claims-submission software. Many providers use clearinghouses, which are private firms, to check that the information on their claims is complete and in the proper format to facilitate claims processing and avoid denials.

14 These claims have matching beneficiary identification, provider identification, procedure code, dates of service (or range of dates), type of service, procedure code or code for item, place of service, and billed amount.

15 Denied claims are not paid; rejected claims are returned to the provider for correction or added information and can be resubmitted and paid.

16 Modifiers are used on the 1500 claim form, but not all services have relevant modifiers.

17 The firms selected for WISeR are Cohere Health (Texas), Genseon Corporation (New Jersey), Humata Health (Oklahoma), Innovaccer (Ohio), Virtix Health (Washington), and Zyter (Arizona).

18 New hospices include those that are newly enrolled in Medicare, undergoing a change in ownership, or reactivating their enrollment after being in a deactivated status.

19 The Congress recently revised the requirements for improper-payment reporting in the Payment Integrity Information Act of 2019 (P.L. 116–117).

20 In skilled nursing facilities, hospital outpatient departments, and hospices, insufficient or missing documentation was the major reason, but in IRFs the reason was medically unnecessary care (p. 209, HHS FY 2024 Financial Report).

21 Chart reviews are a plan-initiated assessment of information in a patient's medical record, or chart. They allow MA plans to capture diagnoses that are not reported on claims or encounter data (for example, diagnoses made during an encounter in which the plan did not submit a record of the encounter to CMS or when the total number of diagnoses from the encounter exceeds the number of diagnosis fields on the encounter record). Chart reviews that document the diagnoses made during hospital and physician encounters in which medical services were provided are allowable for risk adjustment.

22 The total comprised $21.4 billion in overpayments and $2.2 billion in underpayments as reported in the FY 2025 Payment Error Results in the Part C IPM.

23 "Coding intensity" refers to the tendency for more diagnosis codes to be recorded for MA enrollees than for FFS beneficiaries, which causes payments for the same beneficiaries to be higher when they are enrolled in MA than the payments would be if they were enrolled in FFS Medicare. The Commission estimates that, due to higher coding intensity in MA, Medicare will spend $22 billion more for MA enrollees in 2026 than it would spend if those beneficiaries were enrolled in FFS Medicare. For more information on the effects of higher coding intensity in MA, see the Commission's status report on MA in our March 2026 report to the Congress.

24 Diagnoses that are identified only through chart review (i.e., are not recorded on encounter data) may include conditions that are no longer active or are not under active management. The Commission has found that MA plans' use of chart reviews is a major source of higher coding intensity—and higher payments—in MA. Some MA plans devote significant effort to conducting chart reviews to increase their payments from Medicare. For more information on MA plans' use of chart reviews to increase diagnosis coding, see the Commission's status report on MA in our March 2026 report to the Congress.

25 The number of HCCs and the weight of each HCC determine the payment to the MA plan.

26 Medicare also pays most cost-sharing liabilities for beneficiaries who receive the low-income subsidy (LIS). These payments to plans that are made on behalf of LIS beneficiaries are also paid on a monthly basis and are reconciled at the end of the benefit year.

27 The I–MEDIC has a form on its website for submission of complaints: https://www.qlarant.com/wp-content/uploads/2024/01/Qlarant_I-MEDIC_Complaint_Form_2024_01_03.pdf.

28 Anti-kickback laws prohibit offering, paying, soliciting, or receiving anything of value in exchange for referrals or business involving items or services covered by Medicare or Medicaid.

References

Carlson, J. 2013. Cardiologist targeted under 70% rule settles in heart-stent case. *Modern Healthcare*, July 3.

Carlson, J. 2011. Md. hospital to pay $1.8 million over unneeded stents. *Modern Healthcare*, August 11.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2026a. Comprehensive Error Rate Testing (CERT). https://www.cms.gov/data-research/monitoring-programs/improper-payment-measurement-programs/comprehensive-error-rate-testing-cert.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2026b. Period of enhanced oversight for new hospices in Arizona, California, Nevada, Texas, Georgia & Ohio. https://www.cms.gov/files/document/mln7867599-period-enhanced-oversight-new-hospices-arizona-california-nevada-texas-georgia-ohio.pdf.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2026c. Medicare Part C improper payment measurement (IPM). https://www.cms.gov/data-research/monitoring-programs/improper-payment-measurement-programs/medicare-part-c-ipm.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2026d. Medicare Part D program background. https://www.cms.gov/data-research/monitoring-programs/improper-payment-measurement-programs/medicare-part-d-ipm/program-background.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2026e. Original Medicare (Parts A and B fee-for-service): Initial determination/appeals process. https://www.cms.gov/medicare/appeals-and-grievances/orgmedffsappeals/downloads/flowchart-ffs-appeals-process.pdf.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2026f. Personal communication with Audits and Vulnerability Group, Center for Program Integrity, March 13.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2026g. Program background. https://www.cms.gov/data-research/monitoring-programs/improper-payment-measurement-programs/medicare-part-d-ipm/program-background.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2026h. RADV documents and data. https://www.cms.gov/data-research/monitoring-programs/medicare-advantage-risk-adjustment-data-validation-radv-program/radv-documents-data.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2026i. Review contractor directory: Interactive map. https://www.cms.gov/data-research/monitoring-programs/medicare-fee-service-compliance-programs/review-contractor-directory-interactive-map.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2026j. WISeR (Wasteful and Inappropriate Service Reduction) Model. https://www.cms.gov/files/document/wiser-fact-sheet.pdf.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2026k. Fraud prevention system 2. https://www.cms.gov/files/document/dasg-leaflet-fps2.pdf.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2026l. Part D improper payment measure (Part D IPM) fiscal year (FY) 2025 error rates results. https://www.cms.gov/files/document/fy-2025-medicare-part-d-error-rate-findings-results.pdf.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2026m. First level of appeal: Redetermination by a Medicare contractor. https://www.cms.gov/medicare/appeals-grievances/fee-for-service/first-level-appeal-redetermination-medicare-contractor.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2026n. Fiscal year 2025 improper payments fact sheet. https://www.cms.gov/newsroom/fact-sheets/fiscal-year-2025-improper-payments-fact-sheet.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2025a. 2025 *Medicare fee-for-service supplemental improper payment data.* Baltimore, MD: CMS. https://www.cms.gov/files/document/nov-2025-medicare-ffs-supplemental-improper-payment-data-2025922.pdf.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2025b. CMS rolls out aggressive strategy to enhance and accelerate Medicare Advantage audits. https://www.cms.gov/newsroom/press-releases/cms-rolls-out-aggressive-strategy-enhance-and-accelerate-medicare-advantage-audits.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2025c. Does your provider accept Medicare as full payment? https://www.medicare.gov/basics/costs/medicare-costs/provider-accept-Medicare.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2025d. Enroll as a DMEPOS supplier. https://www.cms.gov/medicare/enrollment-renewal/providers-suppliers/durable-medical-equipment-prosthetics-orthotics-supplies-dmepos.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2025e. Enrollment & certification roadmap for institutional providers. https://www.cms.gov/files/document/provider-enrollment-certification-roadmap.pdf.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2025f. Filing an appeal. https://www.medicare.gov/providers-services/claims-appeals-complaints/appeals.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2025g. *Fiscal year 2026: Justification of estimates for appropriations committees*. Baltimore, MD: CMS. https://www.cms.gov/files/document/fy2026-cms-congressional-justification-estimates-appropriations-committees.pdf.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2025h. *Medicare claims processing manual—Chapter 1: General billing requirements*. Baltimore, MD: CMS. https://www.cms.gov/regulations-and-guidance/guidance/manuals/downloads/clm104c01.pdf.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2025i. Medicare program; implementation of prior authorization for select services for the Wasteful and Inappropriate Service Reduction (WISeR) Model. Notice. *Federal Register* 90, no. 124 (July 1): 28749–28753.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2025j. Period of enhanced oversight for new hospices in Arizona, California, Nevada & Texas. https://www.cms.gov/files/document/mln7867599-period-enhanced-oversight-new-hospices-arizona-california-nevada-texas.pdf.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2025k. Prior authorization and pre-claim review initiatives: Review choice demonstration for home health services. https://www.cms.gov/data-research/monitoring-programs/medicare-fee-service-compliance-programs/prior-authorization-and-pre-claim-review-initiatives/review-choice-demonstration-home-health-services.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2025l. *Prior authorization and pre-claim review program stats for fiscal year 2023*. Baltimore, MD: CMS. https://www.cms.gov/files/document/pre-claim-review-program-statistics-document-fy-23.pdf.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2025m. *Prior authorization and pre-claim review program stats for fiscal year 2024*. Baltimore, MD: CMS. https://www.cms.gov/files/document/pre-claim-review-program-statistics-document-fy-24.pdf.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2025n. RADV audits: Fast facts. https://www.cms.gov/files/document/cpi-radvfact-sheet.pdf.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2025o. Review choice demonstration for inpatient rehabilitation facility services. https://www.cms.gov/data-research/monitoring-programs/medicare-fee-service-compliance-programs/prior-authorization-and-pre-claim-review-initiatives/review-choice-demonstration-inpatient-rehabilitation-facility-services.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2025p. *Report to Congress: Medicare and Medicaid integrity programs for fiscal year (FY) 2024*. Baltimore, MD: CMS. https://www.cms.gov/files/document/pre-claim-review-program-statistics-document-fy-24.pdf.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2024a. About the partnership. https://www.cms.gov/medicare/medicaid-coordination/healthcare-fraud-prevention-partnership/about.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2024b. Approved RAC topics. https://www.cms.gov/data-research/monitoring-programs/medicare-fee-service-compliance-programs/medicare-fee-service-recovery-audit-program/approved-rac-topics?page=14.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2024c. Improper payment rates and additional data. https://www.cms.gov/data-research/monitoring-programs/improper-payment-measurement-programs/comprehensive-error-rate-testing-cert/improper-payment-rates-and-additional-data.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2024d. Medicare Part D improper payment measurement. https://www.cms.gov/data-research/monitoring-programs/improper-payment-measurement-programs/medicare-part-d-ipm.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2024e. *Medicare program integrity manual—Chapter 3: Verifying potential errors and taking corrective actions*. Baltimore, MD: CMS. https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/Downloads/pim83c03.pdf.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2024f. Medicare provider enrollment. https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/EnrollmentResources/provider-resources/provider-enrolment/Med-Prov-Enroll-MLN9658742.html.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2024g. Required prior authorization list. https://www.cms.gov/data-research/monitoring-programs/medicare-fee-service-compliance-programs/prior-authorization-and-pre-claim-review-initiatives.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2024h. Supplemental medical review contractor. https://www.cms.gov/data-research/monitoring-programs/medicare-fee-service-compliance-programs/medical-review-and-education/supplemental-medical-review-contractor-smrc.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2024i. What's a MAC. https://www.cms.gov/medicare/coding-billing/medicare-administrative-contractors-macs/whats-mac.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2016. Medicare program; implementation of prior authorization process for certain durable medical equipment, prosthetics, orthotics, and supplies (DMEPOS) items and publication of the initial required prior authorization list of DMEPOS items that require prior authorization as a condition of payment. Implementation of list and phases. *Federal Register* 81, no. 245 (December 21): 93636–93637.

Cottrill, A., N. Ochieng, and T. Neuman. 2025. *How many physicians have opted out of the Medicare program*? Washington, DC: KFF. https://www.kff.org/medicare/issue-brief/how-many-physicians-have-opted-out-of-the-medicare-program/.

Department of Health and Human Services. 2026. *Fiscal year 2025: Agency financial report*. Washington, DC: HHS.

Department of Justice. 2026a. Anchorage doctor sentenced to prison for multi-million-dollar health care fraud and tax evasion. https://www.justice.gov/opa/pr/anchorage-doctor-sentenced-prison-multi-million-dollar-health-care-fraud-and-tax-evasion.

Department of Justice. 2026b. False Claims Act settlements and judgments exceed $6.8B in fiscal year 2025. Washington, DC: DOJ. January 15. https://www.justice.gov/opa/pr/false-claims-act-settlements-and-judgments-exceed-68b-fiscal-year-2025.

Department of Justice. 2025a. Aesculap implant systems agrees to pay $38.5M to resolve False Claims Act allegations related to knee implant failures and enters into a non-prosecution agreement related to the introduction of two adulterated medical devices into interstate commerce. https://www.justice.gov/opa/pr/aesculap-implant-systems-agrees-pay-385m-resolve-false-claims-act-allegations-related-knee.

Department of Justice. 2025b. *Fraud section: Year in review*. Washington, DC: DOJ.

Department of Justice. 2025c. National health care fraud takedown results in 324 defendants charged in connection with over $14.6 billion in alleged fraud. https://www.justice.gov/opa/pr/national-health-care-fraud-takedown-results-324-defendants-charged-connection-over-146.

Department of Justice. 2021. Orlando cardiologist pays $6.75 million to resolve allegations of performing unnecessary medical procedures. https://www.justice.gov/archives/opa/pr/orlando-cardiologist-pays-675-million-resolve-allegations-performing-unnecessary-medical.

Department of Justice. 2016. Florida cardiologist and his practice pay millions and agree to three years of exclusion to resolve alleged false billings for unnecessary procedures and illegal kickbacks. https://www.justice.gov/archives/opa/pr/florida-cardiologist-and-his-practice-pay-millions-and-agree-three-years-exclusion-resolve.

Department of Justice. 2015. Westlake cardiologist convicted of overbilling for $7 million worth of unnecessary procedures. https://www.justice.gov/usao-ndoh/pr/westlake-cardiologist-convicted-overbilling-7-million-worth-unnecessary-procedures.

Department of Justice. 2014a. Kentucky hospital agrees to pay government $16.5 million to settle allegations of unnecessary cardiac procedures. https://www.justice.gov/archives/opa/pr/kentucky-hospital-agrees-pay-government-165-million-settle-allegations-unnecessary-cardiac.

Department of Justice. 2014b. King's Daughters Medical Center to pay nearly $41 million to resolve allegations of false billing for unnecessary cardiac procedures and kickbacks. https://www.justice.gov/archives/opa/pr/king-s-daughters-medical-center-pay-nearly-41-million-resolve-allegations-false-billing.

Erb, K. 2026. The $12 million medical fraud that put patients at risk. *Forbes*, March 18. https://www.forbes.com/sites/kellyphillipserb/2026/03/18/the-12-million-medical-fraud-that-put-patients-at-risk/.

Federal Bureau of Investigation. 2016. Health care fraud: Service provider's crimes caused patients' deaths. https://www.fbi.gov/news/stories/health-care-providers-crimes-caused-patients-deaths.

First Coast Service Options. 2026. Participating provider versus non-participating provider. https://medicare.fcso.com/enrollment/participating-provider-versus-non-participating-provider.

Government Accountability Office. 2025. *Improper payments: Information on agencies' fiscal year 2024 estimates*. GAO–25–107753. Washington, DC: GAO.

Kuhn, J. 2026. Anchorage doctor sentenced in multi-million-dollar health care and tax fraud case. *Alaska's News Source*, March 17. https://www.alaskasnewssource.com/2026/03/18/anchorage-doctor-sentenced-multi-million-dollar-health-care-tax-fraud-case/.

Medicare Payment Advisory Commission. 2026. *Report to the Congress: Medicare payment policy*. Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2025a. Payment basics: Part D payment system. Washington, DC: MedPAC. https://www.medpac.gov/wp-content/uploads/2024/10/MedPAC_Payment_Basics_25_PartD_FINAL_SEC.pdf.

Medicare Payment Advisory Commission. 2025b. *Report to the Congress: Medicare payment policy*. Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2019. *Report to the Congress: Medicare and the health care delivery system*. Washington, DC: MedPAC.

Medicare Rights Center. 2025. Participating, non-participating, and opt-out providers. https://www.medicareinteractive.org/understanding-medicare/medicare-covered-services/outpatient-provider-services/participating-non-participating-and-opt-out-providers.

National Uniform Claim Committee. 2025. Home page. https://www.nucc.org/.

Newett, P. 2025. Florida physician groups pay $810K to settle false claims allegations. *Becker's ASC Review*, June 24. https://www.beckersasc.com/asc-coding-billing-and-collections/florida-physician-groups-pay-810k-to-settle-false-claims-allegations/.

Nicholas, L. H., C. Hanson, J. B. Segal, et al. 2020. Association between treatment by fraud and abuse perpetrators and health outcomes among Medicare beneficiaries. *JAMA Internal Medicine* 180, no. 1 (January 1): 62–69.

Noridian Healthcare Solutions. 2025a. Completed projects. https://noridiansmrc.com/completed-projects/.

Noridian Healthcare Solutions. 2025b. Current projects. https://noridiansmrc.com/current-projects/.

Noridian Healthcare Solutions. 2025c. Type of bill code structure. https://med.noridianmedicare.com/web/jea/topics/claim-submission/bill-types.

Noridian Healthcare Solutions. 2024. Supplemental medical review contractor (SMRC). https://med.noridianmedicare.com/web/jea/cert-reviews/smrc.

Novitas Solutions. 2024. Participating provider versus non-participating provider. https://www.novitas-solutions.com/webcenter/portal/MedicareJH/pagebyid?contentId=00082194.

Office of Inspector General, Department of Health and Human Services. 2025a. *2024 performance data for the Senior Medicare Patrol projects*. OEI–02–25–00160. Washington, DC: OIG.

Office of Inspector General, Department of Health and Human Services. 2025b. *Department of Health and Human Services met many requirements, but did not fully comply with the Payment Integrity Information Act of 2019 and applicable improper payment guidance for fiscal year 2024*. OAS–25–17–042. Washington, DC: OIG. https://oig.hhs.gov/documents/audit/10284/OAS-25-17-042.pdf.

Office of Inspector General, Department of Health and Human Services. 2025c. *HHS OIG semiannual report to Congress: Fall 2025*. Washington, DC: OIG.

Office of Inspector General, Department of Health and Human Services. 2025d. *HHS OIG semiannual report to Congress: Spring 2025*. Washington, DC: OIG.

Office of Inspector General, Department of Health and Human Services. 2024. *Health care fraud and abuse control program report (fiscal year 2023)*. OIG–HCFAC–2023. Washington, DC: OIG.

Schecter, A., K. Nathanson, and T. Connor. 2015. Farid Fata, doctor who gave chemo to healthy patients, faces sentencing. *NBC News*, July 5.

Schulte, F. 2016. Medicare Advantage audits reveal pervasive overcharges. https://publicintegrity.org/health/medicare-advantage-audits-reveal-pervasive-overcharges/.

Tycko & Zavareei Whistleblower Practice Group. 2022. How patients pay the ultimate price for healthcare fraud. *National Law Review*, September 21.

U.S. Attorney's Office, Maryland. 2011. Salisbury cardiologist convicted of implanting unnecessary cardiac stents. Press release. July. https://www.justice.gov/archive/usao/md/news/archive/.